



Potential for Earning Indirect Revenues from Manufacturing Process; Special Reference to Agro Entrepreneurs in Sri Lanka

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ABSTRACT

Most of the countries use agro businesses as a poverty reduction strategy in their countries' developing process. Agro business can enter into the innovative value added activities to achieve their business goals and get generated indirect income by attracting visitors to the farming areas and provide knowledge, experience about a manufacturing process to the visitors.

The objective of this study is to determine the potential for earning additional revenues from manufacturing process by conducting observation tours around manufacturing process to the public.

This Study is a mixed method study, which used primary data from 60 Agro business Entrepreneurs from 03 districts and sample was selected based on Convenience sampling method. Schedule is used under personal Interviews in order to gather primary data. In addition to cardinal primary data collection method, discussions were conducted with customers. Content Analysis and Pattern Matching technique and Descriptive Statistics are used to analyze the data. SWOT Analysis was carried out to identify the internal and external environment factors which are affected for earning additional revenues from manufacturing process.

Content Analysis and Pattern Matching Analysis technique reveals that the Unemployment of youth labor force in Agriculture sector, Family engage in agro business, traditional manufacturing methods which attracts locals and foreign tourists, availability of farming areas in Tourism destinations, are the high rated increasing factors that affect to get generated additional income from manufacturing process. Lower level of Entrepreneurship and management skills and financial and credit problems are the identical factors which effect to decreasing factors affect to get generated additional income. Thus it reveals that there is high potential of earning indirect income form production process.

KEYWORDS: *Agro Entrepreneurs, Earning Additional Revenues, Manufacturing Process*

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1 Introduction

A substantial contribution has been made by agriculture sector to Sri Lankan Economy. Being an agricultural country, agriculture sector contributes 11 percent to the GDP in 2011 from the arable area of 19 percent from total land in Sri Lanka (Samaranayake, 1998). Paddy, Animal Husbandry and livestock Productions and fisheries are very important sectors in agriculture which made significant contribution to uplift agricultural sectors in Sri Lanka (Annual Central Bank Report, 2014). These facts Highlights that the agricultural sector in Sri Lanka creates appropriate environment with vast opportunities for Entrepreneurs to engage in agro business.

Agro Business can be defined as a science and practices of activities with backward linkages related to production, process etc. Many developing countries use agro business as a poverty reduction strategy in their countries developing agenda (Stamm et al, 2006). They use these agro businesses as a tool to reduction of poverty and unemployment as well as develop the life style of rural community. These agro business which are used as developing tool in many countries, play an important role in Sri Lanka as its capacity to generate employments and provide key to the social progress to uplift the lifestyle of the community. Though Sri Lanka has more opportunities to develop the agro business sector, the country is not well accelerated to get full benefits from it due to many facts. The inferiority that prevails among the people, this sector is unprofitable sector, lack of financial support to the agro business, and low level of government intervention and facilitation are few reasons for it (Devagiri, 2005). Agro Entrepreneurs have to draw their attention toward the other income generation method through their business to overcome their financial and credit problems (Perera & Kuruppuge, 2014). Therefore they should look forward to make a proper mechanism to increase the competitiveness and transfer product, process and business model innovations into improved products and larger market share.

Strategy is being practiced to attract visitors to farming areas for various purposes such as educational and recreational purpose in order to provide them knowledge and experience on agricultural production method. This method is applied by farmers in many countries to overcome their financial and economic difficulties and find the new agricultural and business model as well as going in search of new ways of generating income (Malkanathi & Routry, 2012). Usually from the tradition, production process is only limited to employees and it is targeting only the production rather than generating other income. But in present, going beyond the tradition farming culture and farmers attract the local and foreign tourists to their farming areas and provide tours around manufacturing process; it may include observation of production system, harvesting, dairy tours and more (Adam, 2004). These types of processes are presently carried out in Sri Lanka, collaborate with tourism sector. They are called in different names such as "Agro Tourism" and "Tea Tourism". By providing opportunity to visit around the manufacturing process, entrepreneurs can open their gate to promote their products, do extra sales in manufacturing place, and encourage people to purchase Agro products. Thus this will lead to minimize the transaction cost, increasing capability of the supply base Market Structure and Relational value chain and Modular value chain. These activities will create the base to generate other income from manufacturing process at the Manufacturing stage.

