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Visitor satisfaction in agritourism and its implications for agritourism farmers in Sri Lanka

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ABSTRACT

The aim of this paper is to evaluate visitor satisfaction in agritourism and to understand the implications for agritourism farmers in Sri Lanka. This has been done following the Expectancy Disconfirmation Theory. There are 21 attributes under five different aspects selected for the satisfaction measurement. This study also provides a comparative picture of local and foreign visitors. The study has been conducted on three randomly selected agritourism destinations. Results reveal that out of 21 attributes, nine attributes emerge at the satisfied level, and there were ten indifferences and two dissatisfied. Further, the overall satisfaction levels of both groups of visitors were at moderate levels and comparatively a higher level of satisfaction of local visitors can be observed over foreign visitors. Although the possibility of revisiting the destinations is low, recommending the destinations to others was high for both groups. However, both groups emphasized the necessity of improving appropriate educational programs, entertainment activities, variation of farm products with processing, availability of direct sales to visitors, increasing the efficiency of staff members, upgrading the hygiene and sanitation situation, and improving the road conditions leading to the destinations in order to enhance the satisfaction of visitors. The findings of this research may be useful in developing policy and undertaking promotional measures for intensifying agritourism sector, as this sector has a place within the current focus of rural development in Sri Lanka.

KEYWORDS: Agritourism; Expectancy Disconfirmation Theory; Visitor Satisfaction; Sri Lanka

1. Introduction

Agriculture plays a vital role in the economy of many countries. However, today it is facing numerous challenges and profits are being squeezed mainly in developing countries for several reasons such as the rising cost of inputs, poor productivity of farmland, falling prices received for outputs, adverse domestic environments, inappropriate policies, etc., (International Fund for Agricultural Development, 2010). This has caused commodity production to be less profitable over time and thus agriculture gradually is becoming less attractive for investment by farmers. If agriculture is to be truly sustainable, it must be able to yield significant returns for its essential investments, such as land, water, capital, and labour, for those working in the sector. Traditional methods of farm management are becoming less viable day by day. Novel farm resource management methods are crucial in this context, including alternative strategies to find extra income from existing resources that avoid the economic uncertainty of farming. Agritourism is such an important strategy, which can assist in the management of farm recourses, marketing, earning additional income, and many other benefits not only for the farmers but also for local residents (Lack, 1995; Topcu, 2007).

Agritourism

Agritourism or farm tourism is a type of rural tourism and is highly recognized as a mean of farm diversification and an alternative source of farm income (Colton and Bissix, 2005; Byrd and Gibson, 2004; Sharpley, 2002). Although there is a large number of synonyms and definitions for the term agritourism under different contexts, the general meaning of agritourism is the practice of attracting travellers or visitors to an area/s used primarily for agricultural purposes, in order to experience a broad spectrum of agriculturally based products and services. Moreover, according to Bruch (2008) Agritourism is an activity, enterprise or business which combines primary elements and characteristics of agriculture and tourism and provides an experience for visitors which stimulates economic activity and impacts both farm and community income. Brumfield and Mafoua (2002) have described agritourism as a “direct marketing activity, that may provide special opportunities to growers to reduce risks via diversification in a competing and urbanizing economic environment, which may share quasi-fixed inputs (e.g. information, machinery, labour, etc.) with other enterprises and enhance business efficiency and profitability.”

Agritourism is one of the fast-growing travel trends in the world (Agritourism World, 2008), where farmers can

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offer their visitors the opportunity to visit farms or agricultural lands for a short period of time and to enjoy many different activities. Thus, it is a rural-urban relationship, which can bridge the gap between peasants and city dwellers for the benefit of both. The number of agritourism activities depends on the size of the farm and nature of the farming activities. The activities involved in agritourism vary from simple farm visits to complex situations such as educational and recreational/entertainment programs, including bed and breakfasts. The three main activities in agritourism are; 'things to see,' 'activities to do,' and 'farm products to buy' (Adam, 2001). Many agritourism activities require only a small farm crew in order to be successful. For instance, conducting farm tours, bed and breakfasts, tractor/bullock cart rides, maintaining grapes, mangoes, and other horticulture farms, birds/animal zoos, running cottage industries for making jam, chutney, curd, yoghurt, etc., and many other activities may be operated with little additional investment in labour (Agritourism Development Organization in India, 2008).

Since agritourism is consisted of many beneficial functions for the operator that need the cooperation of people involved in agritourism, specially family members, agritourism can be further described as a *multi-functional* and *cooperative* strategy that is useful in agriculture and rural development (Sidali, Spiller and Schulze (2011). The current or third agricultural production system named *post-productivist* agricultural system which is complex than the first (*subsistence*) and second (*productivist*) agricultural systems, plays a vital role in supply of agritourism (Wilson, 2007, Essex, et.al., 2005). The five main tasks of the post-productivist agricultural system are qualitative priorities in food production, alternative income sources for farmers, sustainability of agricultural lands, conservation of environment, and new employment opportunities. Moreover, agritourism can be analyzed regarding five important dimensions, the agricultural, economic, socio-cultural, environmental, and educational dimensions (Topcu, 2007). Further not giving benefits only for male party, but also agritourism has the ability to make use of extra time and labour of female party such as female farmers, housewives, unemployed maid, girls in farm families, in a fruitful way giving them certain level of financial and other benefits without affecting much of their daily routines, agritourism is a *gender equity* agricultural development endeavour (Topcu, 2007; Rentinga et al., 2009; Marsden and Sonnino, 2008).

Agritourism is a developing industry at present in the world, and it includes experiencing agricultural life and leisure recreations, which could take advantage of the agricultural business, village life, the rural landscape, and village culture (Malkanthi and Routray, 2011a). Also, it is a hybrid concept that merges elements of two complex industries, agriculture and travel/tourism, to open up alternative income sources for the farmers as well as the surrounding community (Wicks and Merrett, 2003). Brscic (2006) has explained that agritourism as a special form of tourism takes place within the family farm that represents a specific form of business, giving a number of benefits to the families involved, with multiple impacts on the socio-economic relations and space in rural areas.

According to Bernardo et al. (2007), the list of agritourism activities continues to grow, and might include a variety of participants and educational and spectator experiences such as outdoor recreation (farm visits, fee fishing, photography, etc.), educational experiences (demonstration programs, training sessions, guided farm tours, cooking classes), entertainment activities (harvest festivals, barn dances, hay tunnels), hospitality services (farm stay, home stay, bed and breakfasts), and on-farm direct sales (U-pick operations, sales centres, roadside stands). Wicks and Merrett (2003) have mentioned that agritourism can be successfully integrated into local economies and environment and rural lifestyles without a great disruption to enhance the agriculture sector of a country. Blacka et al. (2001) have divided agritourism facilities in Virginia into six categories: lodging and camping (bed and breakfasts, campsites, youth camps, farm vacations, weddings, honeymoons), special events and festivals (music festivals, haunted houses, holiday celebrations, harvest festivals), off the farm (farmers' markets, roadside produce stands), recreational activities and events (fee fishing, hiking, rock climbing, horseback riding, skeet shooting), tourism-related direct marketing (pick your own fruits/vegetables, sell processed food on the farm, sell herbal organic products) and youth and or adult education (organized tours, agricultural educational programs, demonstrations). Lack (1995) divided agritourism in British Colombia into three groups: retail sales/direct marketing (goods produced on-site, customer-harvested produce and goods produced off-site), tours (tours of processing facilities, scenic tours, and tours of production facilities), and activities (accommodation, cultural activities, recreation and educational or hands-on experiences). It is important to include all of the possible agritourism activities because it helps the tourist to see, enjoy, and learn about agriculture as well as to increase the length of stay and satisfaction of the visitors. In some countries, since farms are large, there are a large number of agritourism activities for visitors to enjoy even for several days. However, the number of agritourism activities on a farm is comparatively lower in Sri Lanka.

