Present Status of Vegetable Direct Marketing in Selected Districts in Sri Lanka

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FOREWORD

Direct marketing shortens the distance between the farmer and the consumer, providing more information to both parties. It helps retain a higher share for farmers as it bypasses the middle person and reduces the extra cost on packaging, storing and transporting. Consumers are able to purchase high quality vegetables at reasonable prices. Direct marketing ensures the consumers' trust on agricultural produce that they purchase since a direct relationship is built with the farmer.

The importance of Direct Marketing has emerged globally as an alternative to the present extensive vegetable marketing system. The distance between agricultural producers and the consumers has widened with the economic transformation process. As a result, expected benefits by stakeholders are reduced along the agricultural marketing chain. The present vegetable marketing chain in Sri Lanka is an extensive process that disrupts the information flow between the farmer and the consumers who are apart, lowered producer and consumer share of final prices, reduces the freshness and quality of vegetables for consumers. Hence it has become a global trend demanding an alternative marketing system for vegetables. Ensuring better prices for farmers and reasonable prices for good quality agricultural products are major areas of concern in the present Sri Lankan government policy context. This study attempted to review the present status and discuss the possibilities of improving the vegetable direct marketing system in Sri Lanka as an alternative to the present vegetable marketing system. This study is based on information gathered from direct marketers as well as vegetable farmers who are not yet engaged in direct marketing.

Findings reveal that the farmers are able to earn a significant income in direct marketing. *Pola* market was the most important place in direct marketing. Farmers maintained a commodity mix and allocated less than 50 perches per crop. Some farmers sold a number of vegetables while others traded vegetables plus fruits and or other commodities. Although the direct marketers believed that they should maintain a commodity mix to meet the need of different consumers, they did not try to produce all the selling items and the mix consisted of their own produce and the rest from others. Since farmers are reluctant to hand over the management of farm to outsiders; they practised both cultivation as well as marketing. The majority travelled less than 10 km for direct marketing and do not like to travel beyond 20km or to the Western Province. Direct marketing is not openly discussed in the farming community. Hence awareness on benefits of direct marketing is a timely need. Local government authorities should promote direct marketing as a recognized venture through the *pola* market. Direct marketing can be promoted if it is included in the mainstream development programmes. I hope that the findings and suggestions of this study would be useful to policymakers and key players in promoting Direct Marketing System in vegetable marketing chain in Sri Lanka.

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Haputhanthri Dharmasena
Director

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E.A.C.Priyankara

EXECUTIVE SUMMARY

Globally, the distance between agricultural producers and the consumers has widened with the economic transformation process. Rapid economic development and urbanization has led to an increased demand for foods from farming areas. As a result, a significant distance is created between the farm and major consuming cities. The present vegetable marketing chain in Sri Lanka is an extensive process that disrupts the information flow between the farmer and the consumer who are apart. Lower producer share of final prices and higher prices for consumers are major disadvantages in the present system. It further affects the freshness and quality of vegetables for consumers. Hence it has become a global trend demanding an alternative marketing system for vegetables. Ensuring better prices for farmers and reasonable prices for good quality agricultural products are major areas of concern in the present government policy context.

Direct marketing shortens the distance between the farmer and the consumer, providing more information to both parties. It helps to retain a higher share for farmers as it bypasses the middle person and reduces the need of extra cost on packaging, storing and transporting. Consumers are able to purchase high quality vegetables at reasonable prices. Direct marketing ensures the consumers' trust on agricultural produce that they purchase due to the direct relationship built with the farmer. This study attempted to review the present status and discuss the possibilities of improving the vegetable direct marketing system in Sri Lanka as an alternative to the present vegetable marketing system. Secondary information was collected through a literature survey while primary data was gathered from a field survey. The sample included 72 direct vegetable marketers to draw the present experience and 214 vegetable farmers who are not so far engaged in such a system to obtain the views and their willingness for direct marketing.

Findings of this study reveal that *Pola* market has played an important role in vegetable direct marketing. In general, nearly 10% of the vegetable retailers in the selected *pola* market were farmers. The majority (88%) of direct marketers in the sample was in the *pola* market.

The number of years that the farmers engaging in direct marketing shows the long term sustainability. About 65% of the *pola* marketers and 38% of the roadside marketers had more than five years' experience. Nearly 17% newcomers have entered the direct marketing field where there was a favorable environment especially in *pola* markets. These farmers have less than two years' experience. This trend indicates the future potential to expand the vegetable direct marketing system.

The management of the farm had been done by the farm family itself. It found that 51% of the farms were managed by the owner while 47% of the farms managed by a family member because these farmers are not willing to handover the farm management to others. Hence, the distance travelled for direct marketing was limited. Nearly 76% of the sample farmers travel less than 10km for direct marketing and 78% dislike traveling to the Western Province. Considering the multiple responses given by the farmers, long distance (54%), extra transport cost (31%), extra time consumption (20%) and influence on farm activities (16%) were the reasons that prevent them from traveling to far away markets from home. These findings indicate that relational proximity is needed to be maintained when direct marketing is promoted. Cities connected with local tourism can be promoted for direct marketing.

The direct marketers preferred mixed cultivation and sell a commodity mix to increase the consumer demand. Nearly 66% of the direct marketing farmers cultivate less than 50 perches for one crop. Further, 42.22% sold vegetables only while 39% sold fruits and vegetables together and 14% sold vegetable, fruits and other crops indicating that the present practice is to maintain a commodity mix than selling a single crop. About six varieties of vegetables are sold by a single farmer. They sold 65% of own products while the rest 35% were the neighboring farmers' produce or products purchased from the wholesale market. On average, a low country and upcountry farmer sold 50kg, earning Rs.2425.00 and 84kg by earning Rs.4811.00 per day respectively.

Findings of second sample consisting of 214 vegetable farmers revealed that small scale vegetable growers are willing to engage in direct marketing. About 64% of the sample that are willing to direct marketing cultivate less than 0.5 acre for one crop. Nearly 80% of them do not like to travel more than 20km and 73% are not willing to travel to the Western Province for direct marketing. The vegetable farmers in each location suggested establishing direct marketing centers close to crowded places.

Poor knowledge about the concept of direct marketing among direct marketers and the exclusion of direct marketing in the present development programmes are the factors limiting the expansion of vegetable direct marketing. Hence, strong awareness and training programmes are needed for small scale vegetable farmers on direct marketing, consumers' expected values and how it is discussed and concern in the present agricultural marketing system. Further, vegetable direct marketing should be brought into the main stream's development programmes and then facilitated with credit, training, market linkages and other necessary facilities for direct marketing. This type of intervention will help government officials initiate programmes and projects in promoting the direct marketing system. The *DIVINEGUMA* is a main agricultural production programme strengthening home gardens. Presently, this programme is mainly focused mainly on production but it can be directed towards direct marketing in the future development process.

Consumers preferred to purchase vegetable directly from farmers because of freshness and quality apart from health and nutritious status that they expect. Hence there should be an assurance to the consumers about those things. Therefore, introduction of regulatory system for direct marketing is recommended to ensure the consumers' trust.

Potted vegetable cultivation and marketing of radish, knokhol, and other leafy vegetable is recommended for the present vegetable marketing system as it can ensure the consumers' expectations. This method will be more important for institutional buyers.

As the growers are reluctant to hand over the farm management to external parties, deployment of a family member for the direct marketing is recommended. Furthermore, forming small groups and encouraging and facilitating one or two members in the group for direct marketing are also recommended.

LIST OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

Introduction

This chapter defines the concept of direct marketing of agricultural products, briefs on earlier studies of vegetable direct marketing, background information, presents an operational definition, the problem statement, the objectives and methodology of collecting and analyzing data.

1.1 Background

Historically, direct sales or direct contacts between farmers and consumers played as a source of fresh agricultural produce in Sri Lanka. In Asian countries, most of the households still use conventional retailers for fresh fruit and vegetable purchasing (Vidanapathirana *et al,* 2011). Traditional periodic rural markets (*pola* system) can be identified as one of direct marketing places in Sri Lanka. Although periodic markets are widespread in rural dry zone areas, they are well operated in urban places too competing with the modern food marketing system. The people have used this place as an exchange center of day-to-day needs in the past. As a result of the green revolution, introduction of new and high yielding varieties, the agriculture system was transformed into a commercial system. As a result, farmers target higher production and bulk selling. The higher growth of urbanization too enhanced the demand for food stuffs from the rural sector. Consequently, the relationship between farmers and consumers has been stronger in the periodic rural markets. Thus in a *"pola market"*, while farmers market a particular fruit or vegetable directly to the consumers, some of the farmers do business outside the *pola market* in bulk through a number of middlemen.

Supermarket is a newly emerging food retailing system in Sri Lanka. This is also a form of direct selling system which has shortened the distance between farmer and consumer especially for fruits and vegetables. Although it does not eradicate all the middlemen in the marketing chain it bypasses them and the produce from farmers reaches the last retailing point through agreements with farmers and supermarkets. This retail marketing system has rapidly developed after the year 2000. The leading supermarkets have their own retail outlets throughout the country operating around 139 and 67 outlets respectively. Fruits and vegetables which are sold in supermarkets are fresh and often cheaper and also they are concerned about the quality of the products (Vidanapathirana et al, 2011).

The present agriculture marketing system of Sri Lanka consists of a number of middlemen from farmer to consumer and therefore lengthy marketing channels have been established. Thus, additional costs such as transport, loading and unloading, packing and profit margins of middlemen are incurred to the agricultural produce. Further, the freshness of agricultural produce withers especially in fruits and vegetables mainly because of improper handling system. In an extensive marketing channel, it reduces the profit margin for the farmer on one hand and transparency to the consumer about the quality and methods of producing those agricultural produces on the other. As a solution to those drawbacks, direct sales will be an alternative approach. Many developed and developing countries have made attempts to develop and promote direct selling system which has shortened the distance between the producer and the consumer.

The government of Sri Lanka has made many interventions for food marketing system to smooth the operation of marketing system and improve the relationship between farmers and the end user through upgrading of the *pola* system in both urban and rural sectors. Establishment of Dedicated Economic Centers and Co-op cities (co-operative sector) and construction of road networks are also vital moves. However, it did not focus on providing an opportunity to the farmers for direct selling. In a country like Sri Lanka where the majority of farmers are small scale land owners, direct selling system is a more important marketing strategy for farmers. It is also important for policymakers of the government of Sri Lanka on the feasibility of strengthening direct relationship between farmers and consumers as it enhances the livelihood of smallholders. In addition, the policymakers would be able to implement programmes related to direct marketing linkages meeting the requirements between farmers and consumers. This background has given a validity to conduct the study for the establishment of direct marketing system in Sri Lanka.

1.2 The Concept of Direct Marketing

Direct sale is a marketing strategy that may allow farmers to contrast the adverse effects of productivism and the imbalance of power in the international agro-industrial food supply chain. The most important common feature of direct selling is that they shorten the distance and favour a direct relationship between producers and consumers (Aguglia *et al*, 2009). As for farmers, direct selling can be interpreted as a diversification strategy that can lead to higher profits and better farm household incomes (Jarosz, 2007). Farmers are able to retain higher value through direct sales because it bypasses the middlemen in the distribution chain. Further, direct selling reduces the need of extra cost on packaging, storing and transporting. Direct selling helps farmers to re-deploy labour resources of the farm household on farm activities different from traditional agricultural production. On the other hand, consumers are able to purchase high quality food at reasonable prices (Aguglia *et al*, 2009). Direct selling ensures the consumers' trust on agricultural produces that they purchase. For instance, in Vietnam, consumers are more concerned about product quality such as freshness, taste and safety. It had been reported that 75% of the consumers are extremely concerned about the safety of foods (Moustier *et al*, 2006).