Thus this research paper examines the potential of attracting tours to the agro products manufacturing areas and get generated the extra income from production process.

1.1 Statement of Problem

The main problem of this study is "Is there a potential for earning extra revenue from agriculture products manufacturing process?" the research questions of the study are: (i) what is the preference of the Agro entrepreneurs to open their manufacturing process to public community in order to get generated additional income. (ii) What are the factors which are affected to get generated indirect income from Production Process? This study find the answers for the questions on consent of the agro entrepreneurs and factors influence to open their production process to the public and make them aware of the manufacturing process, cater entertainment and rural experience in order to get generated the extra income.

1.1.1 Objectives

Based on the research problem the major objective of the research is derived as “Identify the potential opportunities for earning extra revenue from agriculture products manufacturing process”. Specific objectives of the study are: (i) To identify the preference of the Agro entrepreneurs to open their manufacturing process to public community in order to get generated additional income. (ii) To identify the factors which are affected to get generated additional income from Production Process.

In Sri Lanka basically agro entrepreneurs make an attempt to increase the sales volume by selling them to markets or the buyers. They do not make an attempt to get generated extra income from manufacturing process rather looking it only as a process. Through this objective the researchers try to seek the potential to make a production process a success way to use it as a source of extra income generates method.

2. Literature Review

Thus Agro business should draw their attention to upgrade their value chain by introducing new strategies to convert their business a profitable one. Therefor Agro businesses have to look forward the cost reduction programs and strategies which are carried out in aim of get generated the additional income (Pierre et al, 2002). Many researchers identified that attracting tourists or the travellers to the business premises and conduct field visits around the manufacturing process in aim of providing knowledge and entertainment is appropriate strategy to get generated an additional income to agro business (Senanayake & Wimalaratana , 2012).It will make a bridge between agro business and with the outside community who have interest on agro business. Attracting tourists to the business is one of the tactful strategies which bequeath additional income in tourism sector. The income generation study carried out in Tasmania revealed that nearly 50 percent Alternative and additional source of revenues can be generated through the proper way of attracting tourists to the business (Keerr and Gibson).

This additional income generation method in production system simply can be explained as, Agro Entrepreneurs can attract tourists and visitors to their manufacturing places or the farms, conduct tours around it, perhaps let them to engage in manufacturing process activities, and educate them and finally let them create an opportunities to purchase agro products, manufactured through the process that they observed (Nilsson , 2002; Sharply , 2002; Taware , 2004).Through these relationships business can be able to get and exchange new ideas relevant to efficiency and effectiveness of production process, expanding farm operations, developing new markets, and many more. Many parties are involving these processes and enhancing relationship between parties who are interest in agro business for many reasons is highlighted in the UNIDO study program about the agro business for Africa's Prosperity. Variety of parties cater the different roles in the business environment can bring different capabilities to support agriculture activities. Therefore idea behind this program can be used to get generated the additional income to the business in Agriculture Sector.

Creating an attraction on agro business can be lot of work and must be a labor of love. Some attractive places grow out of the owners hobby collections, old farm machines, log buildings, may attract locals and foreigners. This concept is widely propagated in worldwide as many concepts such as Agro Tourism, Tea Tourism, Entertainment Farming, Rural Tourism etc. It may include agricultural farm that related to tourism. In general practice shows that there are entities interested in the agro tourism activities for holidays . This may varies according to the geographical regions as well as consent and the role of the community in these areas (Nilsson , 2002; Sharply , 2002) and Taware , 2004).