Moreover, agritourism is increasingly used as a diversification strategy to uphold a more diverse and sustainable rural economy and to protect farming incomes against market fluctuation (Phelan and Sharpley, 2010), and it is expected to yield a number of economic as well as non-economic benefits to farmers, visitors, and communities. In this sense, agritourism has been suggested to help family farms stay in business, protect the agricultural heritage, enhance the productivity of farm resources through their recreational use, and even to improve the economic situation of local communities (Nickerson et al., 2001; Ollenburg and Buckley, 2007, Veeck et al., 2006; Wilson et al., 2006). From the farm unit perspective, agritourism is claimed to raise farm revenues and to help other entrepreneurial goals of the farmer, such as the improvement of their quality of life (Barbieri, 2009; McGehee and Kim, 2004; Nickerson et al., 2001; Ollenburg and Buckley, 2007).

At the farm level, agritourism improves the value of the farmer's own products through its involvement with the social and cultural context (Nilsson, 2002) and also

at the regional level; it can help with rural development by creating new job opportunities and new value added products. The positive influence of agritourism on the local system is shared between diverse economic sectors, as tourist spending relates not only to farms but also to restaurants, crafts, commerce, and other firms located in the region. Furthermore, the direct boost made by tourist spending creates multiplying effects in the local economic system as a whole (Fleischer and Tchetchik, 2005; Vaughan et al., 2000). Therefore, it is believed that agritourism sustains farm and rural economies. The value additions for farm products and the attraction of visitors to rural areas are important strategies in agritourism. Further, agritourism has the ability to sustain the history and culture of agriculture and the environment by preserving open spaces on farms (Bruch, 2008).

1.2 Visitor satisfaction: theoretical background

Visitors, also known as customers, consumers or buyers of any sector of tourism, are one of the most important components (demand side) of a tourism business. Visitor satisfaction is important for successful destination marketing as it influences the selection of the destination, the consumption of products and services, publicity (word-of-mouth), and the decision to return (Kozak and Rimmington, 2000). After the concept of satisfaction was identified as the most important theme in psychology and visitor behaviour, a considerable number of studies have been focused on this concept due to its importance as a basic parameter used to evaluate the performance of destination products, facilities, and services (Noe and Uysal, 1997). On the theoretical level, visitor satisfaction is broadly discussed in the literature and has been defined frequently. According to Engel et al. (1993), most traditional studies have used the cognitive approach, defining visitor satisfaction as a post-consumption assessment where a selected alternative at least meets or exceeds expectations. However, some studies that followed have considered satisfaction as an emotional response resulting from the consumption experience (Spreng et al., 1996). Recent sociologists have understood that the satisfaction should be considered from a more affective perspective (Oliver et al., 1997; Wirtz and Bateson, 1999) than a cognitive perspective. Expectancy Disconfirmation Theory (EDT) is highly used in analysing customer satisfaction (Weber, 1997), **which** has been developed by considering both cognitive and affective perspectives and their relative nature (Oliver, 1980). Though small differences can be seen between different theories and concepts, most of them are more or less similar. The application of these theories depends on the context, the availability of data, the tourists' cooperation in gathering primary data, etc.

Expectancy Disconfirmation Theory (EDT)

Several researchers have studied visitor satisfaction and have provided theories about tourism (Bramwell, 1998; Bowen, 2001). For example, Parasuraman, Zeithaml, and Berry's (1985) expectation perception gap model, Oliver's expectancy-disconfirmation theory (Pizam and Milman, 1993), Sirgy's congruity model (Sirgy, 1984;

Chon and Olsen, 1991), and the performance-only model (Pizam, Neumann, and Reichel, 1978) have been applied to the measurement of tourist satisfaction with specific tourism destinations. In particular, expectancy-disconfirmation theory has received the widest acceptance among these theories because it is broadly applicable.

According to Oliver (1980), EDT consists of two sub-processes having independent effects on customer satisfaction: the formation of expectations and the disconfirmation of those expectations through performance comparisons. EDT holds that consumers first form expectations of the products' or services' performance prior to purchase or use. Subsequently, purchase and use contribute to the consumer's beliefs about the actual or perceived performance of the product or service. The consumer then compares the perceived performance to prior expectations. Consumer satisfaction is seen as the outcome of this comparison (Clemons and Woodruff, 1992). Moreover, a consumer's expectations are: (a) confirmed when the product or service performance matches prior expectations, (b) negatively disconfirmed when the product or service performance fails to match expectations, and (c) positively disconfirmed when the product or service performance is perceived to exceed expectations. Dissatisfaction comes about when a consumer's expectations are negatively disconfirmed; that is, the product performance is less than expected (Churchill and Surprenant, 1982; Oliver and Beardon, 1985; Patterson, 1993).

Pizam and Milman (1993) used Oliver's (1980) EDT model to improve the predictive power of travellers' satisfaction. They applied the basic dynamic nature of the disconfirmation model to tourism research while testing part of the original model in a modified form. Some studies on customer satisfaction are also important in tourism behaviour research. For instance, Pizam, Neumann, and Reichel (1978) examined the factor structure of tourists' satisfaction with the destination areas. They explained eight distinguishable dimensions of tourist satisfaction. Moreover, Yu and Goulden, (2006) reported on international tourists' satisfaction of travel based on tourist attractions, facilities, services, and prices for four groups of visitors; namely Europeans, Americans, Japanese, and others (Asia Pacific). A similar study has been done by Hui et al. (2007) on tourists' satisfaction, recommendation, and willingness to revisit Singapore. And also, Lee et al. (2007) investigated the relationships among perceived value, satisfaction, and recommendation for the Korean Demilitarized Zone (DMZ) using the EDT approach.

Barsky and Labagh (1992) applied the EDT concept to accommodation research. The proposed model in these studies showed that customer satisfaction was the function of disconfirmation, measured by nine 'expectations met' factors that were weighted by attribute-specific importance. The model was tested with data collected from random subjects via guest comment cards. As a result, customer satisfaction was found to be correlated with a customer's willingness to revisit. Chon and Olsen (1991) discovered a goodness of fit correlation between tourists' expectations about their destination and their satisfaction after the tourists have bought the travel service and products, if the evaluation of their experience of the travel product is better than their

expectations, they will be satisfied with their travel experience. Furthermore, Chon and Olsen (1991) provided an intensive literature review of tourist satisfaction. One thing to be noted, however, is that although the posited social cognition theory offers an alternative way of explaining satisfaction processes, its methodological mechanism is analogous to that of EDT. In other words, the concepts of congruity and incongruity can be interpreted similarly to the concepts of confirmation and disconfirmation, both of which can result in either positive or negative directions. EDT is one of the most commonly adopted approaches used to examine the satisfaction of consumers and it currently dominates the study of consumer satisfaction.

However, a limited number of researches have been conducted regarding agritourism visitor satisfactions in only a few countries in the world at present. For example, Coomber and Lim (2004) have conducted a study on 'farm tourism; a preliminary study of participants' expectations and perceptions of farm tours' and discovered that the participants were satisfied with the farm tour. As another instance, an agritourism market analysis in New York has been conducted by Hilchey and Kuchn (2006) and revealed that visitors were highly satisfied with the agritourism operations. An ethnographic study by Christou, Lashley, and Saveriades (2009) on agritourist satisfaction through the formation of expectations, satisfaction achievement and behavioural intentions, reported high agritourist satisfaction and positive future behavioural intentions.

With this background, the objective of this paper is to analyse the satisfaction level of agritourism visitors, their future behaviour towards agritourism, and the implications for the farmers in a Sri Lankan context.

Agritourism in Sri Lanka

Sri Lanka is an agriculture-based country in South Asia, bearing the name of the 'Pearl of the Indian Ocean.' Since ancient times, it has been world famous for its tourism and hospitality industry. Sun, sea tourism, culture tourism, and religious tourism like mass tourism sectors are very popular in the country. These mass tourism destinations are able to attract large numbers of local and foreign visitors. Therefore, the tourism industry is a most significant sector in Sri Lanka and it is proved by being the sixth major earner of national income. Its contribution to the GDP is 2.6% while generating nine million direct and indirect job opportunities in the country (Sri Lankan Tourist Board, 2010). In the recent past, with the introduction of rural tourism sectors in the country, a gradual development of agritourism could be seen. Some people prefer rural tourism destinations to mass tourism destinations, as they are less crowded and polluted, peaceful, and tranquil (Schmitt, 2010).