Martinez and Steve (2010) point out different forms of direct marketing in their study on *"Local Food System"*. Those are direct to consumer marketing, farmers' market, Community Supported Agriculture (CSA), Pick-your-own or U- Pick operation and community gardening. A farmers' market is a common area where several farmers gather on a recurring basis to sell a variety of fresh fruits, vegetables, and other farm products directly to consumers. In CSA, a group of people buy shares of a portion of the expected harvest of a farm. The CSA requires a one-time payment at the beginning of the season, but have become more flexible, offering two to four installment payment plans or payments on a monthly basis. The concept of the CSA has first started in the United States in 1986 in Massachusetts and New Hampshire. The CSA production was benefited by the increase in the popularity of farmers' markets, growth of the organic fruit and vegetable industry, and greater consumer interest in eating locally grown food (Woods *et al*., 2009). The Pick Your Own (PYO) is a type of direct marketing system where consumers harvest fruits and vegetables themselves. This method is mostly preferred by consumers who select fresh and high quality produce at lower prices. The U-pick, operations became popular in the 1930s and 1940s during the economic depression and after World War II, when producer prices were low and producers could not cover labour and material costs. Crops that are well-suited for the PYO operations include those with high labour requirements but require little expertise to harvest (Lloyd *et al*., 1995). Community gardening, household gardening, and garden sharing are technically not market sources of local foods, but are important in providing households with local food access.

1.3 The Problem

In the present agricultural marketing system, the researchers have identified many problems such as lower producer prices, higher consumer prices, and high wastage due to improper packing, transporting and handling methods, poor quality and, lack of safety causing health problems. The available literature revealed that most of these problems could be solved through direct marketing. Hence it is timely to find out whether the direct marketing system can be applied to overcome the above mentioned problems as an alternative to the present agricultural marketing system. As such this study investigates the problem that how far the direct marketing system can address the problems of lower producer prices, higher consumer prices, and higher wastages and the like.

1.4 Objectives of the Study

The main objective of the study is to assess the present direct marketing chains of vegetables and explore possibilities to expand this system in the future. Though there is no established evidence on this subject, it can be observed that there are farmers engaging in direct marketing. Hence this study also is focused on identifying farmers' willingness and views on direct marketing. To achieve the main objective, following specific objectives are to be accomplished.

01. to review the present situation of direct marketing system.
02. to identify the extent to which and ways the direct marketing can be expanded in Sri Lanka.
03. to identify the existing problems and constraints which limit further development of direct marketing in Sri Lanka
04. to provide suggestions for the development of direct marketing system.

1.5 Methodology

1.5.1 Operational Definitions

In this study, it was focused on the direct relationship between the producer and the consumer. The relationship between producer-retailers and producer- institutional buyers are not focused. And also Community Supported Agriculture and Pick Your Own systems are not considered.

1.5.2 Source and Type of Data

Secondary data sources such as previous research and reports were used to understand the existing situation of direct agricultural marketing system while the primary sources (field surveys) were utilized to understand the views of farmers on direct marketing. Quantitative data such as prices, income, cost and profit as well as qualitative data such as freshness, taste and quality of produce and views, ideas and attitudes were investigated to achieve the objectives of this study.

1.5.3 Locations and the Sample of the Study

Four main vegetable growing districts were selected randomly representing both up country and low country vegetable producing areas to collect data and information. Those districts were (**1) Kurunegala (2) Anuradhapura** for up country vegetables, and **(3) Badulla** and **(4) Nuwara Eliya** for low country vegetables.

The study aims to gather data and information in two streams. The first was collecting data on vegetable direct marketers. Previous studies relevant to agricultural marketing system of Sri Lanka have not much focused on direct selling. Hence, explicit data on the population involved in direct selling of agricultural produce is not available in the literature. As such, direct marketers were searched and interviewed in Thambuttegama in Anuradhapura District, Ibbagamuwa, Dodangaslanda and Madahapola in Kurunegala District, Welimada and Hali Ela in Badulla District, Nuwara Eliya in Nuwara Eliya District to find out the present status of direct marketing and 72 direct marketers were interviewed (Table 1.1).

The second was to identify the farmers' views and willingness for direct selling of agricultural produce. Altogether, a sample of 214 was interviewed randomly from major vegetable producing areas of four districts such as 52 farmers from Kurunegala District, 58 farmers from Anuradhapura District, 53 farmers from Badulla District and 51 farmers from Nuwara Eliya District. Ganewatta, Polpithigama and Ibbagamuwa DS division in Kurunegala District, Palagal, Thambuttegama and Galnewa DS division in Anuradhapura District, Uvaparanagama and Welimada in Badulla District and Nuwara Eliya DS division in Nuwara Eliya District were the locations of the study.

Table 1.1: Distribution of the Sample of Direct Marketers

District	Market	Sample
Kurunegala	Dodanmgaslanda Pola Market	11
	Ibbagamuwa Pola Market *	11
	Galtamwewa Pola Market	8
Anuradhapura	Thambuttegama Roadside Market	7
	Thambuttegama Pola Market	03
Badulla	Hali Ela Pola Market**	15
	Welimada PolaMarket	17
Total		72

*Functioned in the Ibbagamuwa Agrarian Service Center
**Functioned in the Hali Ela Agrarian service Center

1.5.4 Method of Data Collection and Sampling

Two separate questionnaires were administrated to direct marketers and the farmers not engaged in such a system. Direct marketers were interviewed at the selling place while the others were interviewed at the doorstep or in the field. Key informant interviews were conducted to gather farmers' and other stakeholders' views on direct marketing.

1.5.5 Data Analysis

Data were analyzed and presented using descriptive statistics tools such as tables and charts.

1.5.6 Structure of the Report

This report consists of five chapters. The first one is devoted to the introduction which discusses the background and the problem that initiated this study, objectives and methodology. The second chapter provides information from the literature on the vegetable direct marketing system. The third and fourth chapters are devoted for analysis and presentation of data. The fifth chapter includes findings and recommendations.

CHAPTER TWO

Literature Review

This chapter reviews the literature on direct marketing. In particular, it describes the emergence of vegetable direct marketing system in developed and developing countries, advantages for farmers and consumers and the legislative framework for direct marketing.

2.1 Direct Vegetable Marketing in the Agricultural Marketing System

The current vegetable marketing system is an outcome of a long term transformation process of transaction activities. Historically, not only vegetables but also all the agricultural commodities were marketed in a commodity exchange system (BARTER system). In other words, it was a direct marketing system and within this system a close relationship between producers and consumers had been created. Some drawbacks in the earliest agricultural marketing system have generated various modifications time to time to fill the gap between the agricultural marketing system and the socio-economic transformation in the country. Middleman appeared as service providers to fulfill the needs of the two persons in the traditional food marketing system. Gradually the numbers of middlemen in the marketing chain have increased with the development of distribution network.

The transition of the economies from *"inward looking policy"* to *"outward looking policy" has* caused a shift in the agricultural marketing system. The transformation of agricultural marketing system primarily has taken place in two stages according to the economic policies implemented to govern the country. These two eras are known as before and after the introduction of open economic policies. In an inward looking economic policy, the main feature of the agricultural marketing system was local food marketing and government food distribution system. In the open economic policy, many activities were allowed to be determined by the free market forces. As a result, there was a significant expansion of industrial and service sectors with rapid urbanization, increase in income and changes in food consumption patterns. With the changes of food habits demand for vegetables in the urban areas increased. As a result, the lengthy marketing channels with more services have developed. Sometimes various types of intermediaries entered the supply chain to distribute vegetables to the urban consumers according to their needs. The ownership of the commodities was transferred to different persons from farmers to collectors, transporters, commission agents, wholesalers and retailers. This extended channels damaged the relationship between the producers and the consumers. Many consumers are frustrated with the quality of vegetables available in the market and the prices paid for those vegetables. Consumers are more concerned about freshness, cultivation practices (fertilizer and chemical applications) and health and nutritional value. Therefore, direct marketing of vegetables has emerged as a means to increase farm income as well as consumer satisfaction in most of the developed and developing countries.

2.2 Pre-studies of Vegetable Direct Marketing

Previous studies conducted in developed as well as developing countries found that vegetable as a major agricultural produce in the direct marketing process. The Ohio Direct Marketing Survey Research Report (Fox and Ernst, 2009) was prepared to measure the impact of direct marketing strategy and identify the best ways to assist food producers to reach the market efficiently. This study found that vegetables as the top agricultural product which was directly marketed (53.42%). Moustier *et al* (2006) carried out a study titled *"Direct Vegetable Sales in Vietnam suit farmers and consumers interest"*. It found that 40% of sellers in Hanoi wholesale market are producers and it is a growing system in the Vietnam agricultural marketing system. Aguglia *et al* (2009) found that 6.1% of all commercial farmers are engaged in direct marketing. It further revealed that 27.7% out of the total direct sales are accounted for fruits and vegetables. Further, in Italy, direct vegetable sales had increased by 39.8% in 2007 compared to that of 2005 and the value of direct vegetable sales in 2008 is 28% of the total direct sales value. In the US agriculture, the number of vegetable and melon farms involved in direct-to-consumer marketing grew by 24 percent (or 3,474 farms) from 2002 to 2007 (Martinez *et al*, 2010).

2.3 The Re-emerging of Direct Marketing of Vegetables

The concept of direct marketing of vegetables is not a new one but presently it is becoming popular. The literature reveals that there is an increasing market segment which highly prefers to purchase vegetables directly from farmers. In Italy, farmers' markets and other forms concerning the direct sale of agricultural products have grown and become popular rapidly in the recent past. Aguglia *et al* (2009) stated that in Italy, 57,530 farms practiced direct sales in 2007 representing the 6.1 percent of all commercial farms, i.e. those enrolled in Register of firms of the Chambers of Commerce. The number of firms engaged in short supply chain is growing rapidly increasing 18 percent over 2005 and of 48 percent over 2010. Direct selling in Italy has more widely diffused in the Northern (43%) and Central (34%) regions than in the Southern regions. At present, the regions in which direct selling is more widely diffused are Tuscany (16.8%), followed by Lombardy (10.6%) and Piedmont (10%). The very positive result recorded in Tuscany is partly due to the provision and calls for organization of farmers' markets issued by the regional administration. Tuscany is the top ranking region and even diffusion frequency is calculated by dividing the occurrences by the total farms in the region (Aguglia *et al*, 2009).

Fox and Ernst (2009) stated that Ohio in U.S.A is in the top ten states for direct farm sales. In addition, the signs of growth include an increasing number of farm markets, farmers' markets, community supported agriculture programmes, produce auctions, chef-grower networks, and farm-based garden centers. In 2008, fruits and vegetables were in the top four products sold (53%). According to the research report on *"Local Food System",* most of the strategies of direct marketing such as Direct-to-Consumer, Farmers' market and Community Supported Agriculture in the U.S.A have increased in 2007 compared with 1997. For example, the number of farmers' markets rose to 5,274 in 2009 from 2,756 in 1998 and 1,755 in 1994, according to USDA's Agricultural Marketing Service. Direct sales have accounted for 0.4% in 2007 of total sales of the U.S.A total agriculture and shown an increase of 0.1% compared to that of 1997. The percentage of number of direct selling farms and sales values of vegetables and melon in the U.S.A. have increased by 24% and 69% respectively in 2007 compared with 2002.

The farmers in the Atlantic Canada have used the direct marketing system, bringing their products more closely to consumer as a strategy to face with the number of challenges that have arisen under the globalized food marketing system (Roberts *et al*. 2008). According to the same author, presently, direct marketing has become a significant component in the Atlantic-Canadian agricultural industry and has substantial potential for expansion based on farmers' making rational business decisions to take necessary steps to move closer to the consumer. It was estimated that direct sales of agri-food products in the Atlantic Region recorded US $91 million. It found that 60 percent of products sold directly by respondent farmers were horticultural crops, including fruits, vegetables, nursery, and greenhouse products. Some of the agribusinessmen have decided to leave the traditional food chain because wholesalers and distributors attempted to differentiate their products and capture more of the consumer dollar. Estimates of growth indicate that the number of Canadian Farmers' Markets almost doubled between the late 1980s and 2004. The Canadian governments have recognized the potential opportunities that direct marketing brings to agriculture by increasing the overall viability of the sector, increasing industry diversity, and providing socio-economic benefits by supporting local, mainly rural business. (Roberts *et al*. 2008).

Moustier (2007) suggested that "bringing production close to consumption reduces the information and transaction costs related to marketing by favoring direct contacts between producers and consumers. This is especially important when guaranteeing food safety is at stake".

Moustier *et al* (2006) estimated the share of direct sales in Vietnam as 60 percent of total safe vegetable sales, representing around 130 tons of vegetables per day and 45,000 tons per year. Short marketing chains are typical of vegetables produced in peri-urban areas. In Hanoi, more than 40 percent of all wholesale market sellers are also producers.