Agro tourism, defined as activities offered on working farms and other agricultural settings for entertainment or educational purposes (Rich et al, 2012). it provides travellers a valuable experience to go away from their living urban places and to the rural area and experience the way of manufacturing the agro food items that they consume (Griver, 2009).visit to the farmers other agronomists and agro product manufacturing process , encourage visitors to take part in manufacturing process, enjoy and be aware of the agricultural activities, satisfy the curiosity of the visitors as well as generate the additional income to the farm owners (Singh ,2007; Crete ,2009). It needs small team of farm labors lead to cost reduction method to get generated additional income. Farm tours, farm stay, tractor or bullock cart rides, picking fruits, horticulture items, farm zoos and many more activities are involved in this process

of rural tourism. As a promotional strategy of this process of attracting visitors, farmers conduct vegetable contests, festival pageants, special events, workshops, combination of production process and entertainment activities etc. (Adam , 2004). Finally the tourists visit to the farm stores and the knowledge they gain from the farm tour induces tourists to purchase agro products. Selling the agro product at the manufacturing place will increase the sales revenue without having commissions to the sales intermediaries. It is the fundamental stage of generating indirect and additional income. A study conducted to tourists shopping habit in 1992 by North Central Regional Extension determined that after meal and lodging most of them spend for local foods and products. Also nearly 70 percent of visitors buy gifts and souvenirs for future events and moments. According to (Shuangyu ,2010) this process of getting generate additional income for land owners has a significant benefit to the agro business owners in North Caroline. Not only that, attracting visitors to their agro farms generates so many benefits such as, provide quality local products, provide job opportunities for farm household members, preserve natural ecosystems, improve relationship between farmers and local community etc.

The concept of attracting visitors to agricultural areas is successfully applied in most countries. In Japan this concept is applicable in many crops in agriculture and called them in different names such as Rice based Enterprises, or Rice based green tourism, Grapes based tourism, Apple based tourism, Peach based Tourism etc. In Taiwan through the Leisure Agriculture Association they combine tourism and leisure services with Agro enterprises and promote Tea based, Bamboo based and Pomelo based agriculture product process experience to the visitors in aim of Promoting Agriculture Operations Management as well as Generate Extra Income for farmers(Bernardo ,2014).

In Vermont and Hawaii in USA showed an 86 percent of incensement in total annual farm income can be generated from these concepts between 2000 and 2002 (New England Agricultural Statistics Services 2001,2004; Hawaii Agricultural Statistics 2004).

Though Sri Lanka is a suitable destination which has huge potential to promote Agriculture based Tourism by attracting tourists to Agro products manufacturing areas, but still it in the initial stage .(Developed over course of 2500 years.) (Senanayaka & Wimalaratana , 2012) stressed out that the few potential components in agricultural tradition based on rural friendliness which can provide huge backup to the development of the agricultural based tourism in Sri Lanka.

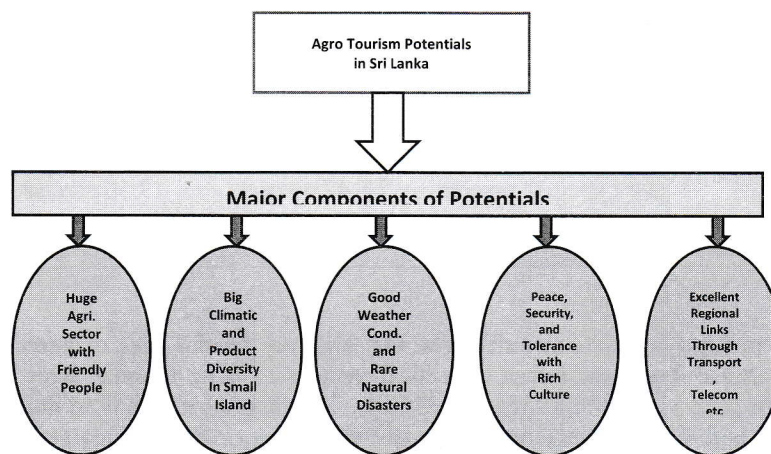


Figure 1- Agro Tourism Potentials in Sri Lanka

3. Methodology

This study is a descriptive study and it was conducted by collecting primary data from 60 agro based business from 03 districts Kandy , Nuwara Eliya and Mathale. From each district paddy farmers, dairy farmers and vegetable farmers are selected for the study. Equal weights (ratios) are given to three Districts to select sample units and equal number of sample units is selected for each sample. Ratio of 2;2;1 is used to select three types of farmers paddy farmers, dairy farmers, vegetable farmers for a sample relevant to district. Discussion was conducted with 20 people to get know about the public view about visiting agro products manufacturing places.