Agritourism is one of the sectors of rural tourism, which is gradually becoming popular among urban and suburban populations and students due to certain special inherent features. Some of them are good food (healthy, clean, and high-quality food items including traditional ones), education (learning opportunities on the farm, farming industry, traditional lifestyle) and cheap service (inexpensive gateway). Sri Lanka is mainly an agricultural country and it is comprise of 24%

agricultural lands out of the total land area. Therefore, vast arrays of crops and plantations are grown in the country and a large number of families (an estimation of 1.8 million) are engaged in and depend on farming (UNCTAD, 2007).

The modern agricultural sector of the country has seen significant improvements in terms of productivity and the quality of the agricultural products. It is important to note that the traditional farming systems in Sri Lanka are also experiencing an emerging trend and an advanced level with indigenous practices. Sufficient and well-distributed annual rainfall and better intensity and longer duration of sun light prevailing in Sri Lanka are the precious grounds for enhancing the productivity and quality of cultivation throughout the year. As an emerging trend for the organic farming in the country, a significant number of organic farms (3,300) can also be seen in the country, covering 0.065% of the total land. Sri Lanka is one of the major producers of organic products in Asia and one of the leading sources of organic tea (UNCTAD, 2007). Furthermore, the country is famous for indigenous medicines, herbal cultivations, and productions and is well known for spices cultivations. In the past, farm visits were allowed free of charge as a social service. However with economic development, agritourism was initiated during the late 20th and the early 21st centuries in the country and now it is gradually developing as a business. Sri Lanka Tourism Development Authority has certain emphasized the development of the agritourism sector of the country under the eco-friendly tourism industry in the country.

It seems that a huge potential exists for the development of agritourism in Sri Lanka. Mainly the Ministry of Tourism, including a number of government organizations, such as the Tourist Board, the Tourism Development Authority, respective Provincial Councils, a number of national universities and non-government organizations such as the Responsible Tourism Partnership of Sri Lanka, the Sri Lanka Ecotourism Foundation, Sarvodaya Community Tourism Initiatives, and Sewalanka Foundation, are now emphasizing community-based, sustainable tourism and thus agritourism is receiving special attention. Agritourism development was included in the Development Policy Framework of the country from 2010 to 2016 (Ministry of Finance and Planning of Sri Lanka, 2010). According to a preliminary study conducted by the author, a list of currently existing agritourism destinations (some destinations conduct agritourism as a small part of their other tourism businesses) in ten districts of the country by 2010 is presented in Table 1.

Fifteen agritourism destinations could be identified in those ten districts of the country. Since the agritourism is newly initiated in the country, the industry is at the developing stage in Sri Lanka and no evidence of studies/research could be found in the literature. Therefore, this study was conducted on agritourism in Sri Lanka by analyzing visitor satisfaction level using 21 attributes under five main aspects of agritourism destinations to bridge the existing gap in the literature, as well as to suggest improvements for the agritourism farmers and how to move forward in this promising industry.

Table 1: Agritourism destinations in Sri Lanka

Destination	Location	District	Starting year of Agritourism operation
CIC Farm	Higurakggoda	Polonnaruwa	2005
New Zealand Farm	Ambewela	Nuwara Eliya	1996
Paradise Farm	Kitulgala	Kegalla	1999
Ceylinco Fruit Farm	Midigama	Galle	2002
Spice Garden	Mawanella	Kandy	1998
Sigiriya Village	Sigiriya	Matale	2001
Hotel Sigiriya	Sigiriya	Matale	2002
Galapita Healing Garden	Buttala	Moneragala	2003
Landa Holiday Resort	Belihuloya	Ratnapura	2000
Adventure Park	Ella	Moneragala	2004
Kanda Land Eco-Centre	Buttala	Moneragala	2001
Tree Tops Farm	Buttala	Moneragala	1998
Woodlands Network	Bandarawela	Badulla	1997
Walawa Nadee Ecotourism	Ambalantota	Hambantota	2006
Samakanda Ecological Centre	Habaraduwa	Galle	2002

(Source: Field survey, 2010)

2. Research Methodology

Expectancy Disconfirmation Theory (EDT) is the most suitable approach for examining visitor satisfaction, as it has a very clear theoretical basis and is meaningful in practical situations. The EDT holds that consumers first form expectations of products or service performance prior to purchase or use. Subsequently, purchase and use convey to the consumer beliefs about the actual or perceived performance of the product(s) or service(s). The consumer then compares the perceived performance to prior expectations. Consumer satisfaction is seen as the outcome of this comparison (Clemons and Woodruff, 1992).

Study area

Out of the existing agritourism destinations (Table 1), three destinations were randomly selected for this study. The selected destinations were Paradise Farm at Kitulgala, Tree Top Farm at Buttala, and the Samakanda Ecological Centre at Habaraduwa. Paradise Farm is about 78 km from Colombo, situated at Kitulgala in Kegalle district and it was established in 1999. It has 33 acres of integrated land, including tea and fruit crops, and is comprised of three cabanas with capacity for about 12 visitors. The annual average number of visitors is 528. It is surrounded by a natural landscape and has a temperate climate. Tree Tops Farm is 247 km from Colombo and is situated in a forest at Buttala in Moneragala district. It was started in 1998 with over 10 acres of land. Now it has been extended to over 25 acres of land and can accommodate 10 visitors. The annual average number of visitors is 752. It has a sub-tropical climate. The Samakanda ecological centre is situated on abandoned tea land at Habaraduwa in Galle district. It was begun in 2002. It has 35 acres of land area as well as three medium-size cottages and has the ability to provide accommodations for 15 visitors at a time. All of these places are medium-size agritourism destinations and are currently functioning at an average standard.

Research design

Secondary as well as primary data were used in the study. The secondary data were collected mainly from journal papers, reports, online information, etc. A visitor survey was conducted to gather the required primary data in the three selected agritourism destinations. Other than the a visitor survey, three group discussions were also conducted with three visitor groups, one from each destination, to gather detailed information and to cross check the survey data.

Questionnaire development

After doing a thorough literature search on visitor satisfaction in tourism and also agritourism, a set of attributes regarding visitor satisfaction was initially selected. Then these attributes were evaluated using a panel of tourism experts (two university professors in rural tourism, the assistant director of the Tourism Development Authority, and three officers of the three Provincial Councils related to Rural Tourism Development) to ensure the validity of the selected attributes for the study. Moreover, out of fifteen, three agritourism farmers were randomly selected and also considered for this consultation. At last 21 agritourism attributes were found suitable to the Sri Lankan situation, covering five aspects of agritourism (destination characteristics, available services and facilities, nature of staff members, situation of the surrounding environment, and price level of place and products) and were selected for the study. They are explained in Table 2. The questionnaire consisted of four parts. Part 1 included questions to collect data related to the demographic characteristics of the visitor, and the Part 2 consisted of questions to gather data on the expected values for the 21 attributes of agritourism destination, answered at the beginning of the visit. These attributes were measured on a five point Likert scale ranging from 1 (very poor) to 5 (very good). Part 3 consisted of questions related to the data collected on the perceived values for the 21 attributes of agritourism destination, answered at the end of the visit. These attributes were also measured on a five point Likert Scale ranging from