Figuie *et al* (2004) stated that a half of Hanoi consumers considered that the quality of foodstuffs had fallen during the past ten years and 90 percent of the households interviewed have revealed that vegetables are the foodstuffs which pose the greatest challenge in terms of quality and 80 percent of the cases, pesticide residues are a concern. The Vietnam farmers have increased the use of chemicals and fertilizer to maximize the productivity of small scale vegetable cultivations to face the competitive marketing environment.

Tran KhacThi, (1999) has pointed out that the quantities of fertilizer and pesticides used by Vietnam vegetable producers exceeded the FAO standards. Cases of illness and even death caused by ingesting vegetables are regular features in the local press. In 1995, public interest in the safety of vegetables led the Vietnamese Ministry of Agriculture to implement an ambitious programme called "safe vegetables." The government of Vietnam has employed the direct marketing method to promote the safe vegetables programme.

2.4 Advantages for Farmers

Aguglia *et al* (2009) have mentioned that direct sales allow farmers to bypass middlemen in the distribution chain and thereby farmers are able to increase their share without passing it to the distributors. They further revealed that the direct marketing increases the household income through the re-deployment of farm labour which has not previously employed and can be used in agricultural marketing activities.

Roberts *et al* (2008) have pointed out surveying 158 direct marketers in Atlantic Canada that 76 percent of respondents had experienced with increased sales while 59 percent of respondents increased profit after starting direct marketing.

According to Dale (2007), farmers do direct marketing due to financial pressure or increase returns to their business. Jarosz (2007) has interpreted direct selling as a diversification strategy that can lead to higher profits and better farm household incomes. While the farmers are able to earn an extra income, they also can reduce the cost in terms of transportation, storage and packaging through direct marketing. Direct marketing is one of the best solutions for the delayed payment by intermediaries of the extensive marketing system. Obtaining a higher share of retail price is the most distinct advantage for farmer in engaging direct marketing.

Moustier *et al* (2006) have pointed out that the farmers who had sold vegetable directly to the consumers in Vietnam received 60 per cent more instead of selling to the collectors. According to the same authors, farmers value direct retail sales because they are able to make quick delivery of cash.

2.5 Advantages for Consumers

Availability of good quality vegetables at lower prices is the main advantage gained by consumers under direct marketing. Aguglia *et al* (2009) mentioned that there is greater transparency concerning the price formation process which the consumer is able to assess in the direct marketing system. The same author further pointed out that price determinant mechanism is more complicated in the traditional long supply chain along with a number of middlemen but in direct marketing system, consumers are able to save 30 to 35 per cent than that of long supply chain. Aguglia *et al* (2009) stated that, according to the analysis of fruits and vegetables carried out by the National Competition Authority in Italy in 2007, the final mark up price had been as lower as 77 percent in case of direct marketing but it was as higher as 300 per cent in long supply chain including three to four middlemen.

Aguglia *et al* (2009) had further pointed out that there are environmental and social factors motivating consumers to engage in direct purchasing. The present agricultural marketing system has widened the distance travelled from the place of production to the place of consumption. This is called as an increase in "food miles" and therefore wastages too go up and create harmful environmental problems due to garbage. Direct marketing offers a more environmental friendly alternative to the traditional long supply chain. Furthermore, the direct sales channel often becomes the ideal instrument to diffuse organic and integrated agricultural products, hence to reduce another important environmental burden from agriculture.

Hiesinger (2006) had shown that consumers in Hanoi selected a particular market where the farmers sell directly to purchase vegetables. Women consumers in Vietnam had reassured the safety of vegetable with the ability to confirm the origin (place of production, name of the farmer or farmer groups) of vegetable. It means that if there are less or no middlemen, there is great confidence among consumers about the products and the suppliers. Further, the system of access to vegetables, preferred by consumers had been indeed direct purchase from farmers, not home delivery, not harvesting at the farm, but rather in shops (Moustier and Loc, 2006).

The concept of direct marketing of vegetable is increasing because it provides more values for consumers too. The consumers who are concerned more about the quality and the safety of vegetables wish to purchase vegetables directly from farmers. Moustier *et al* (2006) stated that a Vietnamese survey conducted in 2005, interviewing 800 consumers has pointed out that the 75 percent of the consumers are extremely concerned about the food safety (mostly related to the rate of chemical residues). Table 2.1 depicts that the freshness and safety of vegetables are placed first and second respectively in the important criteria of food purchasing.

Table 2.1: Important Criteria for the Consumer's Choice of Food

Item	Price	Freshness	Level of nutrients	Safety of Foods	Information on the origin of products	Trademark of products
Vegetables	1.54	4.54	2.82	3.90	1.38	0.11
Fruits	1.48	4.43	2.86	3.81	1.64	0.23
Meat	1.55	4.53	2.95	3.83	1.54	0.13
Aquatic/Seafood	1.61	4.64	2.97	3.53	1.40	0.19
Cereals	1.53	1.63	2.97	3.23	2.65	1.45
Tea, coffee	1.51	0.89	2.03	2.89	2.86	3.33

Source: Luu Hong Minh et al (2005)
0 = absolutely unimportant, 1 = least important and 5 = most important

The most important strategy that offers consumers a guarantee about food safety is the purchase of food from traders they know. Luu Hong Minh *et al*, (2005) had found that 60 per cent of consumers purchase vegetables from the traders whom they knew.

Figuie *et al* (2004) had stated that there is a close relationship between the vegetable safety and sales people who they knew. Similarly, poor consumers classified had preferred buying from street vendors in the morning because they are generally farmers who sell fresh produce at a low price and who can assure the safety of produce.

2.6 The Legislative Framework Concerning Direct Marketing

Direct marketing is a different concept compared to other forms of marketing. The market segment of direct marketing expects to meet special needs through purchasing vegetables directly from farmers. Maintaining such a situation will help promote the above mentioned marketing method. Although the main objective of direct marketing is to increase the farmers' welfare through diversification of income, the success of this particular marketing method will be determined by the sustainable demand in the market. Direct marketing should offer commitments to its consumers that are something different from existing extensive agricultural marketing system. Therefore, legal framework for direct marketing of vegetable is an important factor and countries which are promoting direct marketing of vegetables try to introduce legal features to the norms of direct marketing of vegetables.

Aguglia *et al* (2009) stated that, the Italian government had introduced Legislative Decree Law No. 228/01 in 2001 for direct marketing to the agricultural sector. Under this Act, the farmers who had registered in the Company Registration Act had been allowed to sell their own products. With this intervention it had further declared that this form of sale was not applicable for fruit and vegetables.

CHAPTER THREE

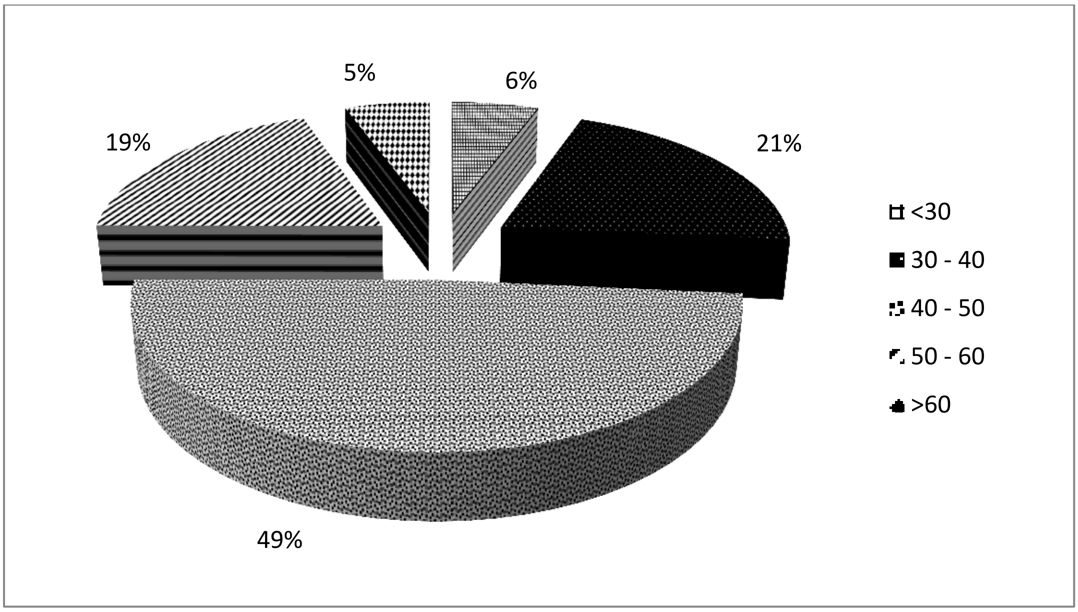
The Practice of Vegetable Direct Marketing

In this chapter, the practice of vegetable direct marketing is analyzed. Data was collected from 72 vegetable farmers who were marketing their vegetables directly to consumers. Their socio-economic profile, places of direct marketing, commodity mix, volume of trade, types and the number of vegetables, experience in vegetable direct marketing, management of the production and harvesting pattern while direct marketing and distance travelling etc. are discussed in this chapter.

3.1 Socio-economic Profile of Farmers

3.1.1 Age Groups and Gender of the Sample

Farmers engaged in direct marketing in the study area were interviewed. The sample depicts that the majority of vegetable farmers in this marketing system were in the middle age. The prominent age group of the sample is 40-50 years and it is represented as 48.61% of the total sample (figure 3.1). The same picture was observed in both upcountry and low country farmers engaging in direct marketing. The farmers engaged in direct marketing in upcountry areas are higher than that of low country areas considering the same age limit. The percentage of farmers in the upcountry is 50 percent and that of low country is 46.88 percent (Table 3.1).



Source: HARTI Field Survey Data 2013

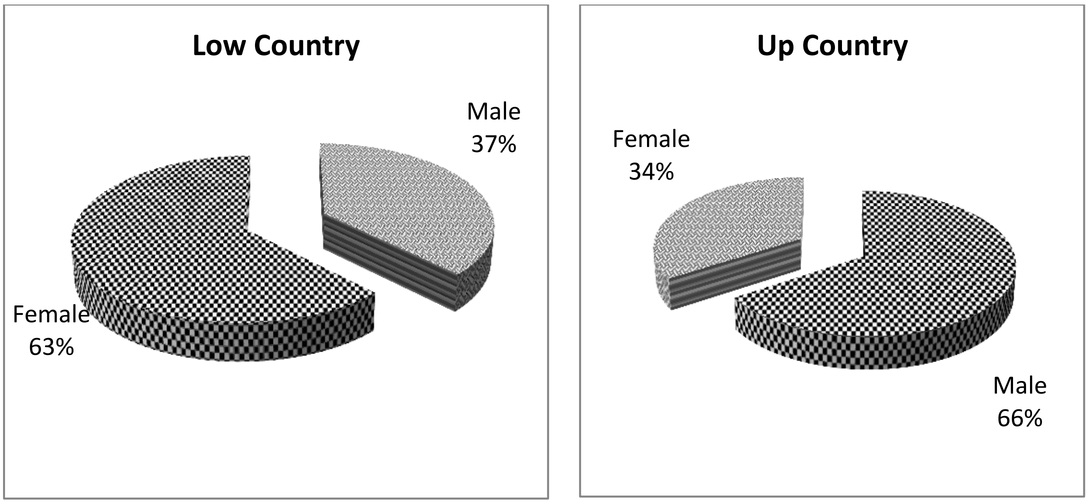
Figure 3.1: Age Distribution of Farmers Engaged in Direct Marketing

Table 3.1: Age Criteria of Up Country and Low Country Farmers Practicing Direct Marketing

Age Group	Low Country Farmers (N=32)* (%)	Up Country Farmers (N=40)** (%)
<30	3.13	7.50
30 – 40	12.50	27.50
40 – 50	46.88	50.00
50 – 60	31.25	10.00
>60	6.25	5.00

Source: HARTI Field Survey Data 2013
* Thambuththegama and Melsiripura **Nuwara Eliya and Bandarawela

The gender wise distribution of direct vegetable marketing shows a different pattern between up country and low country. Women participation in direct marketing is dominant in low country and the involvement of them is about 63 percent while the men's involvement is about 66 percent in the up country (figure3.2).