Convenience sampling is used to select the sample. In order to collect data from agro entrepreneurs personal interviews are carried out. In addition to cardinal primary data collection method, discussions were taken place with agro products consumers. Descriptive Statistics and Content analysis and pattern matching techniques are used to analysis the data. Mainly SWOT analysis carried out to identify the internal and external environmental factors of the agro business which have ability to earning additional revenues from Agro based manufacturing process.

4.Results and Discussion

76 percent from the sample which represent agro product manufactures are willing to open their agro products manufacturing process to public in order to provide them agricultural experiences and hope of getting additional income as a return. 24 percent of agro product manufactures do not keen on the idea of attracting visitors to their farm areas due to the lack knowledge of the idea. Dairy product manufactures are more keen on this idea of opening their product manufacturing process to the customers than other two types of agri culture products manufactures such as paddy and vegetables farmers. It takes considerable amount of 91.6 percent from overall dairy farmers in sample and 47 percent from total agro manufacturers who willing to accept the idea of attracting visitors to their farm areas. Paddy farmers do not much like to the idea as they have lack knowledge of this attract visitors to the farming areas. Table 1 shows the consent of agri product manufactures to open their farming area or manufacturing process to the public.

Table 1 Agri product manufactures consent about the idea of attracting visitors

	Paddy farmers	Dairy farmers	Vegetable farmers	Total
Consent rate (to the each category wise)	62.5 percent	91.6 percent	75 percent	-
Consent rate (to the overall sample)	32 percent	47 percent	19.56 percent	100 percent

Among 76 percent Agro products manufactures who are keen on this idea of attracting tourists, 83 percent like to attract foreigners rather than local visitors to their farming areas. 36 percent are preferred for both local visitors and foreigner visitors. The main objective is to attracting foreigners rather than locals is that the manufactures hope that it will provide more income margin as well as providing new technological knowledge and agro product manufactures can get new ideas to increase the productivity. 94 percent from dairy farmers are hoping and willing to get new technological knowledge to increase their productivity from visitors either foreigners or the locals. 95 percent of them preferred to open their business premises or farming areas for 365 days.

Figure 2 highlights the consent of agro products manufactures to carryout activities to attract the visitors in aim of get generated extra income. Five types of strategies are taken into accounts. High rated strategies that the agro product manufactures preferred to get generated additional income are providing agri foods for dine in farming places, and let visitors to engage in agricultural product manufacturing process such as harvesting crops, helping farmers in agricultural activities, packaging etc

Figure 2- Agri products manufactures consent ratios of implementing strategies

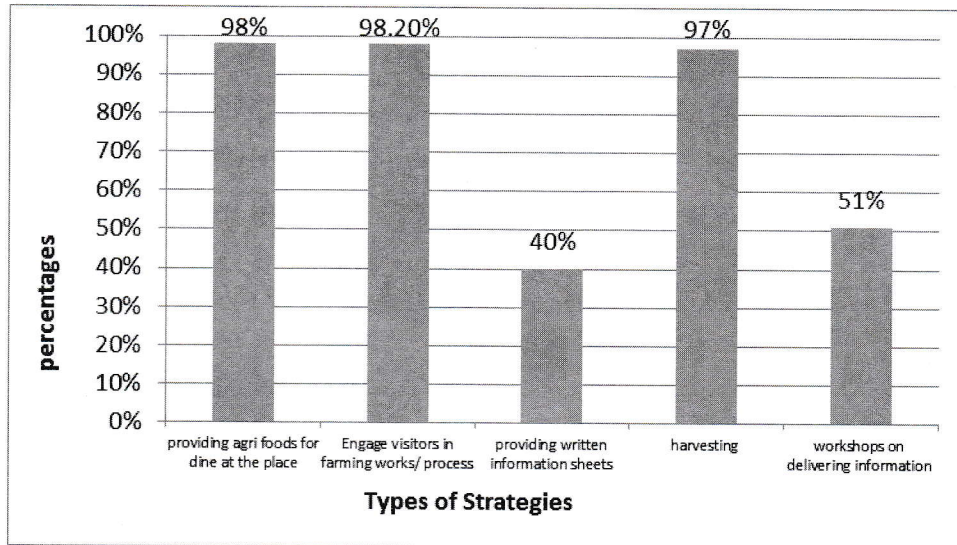


Figure 3- Agro products manufactures 'consent towards the extra income generation methods.