Table 2: Detailed information on the selected agritourism attributes

Aspect/Attribute	Detailed information
Destination characteristics Arrangement of the destination Number of educational programmes Number of entertainment activities Level of direct sales of the destination Services and facilities Quality of farm products Variety in farm activities Level of accommodation facilities Photography, audio, and video facilities Staff members Helpfulness Efficiency Friendliness Courtesy Surrounding environment Natural beauty and greenery Friendliness and courtesy of local residents Hygiene and sanitation of the farm environment Road condition to the destination Safety and protection of the area Price level At the destination For food and drinks For accommodation Off the farm products and other items	Destination-related characteristics Partition of different sections of the farm, farm tour route, footpath, direction boards, name boards, allocation for places for parking, resting, etc. Number of available education-related programs such as farm tours, demonstration culinary classes, practical programs, etc. Number of activities for entertainment, pick your own, harvesting festivals, petty zoos, camping sites, cultural festivals, etc. Quantity and quality of direct selling items on the farm. Services and facilities available on the farm The quality level of farm products such as maturity, appearance, cleanliness, purity, sorting, packaging, labelling, etc. Availability of different farm activities such as crop cultivation, poultry, piggeries, cattle, bee keeping, fish ponds, organic farming, biogas units, etc. Level of chairs, beds, bed sheet, towel, nets, bathrooms, electricity, telephones, television, Internet, reading materials, etc. Facilities available for getting photos, doing audio recordings, videotaping, etc. Qualities of facilitators and staff members at agritourism destinations The level of helping visitors when required How quickly they accomplished requests of visitors How friendly they were with the visitors How faithful and polite they were to the visitors The nature of the farm environment The level of the natural beauty and greenery of the surrounding environment How friendly, hospitable, and faithful the local residents were Condition of the hygiene and sanitation in and around the farm Condition of the roads to the destination and surrounding area Available strategies for safety and protection such as police, hospitals, fire brigades, etc. Price levels of different facilities available at the farm Price of the entrance fees, service charges, value added taxes, etc. Price of different food items and various drinks available in the destination Price of accommodations such as charges for rooms, cabanas, farm houses, etc. Price of on-farm selling items such as fresh fruits, vegetables, jam, jelly, milk products, etc.

1 (very poor) to 5 (very good); and part 4 included three additional questions related to the overall satisfaction and future behaviour of the visitors, again measured on a five point Likert scale ranging from 1 (Very poor) to 5 (very good).

Data collection

A visitor survey was conducted covering the local and foreign visitors at three selected destinations. The survey was carried out from November 2009 to April 2010 in Sri Lanka, covering two main holiday seasons of the country. This was a two-step survey. In step one, visitors filled out the first and second parts of the questionnaire and in step two they filled out the third and forth parts of it. A comparatively lower number of local as well as foreign visitors could be seen due to a lack of publicity for the destinations, and also the unsafe situation that prevailed in the country due to the ethnic war (from 1983 to 2009). Since there were a low number of visitors, all of the visitors above 20 years were included in the data collection of the survey. The total sample size was 204 including 128 local and 76 foreign visitors. The owners of the farms and resorts extended their support and helped out during the research as the findings would be very much useful for them as well.

Data analysis

A descriptive analysis was conducted to study the visitors' demographic features in order to develop their profiles. Two sample-paired *t-tests* were applied for the analysis of visitor satisfaction. Further, one sample *t-test* was conducted to find out the level of overall satisfaction and future behaviour of the visitors. Finally, independent *t-tests* were done to compare differences in overall satisfaction and future behaviour between local and foreign visitors. The Statistical Package for the Social Sciences (SPSS Version 17) was used to perform all of these statistical analyses.

Decision making criteria on satisfaction levels of visitors

According to EDT theory, satisfaction level is based on the comparison of Expected Value (EV) and the Perceived Value (PV) for each and every travel attribute. EV is the level of the service intended, before visiting the destination, and PV is the level of the service experienced by the visitors after visiting the destination. Therefore, if $PV > EV$ (the difference is positive and significant) is considered as *Satisfied* situation or *positive expectancy disconfirmation*, and if $EV > PV$ (the difference is negative and significant) was considered as *Dissatisfied* situation or *negative expectancy disconfirmation* and $EV = PV$ (the difference can be negative or

positive, but it is not significant) was considered as *interference*, *Just Satisfied* or *expectancy confirmation* situation (Oliver, 1980). In this study, the mean perceived value (MPV) (using part 3 of the questionnaire) and the mean expected value (MEV) (using part 2 of the questionnaire) for 21 agritourism attributes were calculated. Then the mean difference of each attribute was checked using a paired *t-test*. Decisions regarding satisfaction levels were taken using the EDT.

3. Findings and Discussion

Demographic profiles of the visitors

The results of the descriptive analysis of the important demographic characteristics of the visitors' are presented in Table 3. This information will be helpful for understanding the category of visitors that mostly preferred the agritourism sector of the country.

Table 3: Profiles of the visitors

Variable	Local visitors % (n=128=63%)	Foreign visitors % (n=76=37%)
Gender		
Male	52.9	65.4
Female	47.1	34.6
Age (Years)		
20–35	14.2	10.5
36–45	44.6	45.8
46–55	31.2	34.4
Above 56	10.0	9.3
Marital Status		
Married	71.2	63.7
Single	28.8	36.3
Educational level		
Primary	3.9	0.0
Secondary	23.5	15.8
Degree	41.2	47.4
Post-graduate	31.4	36.8
Employment status		
Employed	49.8	58.4
Unemployed	9.2	5.1
Retired	5.6	3.2
Other	35.4	33.3
Monthly Total household income (Sri Lankan Rupees (LKR))		
<20,001	5.5	0.0
20,001–40,000	39.1	0.0
40,001–60,000	45.8	0.0
60,001–80,000	9.0	0.0
80,001–100,000	2.6	0.0
100,001–200,000	0.0	3.9
200,001–300,000	0.0	30.3
300,001–400,000	0.0	47.4
>400,000	0.0	18.4
Residential sector		
Urban	73.4	78.8
Rural	26.6	21.2

(Source: Visitor Survey, 2010)

According to the results of Table 3, it is noted that the number of local visitors was higher (63%) than foreign visitors (37%). When gender is considered, although for the local visitors, male and female visitors were more or less similar (53% and 47 % respectively), for foreign visitors, the number of male visitors was higher (65%) than females (35%). The dominant age group of the local and foreign visitors was 36–45 (middle aged). In terms of marital status, both groups consisted of higher numbers of married people than singles. Out of the total respondents, 73% of the locals and 84% of foreigners had an education higher than the secondary level. Furthermore, a higher level of visitors of both groups (50% and 58%) was employed. With regard to the respondents' income, although a majority of local visitors (46%) were receiving a monthly household income of 40,001–60,000 Sri Lankan Rupees (LKR)³ the majority of foreign visitors (47.4%) were receiving a monthly income of 300,001–400,000 LKR. Furthermore, most of the local (73%) and foreign (79%) visitors were from urban areas. Therefore, it is clear that the agritourism visitors in Sri Lanka are typically middle aged, educated, married, urban people having comparatively a higher income level. Agritourism operators should be able to understand the needs of this market category and serve them accordingly. Analysis of the demographic characteristics of visitors is common in most of the visitor satisfaction studies. Jolly and Reynolds (2005) and Reynolds (2007), for example, have studied demographic characteristics and some other related information concerning agritourism visitors in Sacramento and Yolo counties in California in the USA. Moreover, a research by Lobo et al. (1999) has also focused on the demographic characteristics of visitors in San Diego County in the USA.

Satisfactory, indifference, and dissatisfactory attributes in agritourism

First, the mean perceived value (MPV) and mean expected value (MEV) for the 21-agritourism attributes was calculated. After that, two values for each attribute were compared using paired *t-test* and satisfaction level was decided according to the EDT, as explained before. The results are presented in Table 3.

Satisfactory attributes

The results indicate that the visitors were satisfied with nine tourism attributes (Table 3); namely *accommodation facilities*, *photography facilities*, *helpfulness*, *friendliness and courtesy of staff members*, *natural beauty of the area*, *friendliness of local residents*, *price levels of destination*, *and the price levels of food and drinks*. Agritourism farmers were able to provide these general facilities in an adequate manner, making visitors happy. In these agritourism operations, half of the attributes were found to be at a satisfactory level. Agritourism farmers would be happy with the above results and they would make efforts to continue the facilities for future operations.