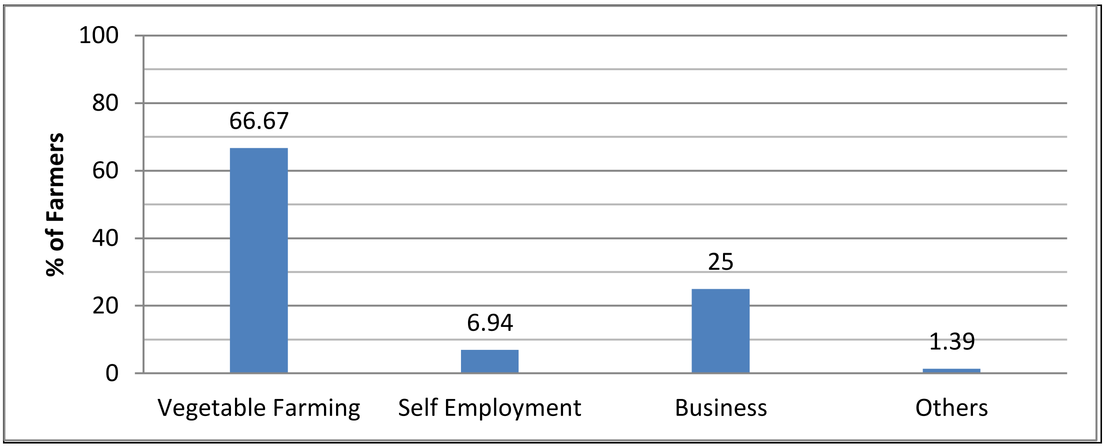


Source: HARTI Field Survey Data, 2013

Figure 3.2: Gender Distribution of Vegetable Farmers in Direct Marketing

3.1.2 Primary and Secondary Occupation

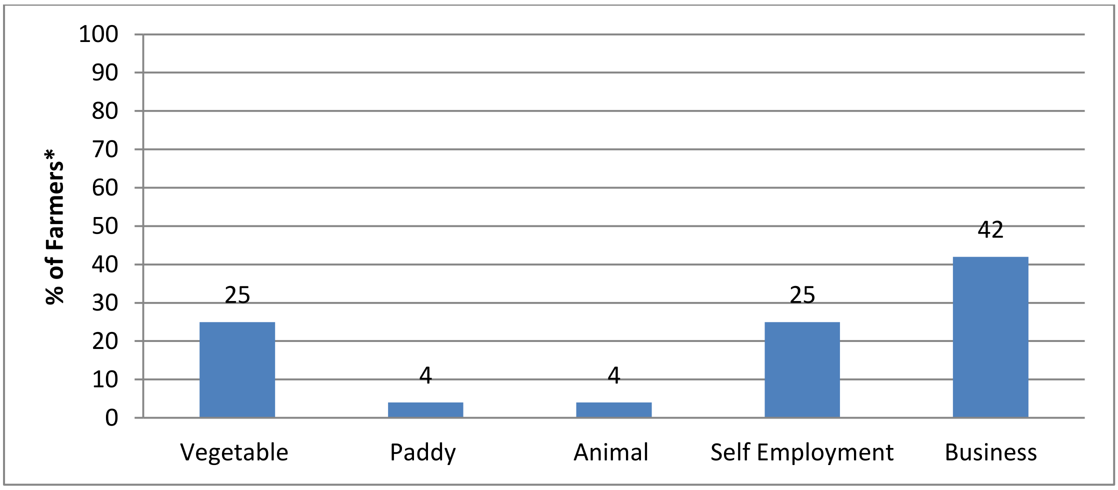
As much as 67% of the samples are engaged in vegetable farming as their primary occupation while 25% are engaged in business (Figure 3.3).



Source: HARTI Field Survey Data, 2013

Figure 3.3: Primary Occupation of the Sample Farmers

The main secondary occupation of the sample farmers is business (42.31%). They are engaged in direct marketing of vegetables while engaging in other economic activities. Farming (29%) and self-employment (25%) are rated second and third respectively. The figure 3.4 shows the types of secondary occupation of the sample.

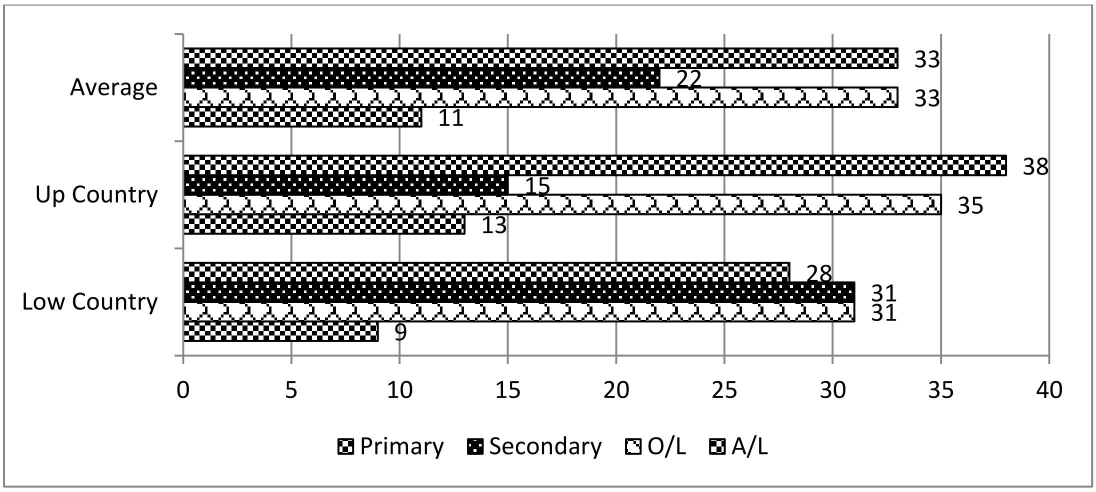


Source: HARTI Field Survey Data, 2013
* 52 respondents

Figure 3.4: Secondary Occupation of the Sample Farmers

3.1.3 Level of Education

The education level of the farmers who are engaged in direct marketing of vegetables had varied around primary to G.C.E (O/L). Only 11% of the farmers in the sample had received the education above G.E.C (O/L). The figure 3.5 depicts the level of education of the farmers.

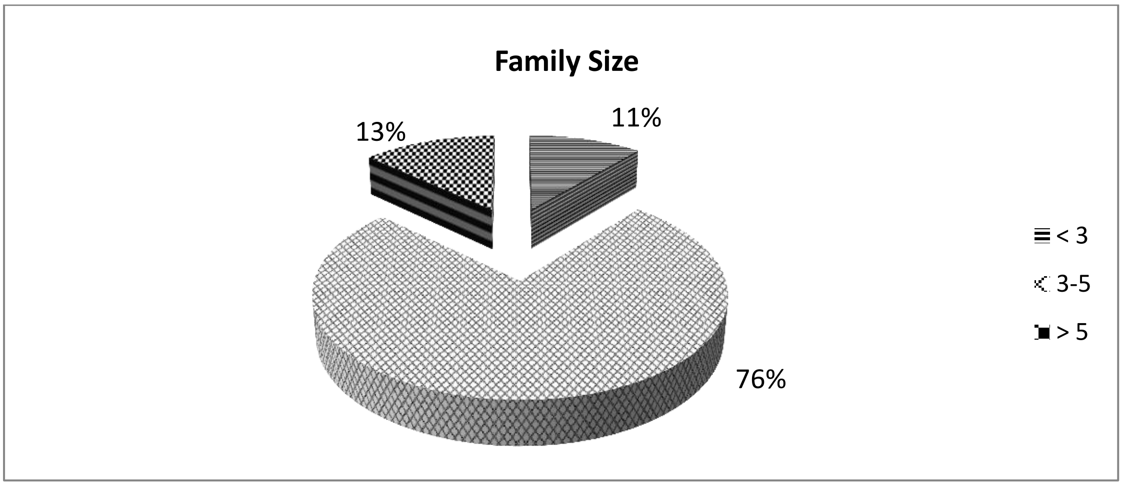


Source: HARTI Field Survey Data, 2013

Figure 3.5: Level of Education of the Farmers (%)

3.1.4 Family Size

Average family size of the sample farmers was 4 members. The majority of the families (76%) of vegetable farmers selling vegetables directly consisted of 3-5 members. It was common to both low country (75%) and up country (77.5%) vegetable farmers. Further, 12.5 percent of farm families have more than 5 members in their families. It indicates that the family units are neither too small nor big (Figure: 3.6).



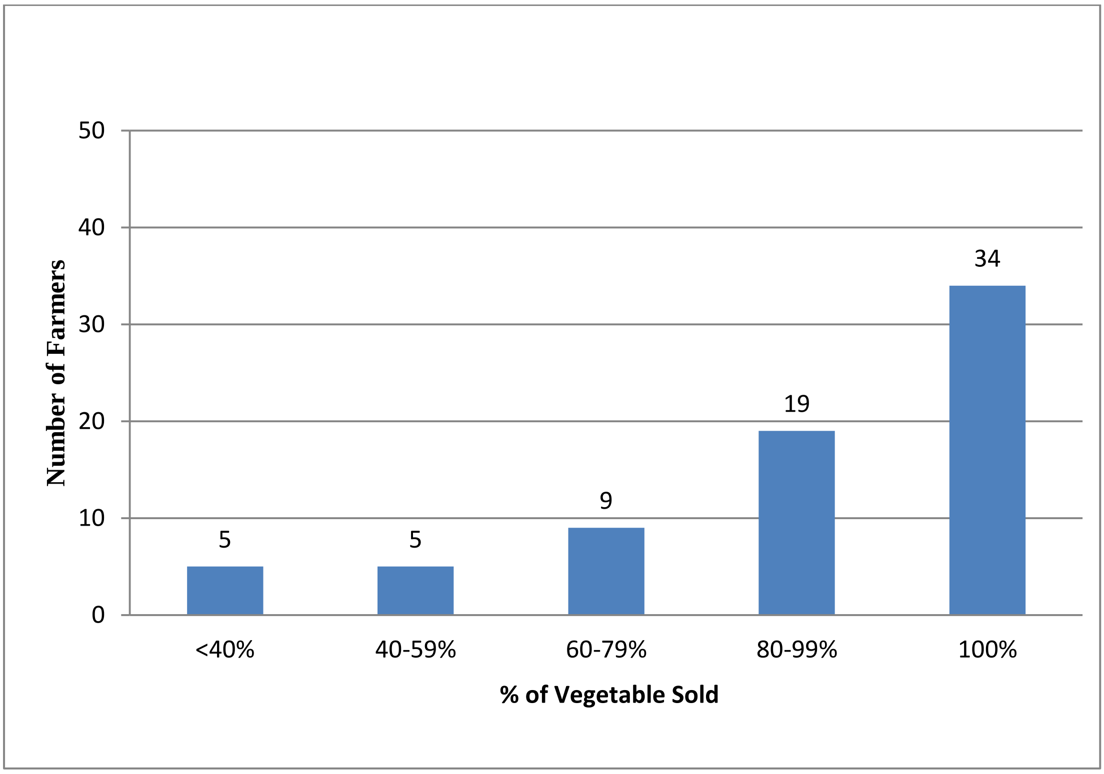
Source: HARTI Field Survey Data 2013

Figure 3.6: Family Size of the Farmers

3.2 The Practice of Vegetable Direct Marketing

3.2.1 The Commodity Profile

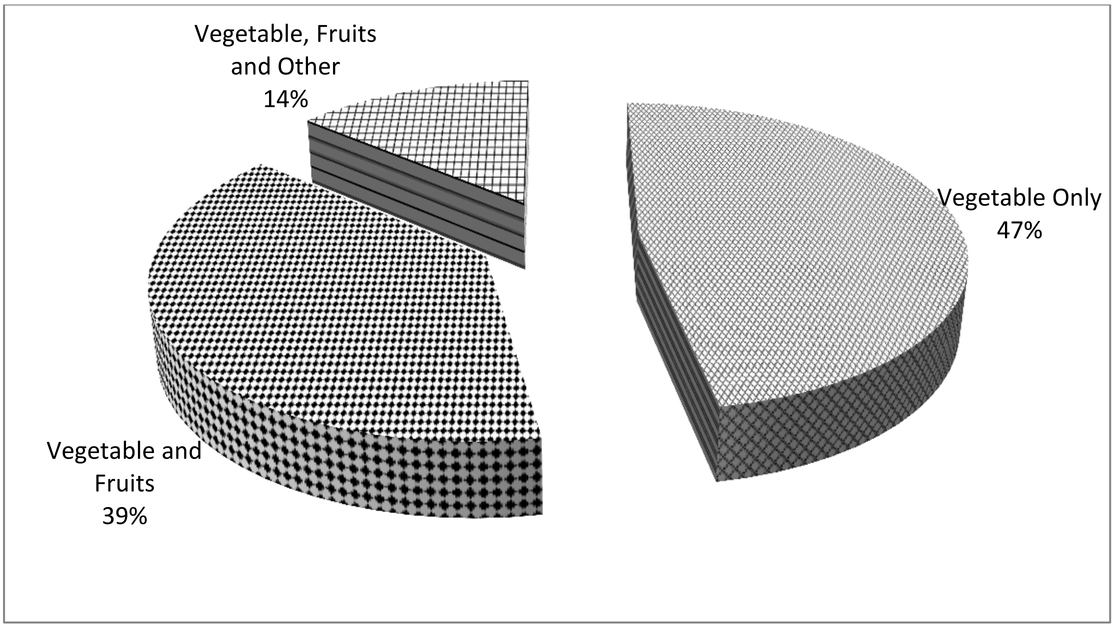
Usually, a limited number of vegetables are grown by a single farmer. Most of the time varieties ranged from one to a few numbers. Therefore, the items of direct marketing are also very limited. However, consumers visit a retail market to purchase vegetables, fruits and other stuff. To find out the commodities sold by direct sellers, data were collected from farmers. The quantity of direct selling was calculated using the collected data. The figure 3.7 shows the results. Among the farmers in the sample, 34 farmers sold vegetables only in their trade mix. The rest, 38 farmers of the total sample sold vegetable with other commodities such as fruits, grains and yams. This reveals that direct marketing of vegetables is more strengthened while selling with other crops too.