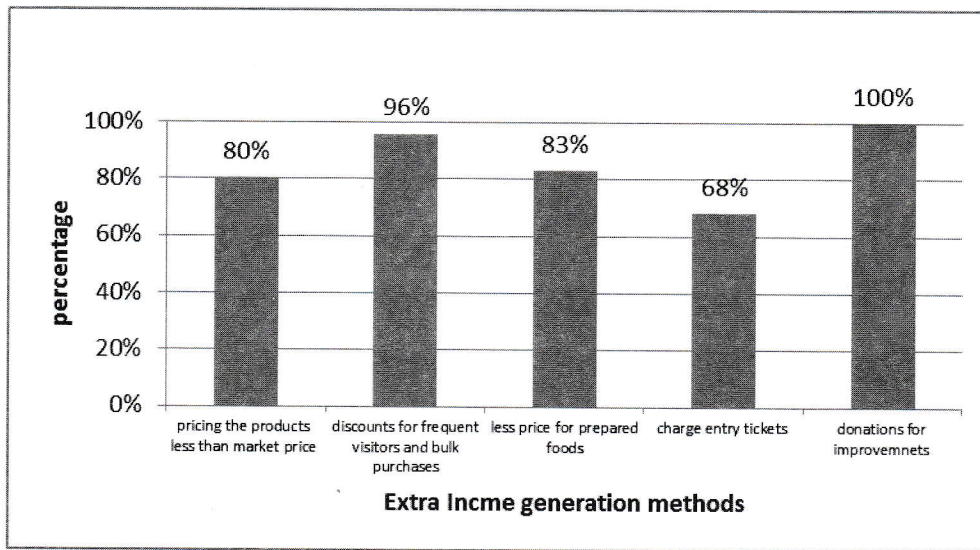


Figure 3 highlights the agri products manufactures' consent ratio to implement the extra income generation methods. All most all the manufactures are giving highest interest to implement the strategies having donations for improvements of the business premises , provide discounts for frequent visitors and bulk purchasers, provide prepared foods for dine at a less price ,at the business premises, pricing the products less than market price at sales centers at farming areas respectively. They carry out the percentages 100 percent, 96 percent, 83 percent , 80 percent respectively. 68 percent of manufactures are reluctant to charge entry tickets as they are not sure about whether they can provide a valuable service relevant to the ticket prices.

Table 2 and Table 3 highlight the significant factors which were identified through SWOT Analysis, effect to generate additional income from Production Process.

Table 2 Strength Factors identified through SWOT analysis

Strength Factors		
Paddy farmers	Dairy farmers	Vegetable farmers
Traditional cultivation processes with less technical tools and machines	Farmers Having broader Knowledge about process	Availability of Variety types of crops
Huge geographical farming areas.(availability of land)	Different processes in manufacturing diversification products	Labor oriented cultivation method
Availability of simple manufacturing process with old machines and tools.	Traditional and old technological tools and machines which can attract visitors.	Huge cultivation area. (availability of land)
Family engage in cultivation	Family engages business.	Family engage business
Diversification in preparing Foods		Farmers Having broader Knowledge in process
Farmers Having broader Knowledge about process		

According to the Content Analysis and Pattern Matching Analysis technique, common strength factors can be identified as follow

1. Traditional cultivation and manufacturing processes which can be attracted visitors, are carried out by agro products manufactures
2. Family members are engaging in agro business ,therefore actively participation of the family members and revenues can be retained in family
3. Border knowledge about the traditional agro products manufacturing process can be considered as valuable factor.
4. Availability of various types of crops and products may lead to different manufacturing processes to attract visitors.
5. Variety of manufacturing products can be used to prepare different cuisine.

Table 3 weakness Factors identified through SWOT analysis

Weakness Factors		
Paddy farmers	Dairy farmers	Vegetable farmers
Fear to commence such program	Less Quality standards are following to produce goods.	Fear to commence such program
Less skills in explanation their border knowledge	Low level of entrepreneurship and management skills	Low level of entrepreneurship and management, skills
Low level of entrepreneurship and management skills	Fear to commence such program	Financial and credit problems
Financial and credit problems	Financial and credit problems	

According to the Content Analysis and Pattern Matching Analysis technique, Strength factors are already available in the agricultural areas and much effort should not pay to take in to the stage. Less entrepreneurship and management skills as well as Fear to commence such programs are badly effect to implement the idea of attracting visitors to the farming area in order to get generated additional income.