³ At the beginning of October 2012, 100 LKR was approximately equivalent to £0.48, US\$0.77 and €0.59 (www.xe.com, accessed 2 October 2012).

Indifference attributes

Ten attributes, such as *arrangement of the destination, educational facilities, entertainment programs, quality of farm products, variety in farm facilities, efficiency of staff members, hygiene and sanitation of the farm and surrounding, safety and protection of visitors, price of accommodation and price of farm products*, showed neutral feelings or indifference between expected and perceived feelings. These are important attributes and are important for increasing the consumer satisfaction in agritourism. Therefore, the visitors expect a certain standard for these attributes. However, due to lack of facilities, skills and awareness, etc., agritourism farmers had failed to provide these things adequately. It is the responsibility of agritourism farmers to improve these attributes to a significant level in order to attract more visitors and also so that visitors return to the destinations.

Dissatisfying attributes

The visitors were dissatisfied with two attributes, *direct sales of the product and goods at the destinations* and the *road conditions*. There were very few products available, and those were available only in small quantities. This is due to the lack of attention and motivation in producing various farm products in an attractive manner on the part of the agritourism farmers. Visitors were also dissatisfied with the road conditions available in these areas. Agritourism destinations are situated in rural

areas and the condition of most of the roads in rural areas is poor. However, visitors are educated people, with busy schedules, and they expect easy and quick access to the agritourism destinations. Agritourism farmers have to pay close attention to correct these problems at the earliest possible time. These two factors are very important for the growth of agritourism destinations and for them becoming popular among the visitors.

Differences in the satisfaction levels of local and foreign visitors

Other than the analysis of satisfaction levels of all the visitors, the satisfaction levels of local and foreign visitors were also analysed and compared in the same way to find out the similarities and differences between the two groups (table 4). According to the results, except for a few differences, the satisfaction levels of the both groups showed a similar trend. When the first character (destination-related characteristics) was concerned, the two groups had shown different results. While local visitors were satisfied with the first attribute and were just satisfied with next three attributes, foreign visitors were just satisfied with the first one and dissatisfied with the other three attributes. The reason behind such a level of satisfaction of local visitors could be due to less experience with the agritourism destinations that they have visited in Sri Lanka and the just satisfied level of foreign visitors may be due to their

Table 4: Comparison of mean differences of all the visitors using paired T-Test

Aspect/Attribute	Total visitors (n=204)				
	MPV	MEV	MD	t- value	Satisfaction level
Destination characteristics					
Arrangement of the destination	3.67	3.61	0.054	1.771	JS
Number of educational programmes	3.51	3.55	-0.039	-1.033	JS
Number of entertainment activities	3.03	3.05	-0.020	-.706	JS
Level of direct sales of the destination	2.27	2.48	-0.206	-4.764*	DS
Services and facilities					
Quality of farm products	3.65	3.61	0.039	-1.267	JS
Variety in farm activities	3.39	3.38	0.010	.294	JS
Level of accommodation facilities	4.06	3.94	0.118	5.203*	S
Photography, audio, and video facilities	4.19	4.04	0.147	5.502*	S
Staff members					
Helpfulness	4.26	4.08	0.186	6.076*	S
Efficiency	3.87	3.93	-0.059	-1.819	JS
Friendliness	4.12	4.00	0.118	4.771*	S
Courtesy	4.40	4.26	0.137	5.683*	S
Surrounding environment					
Natural beauty and greenery	3.77	3.67	0.108	4.954*	S
Friendliness and courtesy of local residents	3.75	3.61	0.147	5.502*	S
Hygiene and sanitation of the farm environment	3.30	3.35	-0.049	-1.315	JS
Road condition to the destination	3.04	3.15	-0.108	-4.515*	DS
Safety and protection of the area	3.14	3.11	0.025	0.928	JS
Price level					
At the destination	3.19	3.00	0.186	4.983*	S
For food and drinks	3.10	2.95	0.147	3.313*	S
For accommodation	2.86	2.88	-0.020	-0.371	JS
Off the farm products and other items	2.87	2.88	-0.010	-0.198	JS

MPV= Mean Perceived Value; MEV=Mean Expected value; MD = Mean Difference between perceived and expected values

S = Satisfied; DS = Dissatisfied; JS = Just Satisfied

*=Significant at 95 Confidence Level

wider experience with better agritourism destinations worldwide. Both groups were dissatisfied with the direct sales of the destinations.

Under the second aspect (availability of services and facilities), the results were similar for both groups. The first two attributes, quality of food and drinks and variety in services, were under the just satisfied level for both local and foreign visitors. Since both groups were educated and had higher incomes, they expected the quality and variety of these aspects. Rozman et al. (2009) have discussed the importance of the quality and variety of farm services in their study on 'A multi-criteria assessment of tourist farm service quality.' Further, Reichel et al. (2000) have studied 'Rural tourism in Israel; service quality and orientation' and reported that there is a need for service quality improvements along with the appropriate training. Both groups of visitors were satisfied with the level of accommodation and photography facilities available at agritourism destinations.

When the third aspect (staff members) was concerned, both groups were satisfied with the first, third, and fourth attribute: *helpfulness*, *friendliness*, and *courtesy*. However, both groups of visitors were just satisfied with *the efficiency of staff members*. Since both groups were educated and people from urban areas, they naturally expected higher efficiency from the work of the staff members.

In the fourth aspect (surrounding environment), except for the price of the farm products and the price of other items (the last attribute), other attributes showed similar results for both groups. All of the visitors were happy with the destinations, which were situated away from cities and rich in natural beauty and greenery. Furthermore, the local residents of these areas showed a high level of respect toward the outside visitors. However, the two groups were just satisfied with the *hygiene and sanitation* of the destination environments. Since both groups were well educated and had a good standard of living, they considered that the cleanliness of the destination, waste management, and application of agro-chemicals were important for the farmlands. Moreover, both groups of visitors were dissatisfied with the *road condition* of those areas. When the last attribute (safety and security condition of the area) of this aspect was concerned, the results indicated that the foreign visitors were just satisfied with it, while local visitors were satisfied. The foreign visitors paid more attention to these aspects than the local visitors, who were familiar with it.

With reference to the last aspect, *price levels of facilities*, both groups were satisfied with the first two attributes; namely *price level at the destination* and *food and drinks*. Regarding the last two attributes, *price level of accommodation* and *direct sale items*, although local visitors were just satisfied, foreign visitors were satisfied with them. This is natural because foreign visitors were getting a higher monthly income than the local visitors.

Overall satisfaction and future behaviour of all the visitors

The overall satisfaction level and future behaviour of the visitors were estimated using mean perceived values (MPV). Then these values were compared to test the

differences using independent *t-tests*. The results are presented in the Table 5.

According to the results for overall satisfaction level concerning the *revisit the destination*, and *recommend the destination to others*, they were at significant levels. However, the *overall satisfaction* level of the visitors was at a moderate level. The level of intention to revisit the destinations by the visitors was at a lower level. This is a common phenomenon in most of the destinations in the world. It was significant that there was a comparatively higher trend to recommend these destinations to others by the visitors. This is a very good indicator for the future development of the agritourism sector of the country. If agritourism farmers can develop the indifference and dissatisfied attributes of these destinations, the overall satisfaction level will automatically increase. Furthermore, it will help to increase the level of revisiting the destination as well as recommending the destination to others.

Comparison of overall satisfaction and future behaviour of local and foreign visitors

A comparison of overall satisfaction and future behaviour of local and foreign visitors was also conducted and the results are presented in Table 6. Few differences could be observed with regard to the overall satisfaction levels and future behaviour of local and foreign visitors. The *overall satisfaction*, *revisit*, and *recommend the destination* items were significant for local visitors. Except for *revisit*, the two other two aspects (*overall satisfaction* and *recommend the destination to others*) were significant for foreign visitors. Furthermore, the mean perceived values of *overall satisfaction*, *revisit*, and *recommend the destination* were comparatively higher in the case of local visitors than with foreign visitors. Recommending the destinations by both types of visitors to others was a positive reflection for a better future for agritourism.