Source: HARTI Field Data 2013

Figure 3.7: Percentage of Vegetables Sold in Direct Marketing

It was observed that while marketing vegetables directly by the farmers they used to sell fruits and other crops as well in their business. Among direct marketers, 39% sell fruits while 14% sell other crops with vegetables (Figure 3.8).



Source: HARTI Field survey Data, 2013

Figure 3.8: Items of Direct Marketing

Sometimes the total quantity of vegetables sold by the farmers was not produced by themselves. When farmers sell the same quantity in direct marketing they collect the required quantity from neighboring farmers. They bring what they can sell from other sources. Those who sell vegetables, sell 65% of own products and the rest 35% is collected from others. Most of the farmers obtain the vegetables which they do not grow from neighboring farmers and sometimes from the wholesale market to fulfill the needs of their customers. Neighboring farmers are offered a comparatively higher price (Rs.5- 10/kg) when direct marketing farmers purchase produces from neighboring farmers.

3.2.2 Average Number of Vegetables Sold by a Single Farmer

According to the field observations, it was understood that a single farmer sold more than one variety. Direct selling farmers revealed that many items should be sold to increase their turnover. Therefore they sold a number of vegetables. On average, a farmer sold about six vegetables at a time and it was common to both low and up country vegetable farmers.

3.2.3 Volume of Trade

The findings of this study show that on average, 50kg of vegetables are sold by a single low country farmer in a day and of which 56 percent (average quantity is 36kg) were his own products and the rest 44 percent (average quantity is 14kg) was collected from others. Meanwhile 84kg of vegetables sold by up country farmer and of which 52 percent (average quantity is 51kg) was his/her own product and the rest 48 percent (average quantity is 33kg) were collected from others. This information reveals that the direct vegetable marketers keep selling a higher percentage of their own products in their selling mix. This is mainly due to farmers' understanding about consumer satisfaction. They knew that consumers visit farmers' shops to purchase good quality fresh vegetables. The ability to purchase fresh vegetables is one of the advantages gained by consumers' through direct purchasing. Luu Hong Minh *et al*, (2005) pointed out that freshness is one of the most important factors considered by the consumers. It was revealed that farmers who engage in direct marketing tried to maintain the freshness and keep better display to increase the turnover.

Pumpkin, Cucumber, Radish and Kekiri were the most popular vegetables among low country vegetable farmers. Knolkhol, Tomato, Carrot and cabbage were major vegetables among up country farmers. Brinjal was the most demanded crop by both up country and low country farmers of both own vegetables and vegetables purchased from others, more than 100kg of these major vegetables were sold in total per day by a single farmer. The average value of trade was Rs.2425 for low country vegetables and Rs.4811 for up country vegetables. Major vegetables which offered a higher value to low country farmers were drumsticks, beans, thibbatu, capsicum and chilies. By selling potato, carrot, bittergourd and beans, up country farmers received a higher income (Table 3.2).

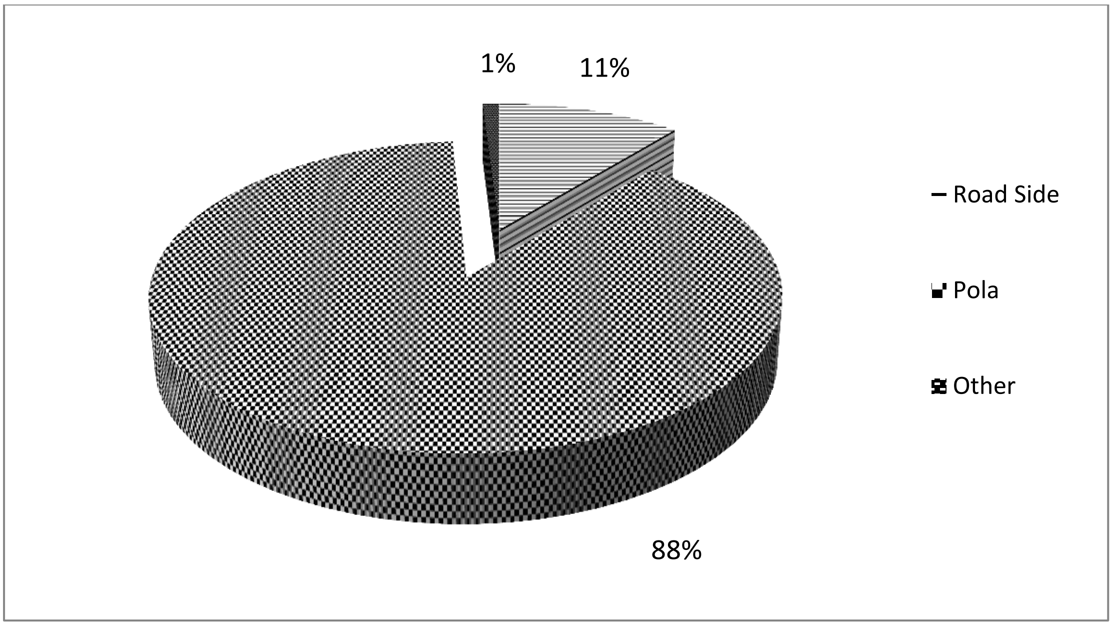
Table 3.2: Average Sold Quantity and Value of Vegetables by Farmers (per day)

Farmer's	Average Sold Quantity and Value of Vegetables by Farmers					
	Own Products		Others' Products		Total	
	(Kg)	Value (Rs)	(Kg)	Value (Rs)	(Kg)	Value (Rs)
Low Country Farmers	36	1454	14	971	50	2425
(%)	56	60	44	40	100	100
Up Country Farmers	51	2717	33	2094	84	4811
(%)	52	56	48	44	100	100

Source: HARTI Field survey Data2013

3.2.4 The Place

The majority of vegetable farmers who are selling their products directly to the consumers selected *pola* in the respective areas as the place of selling. Out of the total sample, 87.5 percent farmers sold their products at *pola* and it is 97.5 percent by up country and 75 percent by low country vegetable farmers. The farmers in Dodangaslanda (Kurunegala) and Bandarawela *pola* markets have obtained the spaces using personal contacts. The Agrarian Service Center in Hali Ela in the Badulla district has initiated a new market place in their office premises. The small *pola* market in Ibbagamuwa consisting nearly 10 vegetable growers has been initiated by a community based organization utilizing the office premises of the Ibbagamuwa Agrarian Training Center. The operations of those two markets were in a good position. Hence, Agrarian Service Centers and other grassroot level development institutes can take initiative, promoting the direct marketing system. Rural and urban local government authorities should facilitate and encourage small scale vegetable growers for direct marketing in the *pola* system as a recognized form of trade. Meanwhile, 11 percent had engaged in selling in roadside retail outlets (Figure 3.9). Those roadside sellers could be found mainly in Thambuththegama area. Field observations revealed that they are targeting the people traveling to Anuradhapura and Northern Province.

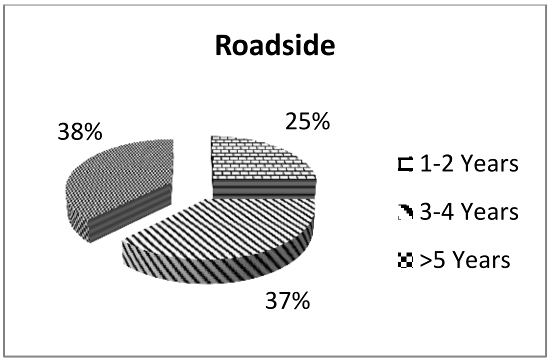


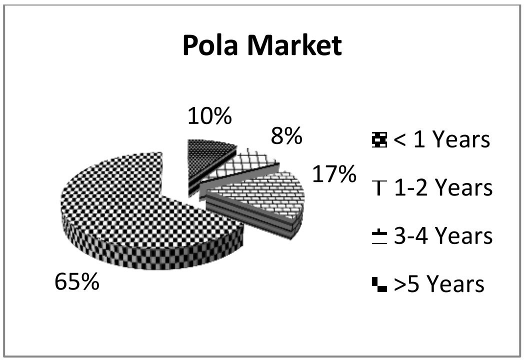
Source: HARTI Field Survey Data 2013

Figure: 3.9: The Place of Direct Marketing

3.2.5 Existence in Direct Marketing

The majority of farmers have been engaging in Direct Marketing for more than four years. Eight farmers who sell on the roadside were also included in the sample of this study. These sample farmers have direct marketing experience of over four years. There were 63 farmers who practices marketing directly in the *pola* and 65 percent (average) of them have practiced direct marketing for more than five years (Figure 3.10). The percentages vary among low country and up country *pola* markets and it is 87.5 percent in low country *pola* markets and 51.28 percent in up country *pola* markets. This information reveals that direct marketing practices in periodic rural markets are not a new trend. The sustainability proves that about 17 percent newcomers have entered the direct marketing field where there is a favorable environment especially in the *pola* markets.

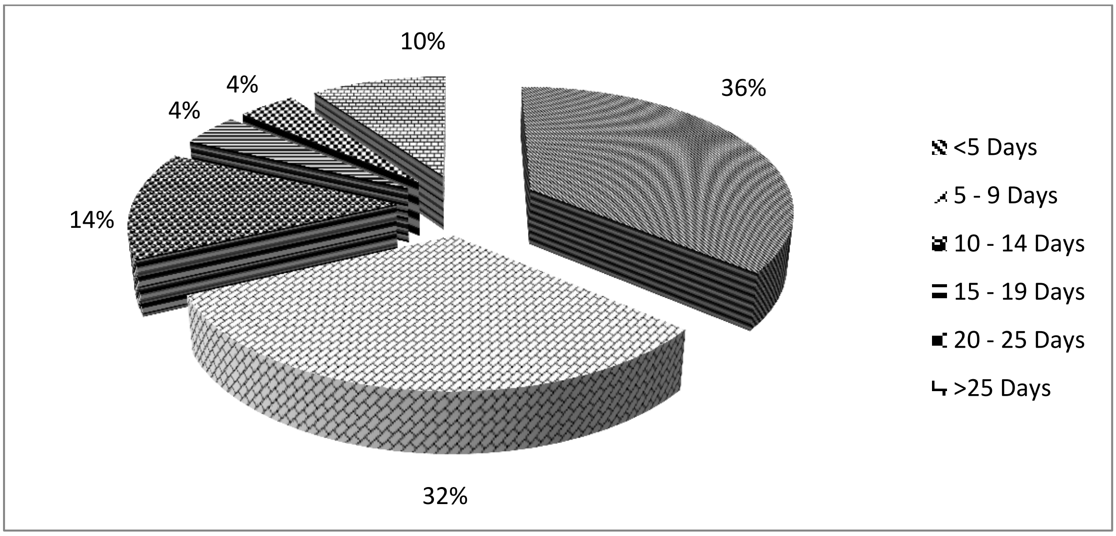




Source: HARTI Field Survey Data 2013

Figure 3.10: The Duration of Engagement in Direct Marketing

According to the information obtained from farmers, they have engaged in direct selling of vegetables about 2 to 28 days per month. About 82 percent of the farmers are engaged in selling their vegetables through direct marketing for less than 15 days per month (Figure 3.11). According to the field observations, farmers sell vegetables 3 - 4 days a week travelling through all *polas* in the surrounding area. The rest of the time they use for cultivation purposes. This shows how labour is divided between farming and marketing. In the meantime, nearly 18% attended more than 15 days and of which nearly 10% attended more than 25 days. This practice of farmers shows the division of farm labour in marketing activities. In this division one person is allocated for marketing while the others engage in farming. This information is further established by the number of persons involved in direct marketing.