Table 4 Opportunity Factors identified through SWOT analysis

Opportunity Factors		
Paddy farmers	Dairy farmers	Vegetable farmers
Availability of large number of farmers and cultivated farming areas.	Availability farming areas in tourism destinations	Availability of large no of farmers and cultivated farming areas in one particular areas..
Availability of farming areas in tourism destinations	Availability of the societies which guide dairy product manufactures	Availability of farming areas in tourism destinations
Availability of agricultural societies, government departments who guid the farmers.	Unemployment youth community	Unemployment youth in the vegetable farming families
Propagating green concepts and environment friendly concepts in society.	People are willing and preferring to visit areas.	Propagating green concepts and environment friendly concepts in society.
Unemployment youth in the paddy cultivated families		
Availability of tourism organizations which prevail Agro tourism and other agriculture based truism concepts.		
People prefer to visit those agricultural areas to get knowledge as well as for fun.		

According to the Content Analysis and Pattern Matching Analysis technique , common opportunity factors which can be effect to get generated additional income from manufacturing process are as follow

1. Large cultivated or manufacturing areas and large number of farmers are located as flock in a certain areas especially in tourism destinations.
2. Availability of agricultural and other supportive societies
3. Unemployment youth force in society
4. Most valuable factor is that the public are prefer to fulfill the curiosity to get know about the production process.

Table 4 Threats Factors identified through SWOT analysis

Threat Factors		
Paddy farmers	Dairy farmers	Vegetable farmers
Less government supervision and encouragements	Less government supervision and encouragements	Less government supervision and encouragements
Language problems in communications	Competitors threats	Lack of sources to them to get technical knowledge
Lack of sources to them to get technical knowledge	Lack of sources to them to get technical knowledge	Labor transfer into other sectors
Labor transfer into other sectors		

According to the Content Analysis and Pattern Matching Analysis technique, most effective common threats for them is that the lack of government supervision and the encouragement. Lack of sources to get knowledge to improve their productivity is another issue in this agricultural sector. Thus there are starving in upgraded technical knowledge to carry out their business in successful way.

Nearly 96 percent of local customers, interviewed are preferred to visit to the agro products manufacturing premises in order to get knowledge. 76 percent of them would like to get a chance of visiting those places in order to obtain knowledge rather than enjoyment. 93 percent of them like to have such kind of agricultural area visits to educate their children and to get fresh and new agricultural products. They would like to get that experience in the school vacation. 73 percent local customers willing to purchase good, fresh, nourished agro products in appropriate price in little bit of higher prices. This highlights that there is a push factor coming from public to agro products manufactures to attract visitors to their manufacturing or the farming areas. This is identified as a good opportunity factor in SWOT analysis.

5. Conclusion and Recommendations

It is revealed that there are more common strength factors as well as Opportunity factors in agro business to get generated additional income from attracting visitors to the farming or manufacturing areas. Therefore it is need of the hour to get generated additional income from manufacturing process, which is considered only to be a manufactured final product. The strength factors identified through the SWOT analysis are available treasured in agricultural sector and responsible people should have to bloom them in order to uplift the agro business in generating additional income. Nature of Agricultural activities as a traditional and family based and diversity product range may influence to improve idea of attracting visitors to the agro business. Therefore favorable Opportunities and strength factors are available in the agricultural sector in Sri Lanka to attract tourists as well as visitors for agro business for various purposes such as educational and recreational activities to get generate additional income to agro business.

And also there are a few weakness factors as well as threats factors which make negative effects for the idea of attracting visitors to the agribusinesses. Some weakness can be reduced not totally, by drawing attention towards the development of entrepreneur and managerial skills. Agricultural societies, government institutes and tourism organizations intervention will make it easier to reduce these weakness factors to reach the targets of agro business. Finally through the SWOT Analysis it is revealed that there is a favorable and high potential to get generated additional income from manufacturing processes in Agro business

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