4. Conclusion and Recommendations

Understanding visitor satisfaction and future behaviour was very important with a strong bearing on agritourism development and expansion in the country. Analysing the facts following the EDT is both a theoretical and practical rationale as several visitors mentioned it during group discussions. It is evident from the demographic features of visitors that the majority of the visitors were middle aged, educated, and were working people having a higher level of income. They were mostly from urban areas. As the demographic factors imply the level of needs of the visitors, operators should be well prepared in meeting their needs and expectations. Hence, agritourism farmers should have the ability and competence to provide a satisfactory level of services to this market segment.

The level of satisfaction of visitors was reflected at a significant level because the visitors were happy with the nine attributes of agritourism. Furthermore, a significant level of intention to revisit by the local visitors and a high level of readiness to recommend the destinations to others by both groups of visitors were positive signs of the sector.

Table 5: Comparison of mean differences of local and foreign visitors using paired T-Test

Aspects/Attribute	Local visitors (n=128)					Foreign Visitors (n=76)				
	MPV	MEV	MD	t-value	Satisfaction level	MPV	MEV	MD	t- value	Satisfaction level
Destination characteristics										
Arrangement of the destination	3.84	3.73	0.109	3.949*	S	3.37	3.41	-0.039	-0.597	JS
Number of educational programs	3.66	3.59	0.063	1.520	JS	3.26	3.47	-0.211	-2.970*	DS
Number of entertainment activities	3.58	3.53	0.047	1.282	JS	2.11	2.24	-0.132	-3.371*	DS
Level of direct sales of the destination	2.44	2.66	-0.219	-3.436*	DS	2.00	2.18	-0.184	-4.115*	DS
Services and facilities										
Quality of farm products	3.81	3.73	0.078	1.728	JS	3.37	3.39	-0.026	-0.815	JS
Variety in farm activities	3.47	3.42	0.047	1.178	JS	3.26	3.32	-0.053	-0.893	JS
Level of accommodation facilities	4.22	4.13	0.094	3.625*	S	3.79	3.63	0.158	3.750*	S
Photography, audio, and video facilities	4.39	4.25	0.141	4.559*	S	3.84	3.68	0.158	3.174*	S
Staff members										
Helpfulness	4.47	4.28	0.188	5.414*	S	3.92	3.74	0.184	3.156*	S
Efficiency	3.98	4.05	-0.063	-1.644	JS	3.68	3.74	-0.053	-0.893	JS
Friendliness	4.19	4.09	0.094	3.625*	S	4.00	3.84	0.158	3.174*	S
Courtesy	4.58	4.45	0.125	4.259*	S	4.11	3.95	0.158	3.750*	S
Surrounding environment										
Natural beauty and greenery	3.63	3.63	0.094	3.625*	S	4.03	3.89	0.132	3.371*	S
Friendliness and courtesy of local residents	3.63	3.50	0.125	4.259*	S	3.97	3.79	0.184	3.542*	S
Hygiene and sanitation of the farm environment	3.33	3.36	-0.031	-0.755	JS	3.26	3.34	-0.079	-1.097	JS
Road condition to the destination	3.03	3.11	-0.078	-3.281*	DS	3.05	3.21	-0.158	-3.174*	DS
Safety and protection of the area	3.22	3.16	0.063	2.910*	S	3.00	3.04	-0.039	-0.652	JS
Price level										
At the destination	3.31	3.09	0.219	3.949*	S	2.97	2.84	0.132	3.371*	S
For food and drinks	3.31	3.19	0.125	2.024*	S	2.74	2.55	0.184	3.156*	S
For accommodation	2.84	3.00	-0.156	-2.162	JS	2.89	2.68	0.211	3.203*	S
Off the farm products and other items	2.78	2.91	-0.125	-1.805	JS	3.03	2.84	0.184	3.156*	S

MPV= Mean Perceived Value; MEV= Mean Expected mean value; MD = Mean Difference between perceived and expected values

S = Satisfied; DS = Dissatisfied; JS = Just Satisfied

*=Significant at 95 Confidence Level

Table 6: Overall satisfaction and the future behaviour of all the visitors

Impression	Total Visitors (n=204)		
	MP V	SD	t-value
Overall satisfaction with the destination	3.36	0.980	48.985*
Intention to revisit the destination	1.27	0.509	35.752*
Recommending the destination to others	3.94	0.740	76.024*

MPV=Mean Perceived Value; SD=Standard Deviation;
*=significant at 95 Confidence Level

Table 7: Comparison of overall satisfaction and the future behaviour of local and foreign visitors

Impression	Local (n = 128)			Foreign (n = 76)			Independent t-test	
	MPV	SD	One sample t-test value	MPV	SD	One sample t-test value	MD	t-test value
Overall satisfaction with the destination	3.50	0.956	41.433*	3.13	0.984	27.732*	0.368	2.632*
Intention to revisit the destination	1.33	0.534	28.137*	1.18	0.453	22.767*	0.144	2.159*
Recommending the destination to others	3.97	0.813	55.252*	3.89	0.602	56.424*	0.074	0.689

MPV = Mean Perceived Value; SD = Standard Deviation; MD = Mean Difference
*= Significant at 95 Confidence Level

However, the visitors were not so happy with many attributes. Under the destination characteristics, *arrangement of the destination, educational facilities, entertainment programs, level of direct sales*, and under the services and facilities, *quality of farm products and variety in farm facilities* were not at a good level. Lack of efficiency among the staff members was a major weakness. Regarding the surrounding environment, *poor hygiene and sanitation of the farm and surrounding, poor road conditions*, and a *low level of safety and protection of visitors* could be seen. In the case of price levels, *price of accommodation and price of farm products* were not in line with the expectations of the visitors.

When the indifference and dissatisfied attributes were studied in detail, several weaknesses could be identified. Out of them some are farm level weakness and the others are the problems due to lack of policy guidelines. It is better to explain these two types of weaknesses separately, with the suitable recommendations to overcome them.

Recommendations for farm level operations

Arrangements at the destinations (internal roads, footpath, direction boards in the farm, name boards for different sections, parking and resting areas for the visitors) were not well planned. The number and quality of educational programs (guided farm tours, demonstration programs, practical sessions) were not up to the standard. With regard to entertainment programs, although some programs (pick your own, feeding animals, bird watching) exist, special programs such as harvest festivals, camping sites, petty zoo, and cultural items, etc. were not found. There were only two items

available for direct selling: fresh fruits and vegetables. They did not sell processed farm products, and herbal items etc. This is because that the agritourism farmers have lack of knowledge on planning, landscaping, management, marketing, and also lack of experience in hospitality management. Therefore, agritourism farmers need to improve their basic knowledge and skills in order to provide better agritourism services to visitors.

With regard to services and facilities, the quality of farm products is very important. However, in these agritourism destinations, the quality of some products was not so good. The availability of chemical residues, harvesting of premature as well as over-matured farm products, and poor cleaning, sorting, labelling and packaging were commonly seen as problems. To overcome these weaknesses, agritourism farmers need to have better knowledge and awareness of these aspects, and they have to pay attention to maintain good quality farm products.

Furthermore, the farm facilities were at a poor level. Since farms are small in size, they cultivate crops and rear livestock at a small-scale level. Consequently, only limited activities were included as agritourism activities. As solutions to these problems, the establishment of green houses, linkages with other agritourism farmers and formation of agritourism networks can be thought of. Linkages with local residents, introduction of local cultural activities, and local products such as arts and crafts, etc. are equally important.