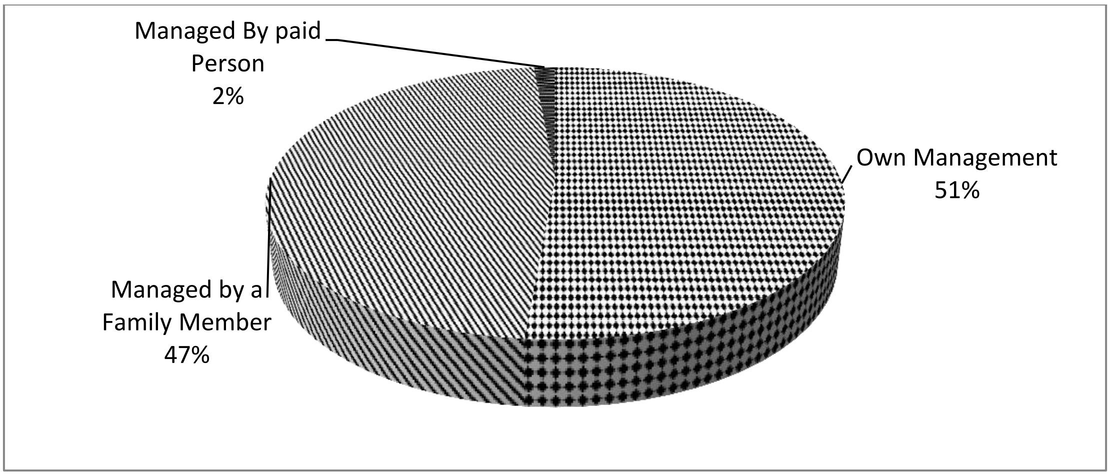


Source: HARTI Field Survey Data 2013

Figure 3.11: Number of Days of Direct Marketing per Month

3.2.6 Management of the Farm

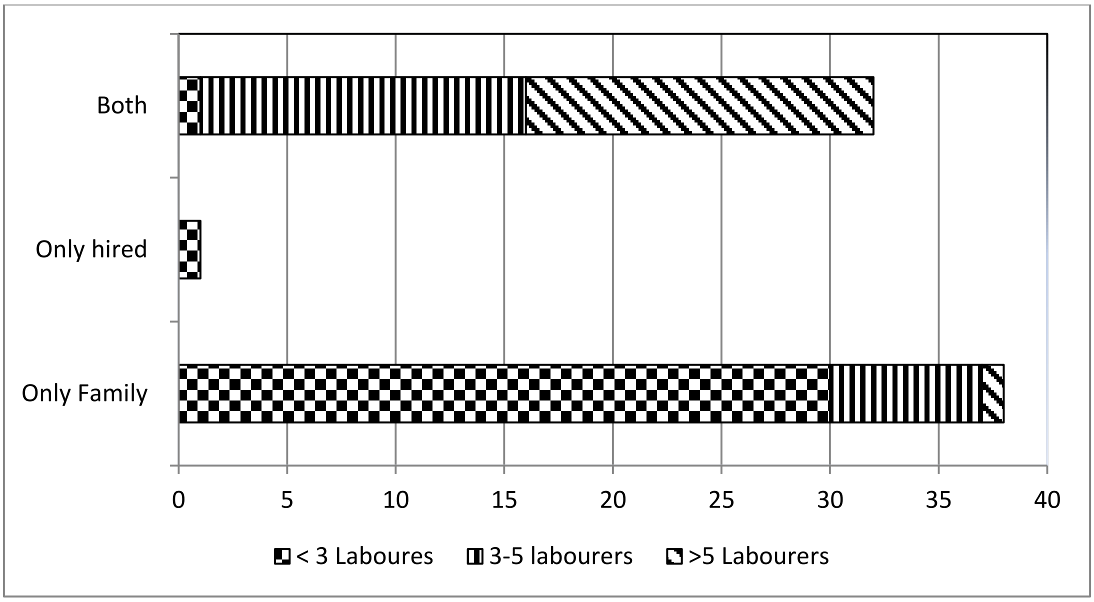
A general practice in the Sri Lankan agriculture sector is that farmers who own the land, work in their field. If the labour is hired, the owner also works in the field. This shows that farm management as well as direct marketing are practiced by vegetable farmers and they can easily improve their income by supplying the required quality of vegetables to the consumers. The farmers who practice direct marketing are supported by the family members. Of the total sample, 51% are direct marketers who manage the farm on their own and another 47% are engaged in direct marketing while a family member managing the farm (Figure 3.12).



Source: HARTI Field Survey Data, 2013

Figure 3.12: Management of the Farm by Farmers Involved in Direct Marketing

Farmers' decision on entering direct marketing depends on the labour availability for cultivation as well. When the farmers are engaged in direct marketing, they have to be away from the farm during the time of marketing their products. Therefore, farmers are more concerned over improving the quality of products and timely completion of activities at the field before hiring labourers. Hence farmers prefer family labour to hired labour. The survey revealed that 53% farmers use only family labour while 44% use both family and hired labour. Further, 78% of the sample practiced farming using family labour in their own land and they use less than 03 labourers. About 50% of the farmers use both family and hired labour and these farmers use more than 5 laborers to complete any activity in their field (Figure 3.13).



Source: HARTI Field Survey Data2013

Figure 3.13: Type of Labour Available for Farming

3.2.7 Land Size

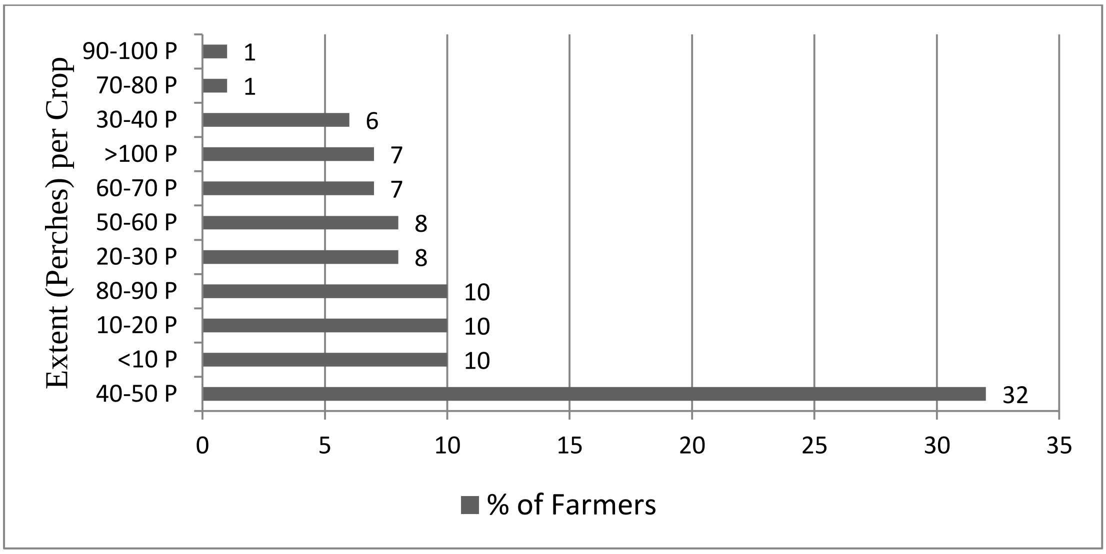
Cultivated land size ranged from 0.25 acre to nearly 2 acres. About 61% of the farmers cultivated less than 1.5 acres. However, the number of crops cultivated also vary from 1- 4 crops. About 74% of the farmers cultivate more than one crop in their land. Even the 5.56% of the farmers whose cultivated land size is less than 0.25 acre have grown 3 crops. Nearly 26% of the farmers cultivated one crop and their land size was more than 1.75 acre (Table 3.3).

The average land size per crop cultivated by direct marketing farmers ranged from 10 – 100 perches. More than 64% of the farmers were cultivating less than 50 perches (Figure 3.14). According to the farmers; the production of smaller lands is manageable while engaging in direct marketing. It was further revealed that those who cultivate nearly 100 perches were unable to sell the total production through direct marketing and they sell the excess production to the wholesale market.

Table: 3.3 Distribution of Land Size and No. of Crops by Farmers

Land Size	No.of Farmers	%	No.of Crops
<0.25	4	5.56	3
0.25-0.5	6	8.33	3
0.5-0.75	12	16.67	3
0.75-1	6	8.33	4
1-1.25	9	12.50	4
1.25-1.5	7	9.72	2
1.5-1.75	9	12.50	2
1.75-2	12	16.67	1
>2	7	9.72	1
Total	72	100.00	

Source: HARTI Field Survey Data, 2013

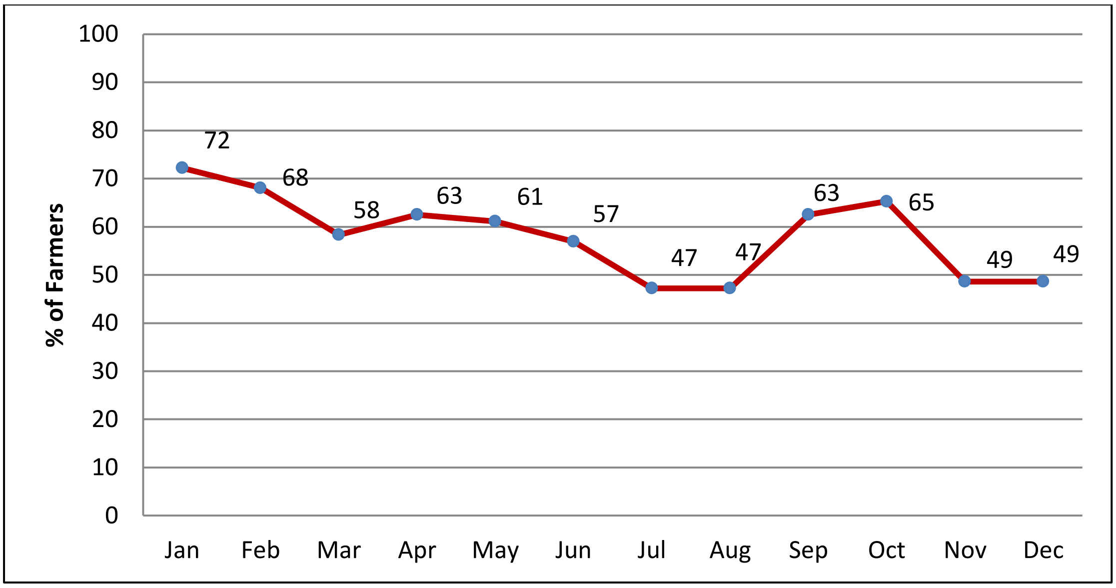


Source: HARTI Field Survey Data 2013

Figure 3.14: Average Land Size Cultivated

3.2.8 Year Round Direct Marketing Pattern

There is seasonality of vegetable production. Vegetables are cultivated mainly during two seasons namely *Maha* (October – March) and *Yala* (April – September). In addition, cultivation in intermediate season is also observed in the country. On this basis, direct marketing of fresh products has a possibility throughout the country. The survey revealed that farmers are engaged in direct marketing by selling their own products to the consumers throughout the year (Figure 3.15).

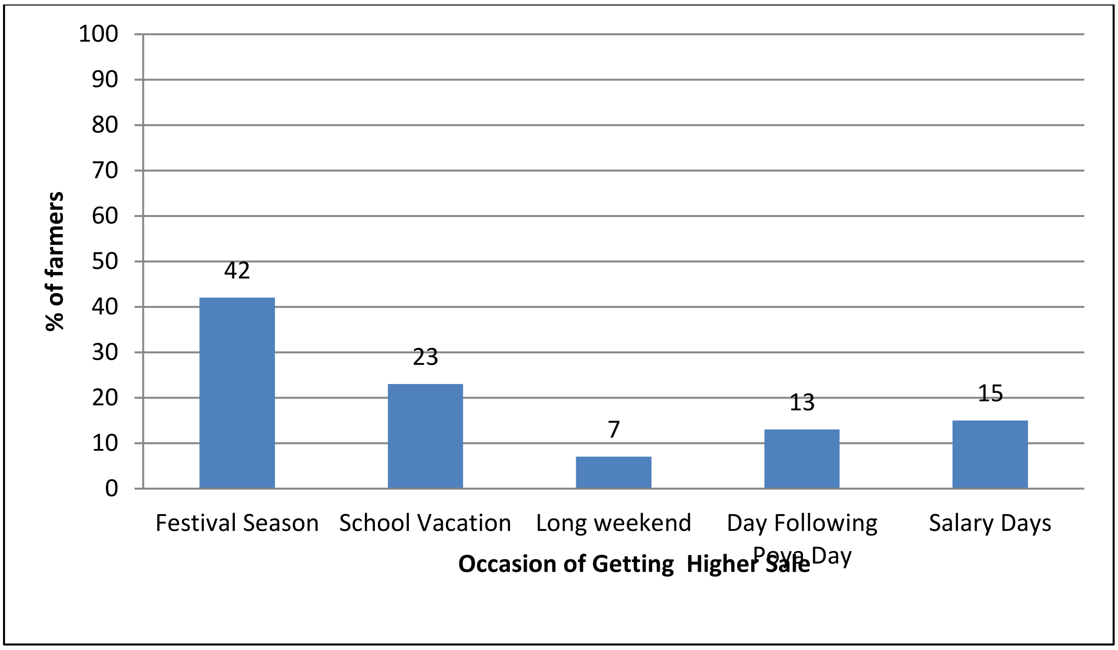


Source: HARTI Field Survey Data 2013

Figure 3.15: Percentage of Famers Engaging in Direct Selling

3.2.9 Inter-Temporal Distribution of Sales

The farmers engaging in direct marketing gradually increased their turnover because of their experience in the business. The majority of farmers in the sample were able to reach a higher level of sales on a number of occasions around the year. Nearly 42% of the farmers in the sample stated that sales are the highest in festival seasons. The festival season mainly comprises religious festivals namely Vesak, Posson and other flower offering festivals in Anuradhapura and also such festivals in the North. School vacation (23%) and long weekend (7%) are also favorable periods for higher sales for the direct marketers due to increased tourist arrivals during such time to Anuradhapura, Polonnaruwa, Northern area, Badulla, Bandarawela and Nuwara Eliya. The experience of about 13% of the farmers was that many people travel to sacred places on full moon Poya day (Figure 3.16). People are keener to purchase fresh vegetables on their way home after visiting those places.



Source: HARTI Field Survey Data 2013

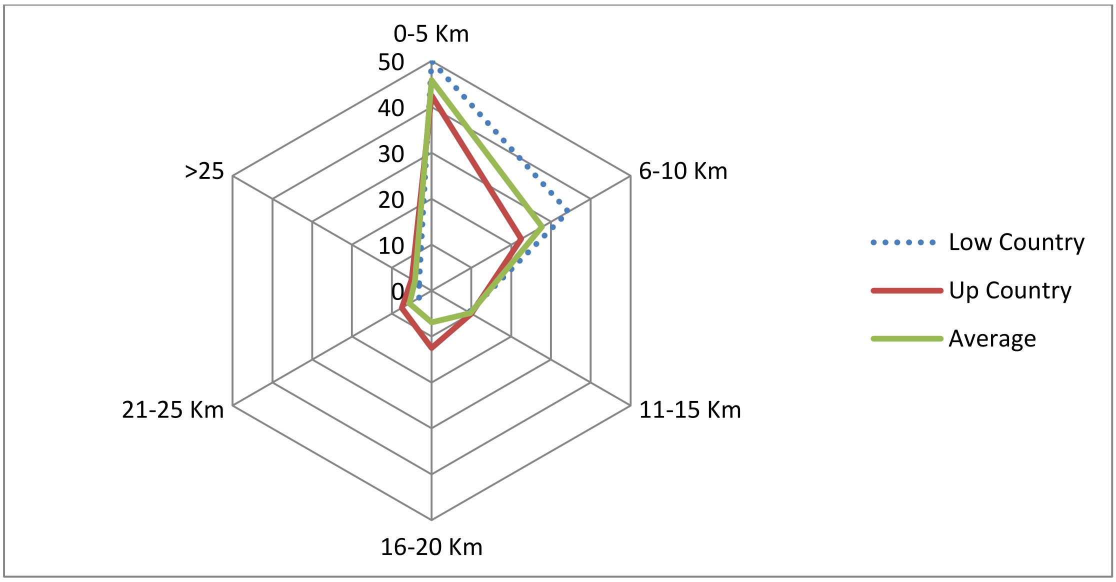
Figure 3.16: Occasions of Higher Sales

3.2.10 Harvesting Pattern

The quantity of daily sales of a single vegetable varied from 3kg to 135kg depending on the type of vegetable. Considering the sales of each vegetable per day revealed that on average, low country vegetable farmer sells 50kg of a single vegetable variety per day while the up country farmer sells 84kg daily. This shows that the selling quantity in a day is limited. Hence farmers harvest a limited quantity daily on staggered basis to fulfill the market demand. Regarding the harvesting practice of the sample, 94% do not harvest the total quantity at once and they harvest only the required quantity every day. As the vegetables needed to be harvested in right time they harvest the crop and send to the nearest wholesale market to minimize the losses, these facts reveal that direct marketers use the direct marketing as an ***income diversification strategy***.

3.2.11 Distance Traveled for Marketing

Farmers allocate their time for a number of activities. The time is used not only for agricultural activities but also for many other activities at home. The farmers always try to find a closer market for direct selling to minimize the time waste. Most of the direct marketers mentioned that they are unable to be away from home regularly. Farmers find markets in the area with a manageable distance from farm to save time. About 40-50% of direct marketing farmers travel presently for direct selling while travelling for less than 10km (Figure 3.17). This way, they can allocate their time for other activities such as harvesting and sorting products, management of the farm, visiting markets and engaging in marketing and other household activities. By travelling a limited distance farmers can avoid the overheads. For instance, field observations revealed that the majority of farmers bring their lunch from home to cut down the cost and have better quality food.

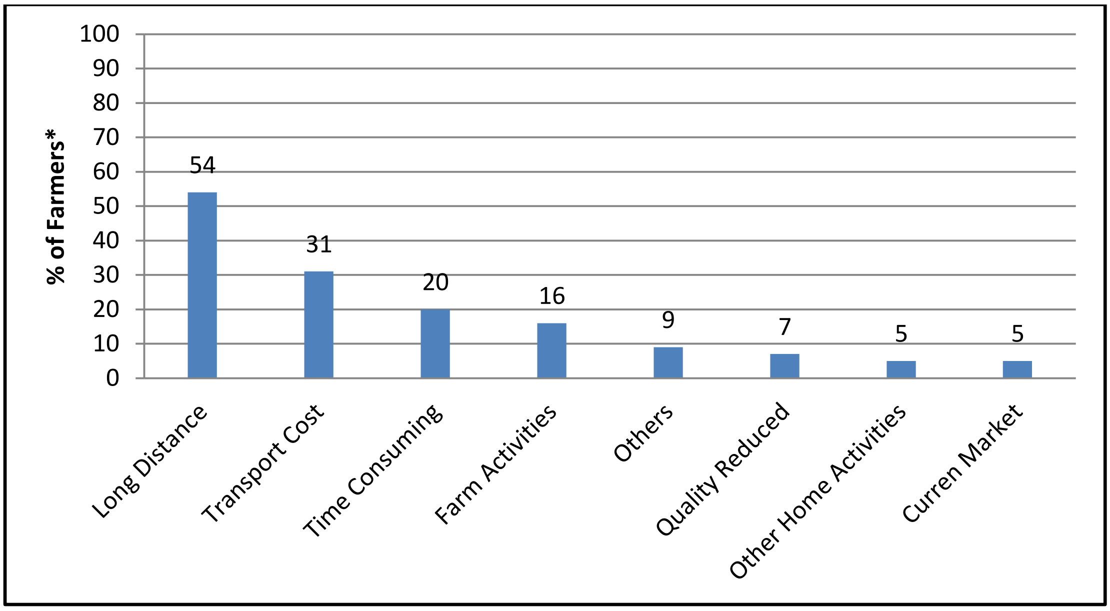


Source: HARTI Field Survey Data 2013

Figure 3.17: Distance (km) Travelled for Direct Marketing (% of Farmers)

3.2.12 Willingness to Travel to Western Province

The Western Province is a major consuming area and there is a huge market for agricultural products. The inbuilt characteristics of direct marketing concept such as freshness, quality, health and nutritional status and access to information help capture a new market segment in the Western Province. Hence this study attempted to obtain the views of the farmers about direct selling of their produce to the consumers in the Western Province if a direct marketing center is established. About 78% of the sample farmers said they are not willing to travel to the Western Province mainly due to the long distance, high transport cost and high travel time etc. Figure 3.18 shows the reasons for not willing to travel to the Western Province.



Source: HARTI Field Survey Data 2013
* Multiple respond is possible

Figure 3.18: Reasons for not Willing to Travel to the Western Province

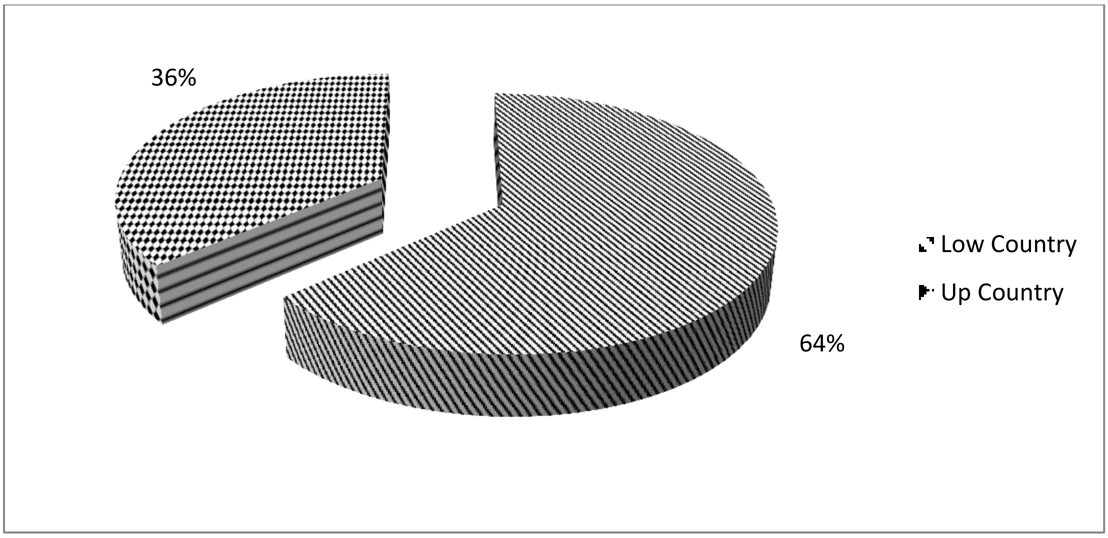
CHAPTER FOUR

Willingness for Direct Marketing

This chapter is devoted to find out the extent of willingness of vegetable growers towards direct marketing. A sample of 214 vegetable farmers who are not marketing vegetables directly to consumers was interviewed to find out whether they are willing to practice direct marketing. Both up country and low country vegetable farmers were represented by two locations from each. Mahaweli H and Melsiripura were selected for the low country while Bandarawela and Nuwara Eliya were selected for the up country. Characteristics of vegetable farmers who are willing to engage in direct marketing are described here. In particular, the socio-economic background, the cultivated extent, labours utilization in the farm, distance willing to travel and suggested places for direct marketing by farmers are considered.

4.1 Willingness for Direct Marketing among Up Country and Low Country Farmers

Out of 214 farmers, 72% are willing to practice direct marketing and the rest 28% farmers are not willing to engage in direct marketing due to various reasons. Figure 4.1 shows the extent of willingness of farmers in Up Country and Low Country areas.