The low efficiency of staff members was clearly evident in all places. It is because of the fact that the staff members are local people with low level of education and experience. They work traditionally

without any modern tools and gadgets. They take more time to think and then do things. As a result, their work efficiency is comparatively low. Learning and getting acquainted with new technology to enhance the efficiency and effectiveness of the staff members at the agritourism destinations is very much crucial. Further, the hygiene and sanitation situation at the destinations were not up to the standard. Poor attention was given to remove farm waste and keeping the farm environment clean and tidy. Farmers are very busy with farming tasks, and agritourism and family activities at the same time. Agrochemicals, polythene sheets, plastic bottles, heaps of garbage, etc. were seen in many places in the farms. This has negatively affected the visitors. Agritourism farmers must follow proper methods and practices in managing such farm and non-farm wastes. Here, the 3R concept (reduce, reuse and recycle), production of compost and biogas from waste are possible alternatives.

Policy recommendations

The poor condition of roads is an important issue that requires high attention for improvement. These agritourism destinations are situated in rural areas, and visitors come mainly from urban areas using comfortable vehicles. Maintaining a high quality road network is the responsibility of local as well as the national governments around agritourism operations. Agritourism farmers have equal responsibility to maintain their internal roads. Mobilising local residents' support and cooperation for improving both internal and external roads should be linked with the local government in promoting the agritourism activities collectively in the area.

Security and safety measures for protecting the visitors against local thieves, wild animals, and bad road hazards leading to accidents at times are of great concerns. Lack of transport services and hospitals are constraints in meeting emergency situation due to potential risk of road accidents. This was very much realised at study locations. Therefore, agritourism farmers need to keep close contacts with these services in order to guarantee quick services whenever required. Not only farmers, especially local authority should support and pay attention to guarantee have these basic needs in agritourism areas.

The price level of accommodations provided by the agritourism operators was high as compared to the neighbouring hotels with better accommodation facilities. The operators need to learn and provide with competitive rather cheaper price as compared to outside providers. Government may consider to provide education and training programs to agritourism operators about improving accommodation quality and fixing proper as well as attractive price to the visitors.

The price of the farm products and other items was expensive. Agritourism farmers claim that they sell fresh organic farm products. However, there was no way to differentiate between organic and inorganic fruits and vegetables. Agritourism farmers should be honest about their products whether organic or inorganic and need to maintain fair price levels for the farm products. Since there is no mechanism and procedure yet to differentiate between organic and inorganic products in the county, it

is urgent to establish such a mechanism to overcome these problems. If agritourism farmers follow above mentioned recommendations, they will be able to supply a better quality services to the visitors and enhance the visitor satisfaction in agritourism.

Limitations of the research

There are a few limitations of this research. The research was conducted only at three destinations, which had fewer diversified agritourism functions and services as they were at the initial stage of development at present. The sample size was small, particularly for the foreign tourists, and the data were collected only at one point in time (cross sectional data). Other than the selected 21-agritourism attributes, there might be some other attributes important for visitor satisfaction. However, the findings are useful in developing policies and promotional measures for further expansion of this sector.

Conclusion

The overall satisfaction levels of both the groups of visitors were moderate and a higher level of satisfaction was observed in local visitors compared to foreign visitors. Although the possibility of revisiting the destinations was low, recommending the destinations to others was high by both the groups. However, these two groups emphasized the necessity of improving appropriate educational programs, entertainment activities, diversification of farm products and processing as applicable, availability of farm products for direct sale to the visitors, increasing the efficiency of staff members, upgrading the hygiene and sanitation situation, and improving the road conditions leading to the destinations in order to enhance the satisfaction of visitors. In general, agritourism farmers should pay more attention to several aspects of their operations, especially regarding the attributes that were identified as dissatisfactory and also those that were regarded with indifference on the part of the visitors. After the end of the ethnic war, Sri Lanka is now focussing on promoting tourism in the country. Rural development is the top priority, especially by developing the tourism in rural areas. In this context, agritourism is well placed and can be expanded in and extended to remote rural areas. Thus, the findings of this research may be useful in developing policies and undertaking promotional measures along with improving the quality and networks of rural roads.

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REFERENCES

- Adam, K. (2001) *Entertainment Farming & Agri-Tourism*: National Centre for Appropriate Technology, USA.
- Agritourism Development Corporation (2008) Maharashtra Krishi Prayatan (Agri-tourism) Vistar Yojana 2008. Retrieved May 03, 2008, from <http://www.agritourism.in/atdc.html>
- Agritourism World. (2008) 'Agritourism News World Wide'. Internet Directory for Agritourism.
- Barbieri, C. (2009) *A comparison of agritourism and other farm entrepreneurs: Implications for future tourism and sociological research on agritourism*. Paper presented at the Northeastern Recreation Research Symposium.
- Barsky, & Labagh. (1992) A Strategy for Customer Satisfaction. *Cornell Hotel and Restaurant Administration Quarterly*, Oct, 32–40.
- Bernardo, D., Valentine, L., & Leatherman, J. (2007) Agritourism: If we build it, will they Come? Retrieved September 25, 2007, from <http://www.uvm.edu/tourismresearch/agresearch.html>
- Blacka, A., Couture, P., Coale, C., Dooley, J., Hankins, A., Lastovica, A. (2001) Agri-Tourism. Virginia Cooperative Extension. Retrieved 09 November, 2004
- Bowen, D. (2001) Antecedents of consumer satisfaction and dis-satisfaction (CS/D) on long-haul inclusive tours – a reality check on theoretical considerations. *Tourism Management*, 22, 49–61
- Bramwell, B. (1998) User satisfaction and product development in urban tourism. *Tourism Management* 19(1), 35–47.
- Brscic, K. (2006) The Impact of Agritourism on Agricultural Production. Paper presented at the 1st International conference on Agriculture and Rural Development, Topusko, Croatia.
- Bruch, M. L. (2008) Agritourism and the Tennessee Agritourism Initiative. Paper presented at the Great Smoky Mountains Sustainable Tourism Summit held on April 28–29 2008 at the Knoxville Convention Center in Knoxville, Tennessee. USA. Retrieved on 12 May 2011 from <http://cpa.utk.edu/pdffiles/cpa152.pdf>.
- Brumfield, R. G., & Mafoua, E. K. (2002) Agric tourism as income based risk management strategy for greenhouse and nursery producers [Electronic Version]. *Rutgers cooperative Extension, New Jersey Agric Experiment station, New Jersey*. Retrieved 13 May 2007 from <http://www.linkbc.ca/torc/dwns1/agritour.pdf?PHPSESSID=dfb8c15b25bcbfb9345baa5d0781d05f>.
- Byrd, C. C., & Gibson, J. D. (2004) *Marketing and expanding your community's agricultural tourism assets*. Paper presented at the Proceeding of the 29th Annual Conference, Dublin, Ireland.
- Chon, K. S., & Olsen, M. D. (1991) Functional and Symbolic Approaches to Consumer Satisfaction/Dissatisfaction. *Journal of the International Academy of Hospitality Research*, 28:21–20.
- Christou, P., Lashley, C., & Saveriades, A. (2009) The World of Agritourists: A Psychological Perspective. *Tourismos: An International Multidisciplinary Journal of Tourism*, 4(4), 241–257.
- Churchill, G. A. J., & Surprenant, C. (1983) *Marketing Research: Methodological Foundation*. Chicago: The Dryden Press.
- Clemons, S. D., & Woodruff, R. B. (1992) Broadening the view of Consumer (Dis)satisfaction: A proposed Means – end Disconfirmation model of CS/D. *American Marketing Association, Winter* (413–421).
- Colton, J. W., & Bissix, G. (2005) Developing agritourism in Nova Scotia: Issues and Challenges. *Journal of Sustainable Agriculture*, 27(1), 91–112.
- Coomber, L. a. L., C. (2004) Farm tourism: A preliminary study of participants' expectations and perceptions of farm tourism. Retrieved 2007.09.8, from <http://www.iemss.org/iemss2004/pdf/ecotourism/coomfarm.pdf>.
- Engel, J., Blackwell, R., & Miniard, P. (1993). *Consumer Behaviour* Orlando: Fort Worth, Dryden Press.
- Essex, S. J., Gilg, A. W., Yarwood, R. B., Smithers, J., & Wilson, R. (Eds.). (2005). *Rural change and sustainability, agriculture, the environment and communities*. Wallingford: CABI Publishing.
- Fleischer, A., & Tchetchik, A. (2005) Does rural tourism benefit from agriculture? *Tourism Management*, 26(4), 493–501.
- Hilchey, D., & Kuehn, D. (2006) Agritourism in New York: A Market Analysis [Electronic Version], 8. Retrieved 11/10/2007 from <http://www.uvm.edu/tourismresearch/agritourism/?Page=agresearch.html>.
- Hui, T. K., Wan, D., & Ho, A. (2007). Tourists' satisfaction, recommendation and revisiting Singapore. *Tourism Management*, 28(4), 965–975.
- International Fund for Agricultural Development (2010) *Rural Poverty Report 2011*. Rome, Italy.
- Jolly, D. A., & Reynolds, K. A. (2005) Consumer demand for agricultural and on-farm nature tourism. *UC Small Farm Centre Research Brief* Retrieved 05 May, 2008, from <http://sfp.ucdavis.edu/agritourism/agtourbrief0601.pdf>
- Kozark, M., & Rimmington, M. (2000) Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination. *Journal of Travel Research*, 38, 260–269
- Lack, K. J. (1995) *Agri-Tourism Development in British Columbia*. Simon Fraser University, Ottawa.
- Lee, C., Yoon, Y., & Lee, S. (2007) Investigating the relationships among perceived value, satisfaction, and recommendations: The case of the Korean DMZ. *Tourism Management*, 28(1), 204–214.
- Lobo, R. E., Goldman, G. E., Jolly, D. A., Wallace, B. D., Schrader, W. L., & Parker, S. A. (1999) The flower fields in Carlsbad, is a popular agritourism attraction in San Diego County. Retrieved August 19, 2007, from www.backyardnature.com
- Malkanthi, S. H. P., & Routray, J. K. (2011) Potential for agritourism development: evidence from Sri Lanka. *The Journal of Agricultural Sciences*, 6(1), 45–58.
- Marsden, T., & Sonnino, R. (2008) Rural development and the regional state: Denying multifunctional agriculture in the UK. *Journal of Rural Studies* 24, 422–443.
- McGehee, N. G., & Kim, K. (2004) Motivation for Agri-Tourism Entrepreneurship. *Journal of Travel Research*, 42(2), 161–170.
- Ministry of Finance and Planning. (2011) *Mid-year fiscal position report*. Colombo, Sri Lanka.
- Nickerson, N. P., Black, R. J., & McCool, S. F. (2001) Agritourism: Motivations behind Farm/Ranch Business Diversification. *Journal of Travel Research*, 40(1), 19–26.
- Nilsson, P. A. (2002) Staying on farms: An ideological background. *Annals of Tourism Research*, 29(1), 7–24.
- Noe, F. P., & Uysal, M. (1997) Evaluation of Outdoor Recreational Settings. A Problem of Measuring User Satisfaction. *Journal of Retailing and Consumer Services*, 4(4), 223–230.
- Oliver, R. L. (1980) A cognitive Model for the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 27(460–469).
- Oliver, R. L. (1997) *Satisfaction: A Behavioral Perspective on the Consumer*. New York, USA.: McGraw Hill.

- Oliver, R. L., & Bearden, W. O. (1985) Disconfirmation Processes and Consumer Evaluations in Product Usage. *Journal of Business Research*, 13, 235–246.
- Ollenburg, C., & Buckley, R. (2007) Stated economic and social motivations of farm tourism operators. *Journal of Travel Research*, 45(4), 444–452.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. (1985) A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41–50.
- Patterson, P. G. (1993) Expectations and product performance as determinants of satisfaction for a high-involvement purchase. *Psychology & Marketing*, 10 (5), 449–465.
- Phelana, C., & Sharpley, R. (2010) Agritourism and the farmer as rural entrepreneur: a UK analysis. Paper presented at the *NeXT Tourism Entrepreneurship Conference*, Wilfred Laurier University, Waterloo, Ontario, Canada, 26.
- Pizam, A., & Millman, A. (1993) Predicting satisfaction among first-time visitors to a destination by using the expectancy-disconfirmation theory. *International Journals of Hospitality Management*, 12(2), 197–209.
- Reichel, A., Owengart, O., & Milman, A. (2000) Rural Tourism in Israel: Service Quality and Orientation. *Tourism Management*, 21(5), 451–459.
- Rentinge, H., Rossingb, W. A. H., Grootb, J. C. J., van der Ploeg, J. D., Laurentc, C., Perrauid, D. (2009) Exploring multifunctional agriculture. A review of conceptual approaches and prospects for an integrative transitional framework. *Journal of Environmental Management*, 90(12), 3687–3740.
- Reynolds, K. A. (2007) Information Channels Reaching Agricultural and On-Farm Nature Tourism Visitors. *UC Small farm centre research brief* Retrieved October 01 2007, from www.sfc.ucdavis.edu/agritourism/agtourbrief0701.pdf
- Rozman, C., Potocnik, M., Pazek, K., Borec, A., Majkovic, D., & Bohanec, M. (2009) A Multi-criteria Assessment of Tourist Farm Service Quality. *Tourism Management*, 30, 629–637.
- Schmitt, M. (2010) Agritourism – From Additional Income to Livelihood Strategy and Rural Development. *The Open Social Science Journal*, 3, 41–50.
- Sharply, R. (2002) Rural tourism and the challenge of tourism diversification: the case of Cyprus. *Tourism Management*, 23 (3), 233–244.
- Sidali, K. L., Spiller, A., & Schulze, B. (Eds.). (2011). *Food, Agri-Culture and Tourism: linking local Gastronomy and Rural Tourism: Interdisciplinary Perspective*. London: Springer Heidelberg Dordrecht
- Sirgy, J. M. (1984) A Social Cognition Model of Consumer Satisfaction/Dissatisfaction. *Psychology and Marketing* 1 (summer), 27–44.
- Spreng, R. A., Mackenzie, S. B., & Olshavsky, R. W. (1996) A Re-examination of the Determinants of Consumer Satisfaction. *Journal of Marketing Research*, 60(3), 15–32.
- Sri Lanka Tourist Board. (2010) *Annual statistical report 2010*. Retrieved 2011.11.12, from <http://www.srilankatourism.org>.
- Topcu, E. D. (2007) *Agri-tourism: as a new element of country planning*. Middle East Technical University, Turkey
- Veeck, G., Che, D., & Veeck, A. (2006) America's changing farm escape: A study of agricultural tourism in Michigan. *Professional Geographer*, 58 (3), 235–248.
- Weber, K. (1997) The Assessment of Tourist Satisfaction Using the Expectancy Disconfirmation Theory: A study of the German Travel Market in Australia *Pacific Tourism Review*, 1, 35–45.
- Wicks, B. E., & Merrett, C. D. (2003) Agritourism: An economic opportunity for Illinois. Retrieved 06 June 2007, from www.iira.org/pubsnew/publication/IIRA-RRR-577.pdf.
- Wilson, G. A. (2007). *Multifunctional agriculture: A transition theory perspective*. London: CABI Publishing.
- Wilson, J., Thilmay, D., & Watson, P. (2006) The role of agritourism in Western states: place specific and policy factors influencing recreational income for producers. *Review of Regional Studies*, 36(3), 381–399.
- Wirtz, J., & Bateson, J. E. G. (1999) Consumer Satisfaction with Services: Integrating the Environmental Perspective in Services Marketing in to the Traditional Disconfirmation Paradigm. *Journal of Business Research*, 44 (1), 55–66.
- Yu, L., & Goulden, M. (2006) A Comparative Analysis of International Tourists' Satisfaction in Mongolia. *Tourism Management*, 27, 1331–1342.