Source: HARTI Field Survey Data 2013

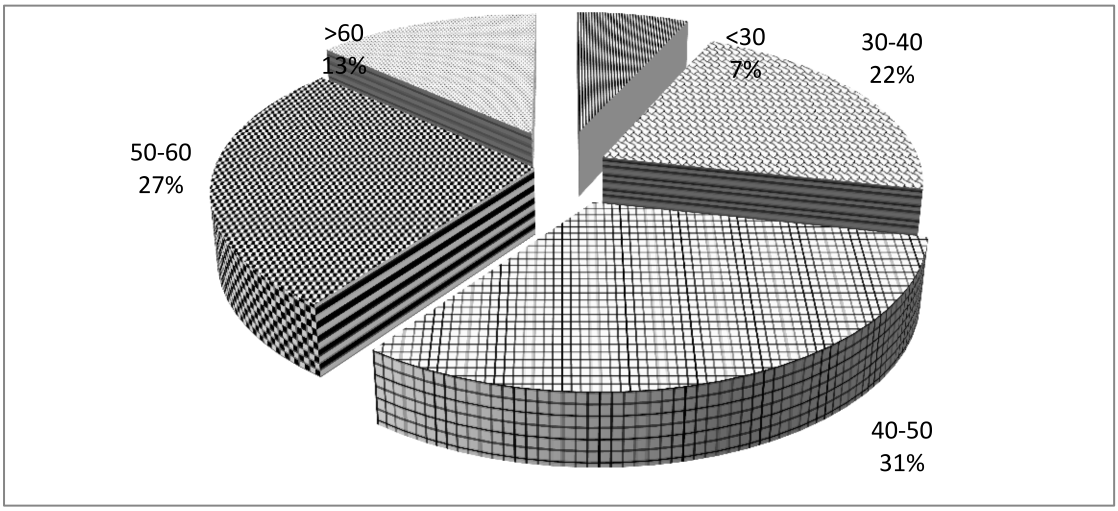
Figure 4.1: Willingness of Farmers to Engage in Direct Marketing in Up Country and Low Country Areas

4.2 Features of Farmers who are Willing to Engage in Direct Marketing

In direct marketing, production and marketing are two major components of the agriculture value chain, which are integrated. A significant distance is maintained between producing and consuming areas. Hence, direct marketing requires extra allocation of time and resources and behavioural changes of farmers in agricultural activities. The success rate of the adoption of direct marketing is measured against the extent to which the farmers are able to perform both production and marketing activities. The adoption of direct marketing should not affect the production activities. Therefore, farmers' willingness to adopt direct marketing is an important factor. Farmers' preference for direct marketing was checked. Characteristics of the farmers who are willing to enter direct marketing will be discussed in this chapter.

4.2.1 Socio-Economic Profile

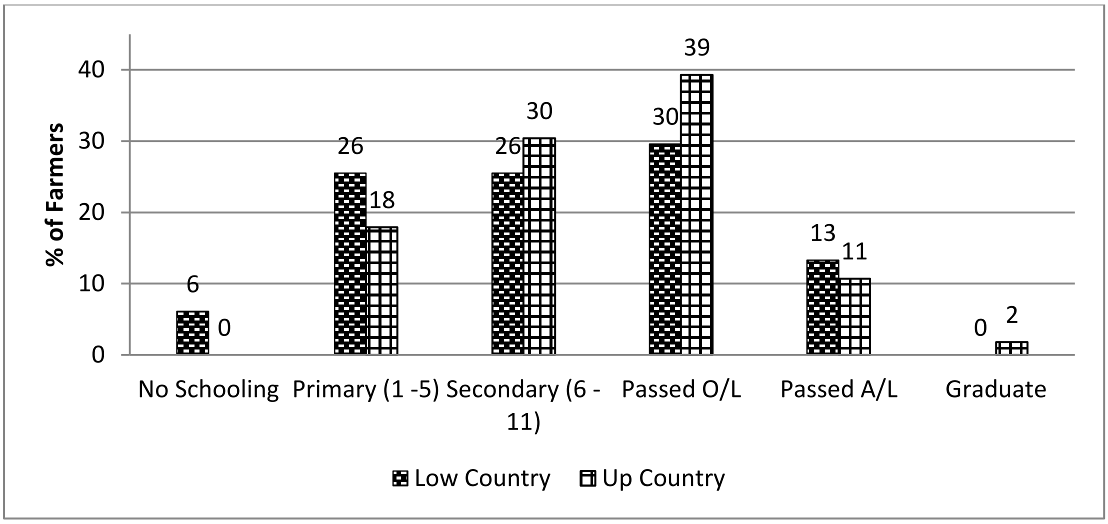
The study found that out of the 72% of the farmers who wish to practice direct marketing are in the age group of 40 to 60 years. This is common in the Sri Lankan agriculture sector due to less youth participation in farming activities. However, it is revealed that 29% of the total farmers are willing to market vegetables directly and they are represented by young farmers below 40 years.



Source: HARTI Field Survey Data 2013

Figure 4.2: Willingness for Direct Marketing and Relative Age Groups

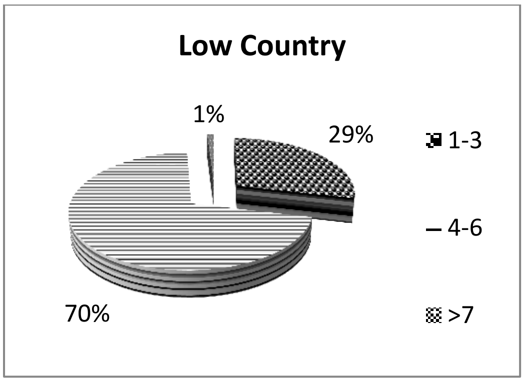
Nearly 4% of the total sample or 6% of the low country farmers had not attended school. All these farmers represented the low country sample. More than 73% of the sample had received secondary education and above. Hence they are able to identify the market behavior easily. Meanwhile, 13% of low country sample farmers and 11% of up country sample farmers (average 12.3%) had passed the Advanced Level. (Figure 4.3)

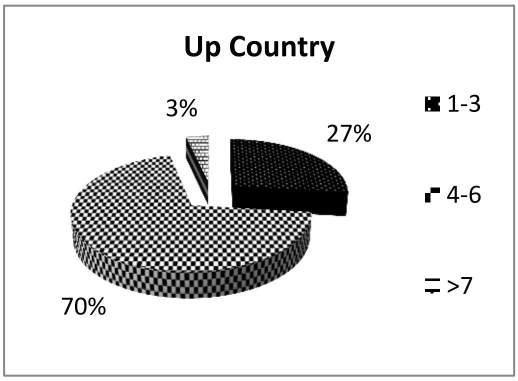


Source: HARTI Field Survey Data 2013

Figure 4.3: The Level of Education of Farmers Willing for Direct Marketing

The average family size of the farmers who are willing to enter direct marketing is about 4 members. The picture is common to both up country as well as low country vegetable farmers. Also the family size of the sample is closer to the national average family size. Members of families of the sample were categorized into three groups namely 1-3, 4-6 and more than 7 members. Of the total sample, 70% are having 4-6 members in a family. Figure 4.4 shows the family size of the sample.



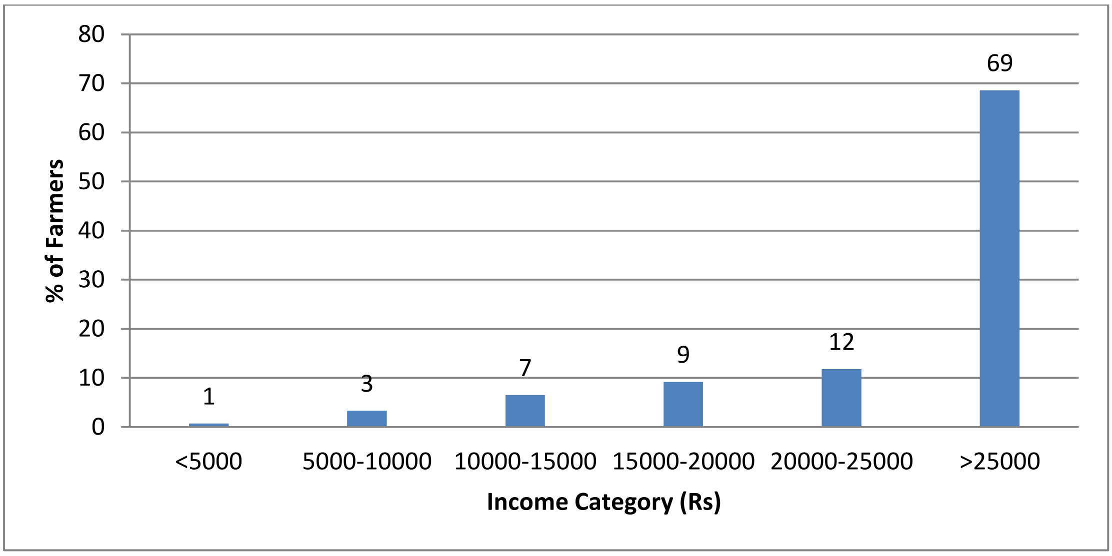


Source: HARTI Field Survey 2013

Figure: 4.4: Family Size of Farmers Willing for Direct Marketing

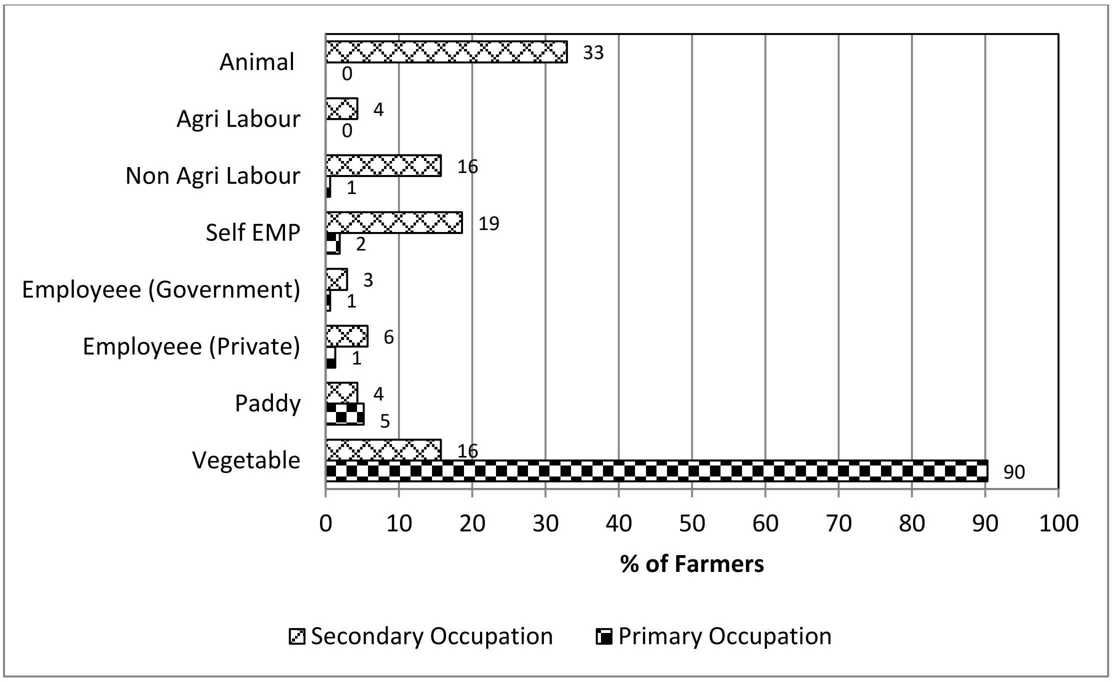
4.3 Level of Income and Source of Income

The findings of this study indicated that about 69% of total households of the sample received more than a Rs.25000 monthly average income both from agriculture and other sources (Figure 4.5). The primary source of income was agriculture and of which vegetable cultivation is dominant of 90% of the sample (Figure 4.6). Animal husbandry (33%) and self-employment (19%) were the main secondary occupations of low country as well as up country farmers. Dairy farming was the main activity in animal husbandry. Paddy was not a significant source of income of the majority of sample farmers because they cultivate paddy only in the *maha* season and they own very small sized lands. However, the amount of income received by non-agricultural sources is small and about 60% of the households in the sample earned less than Rs.5000 per month on average (Figure4.7).



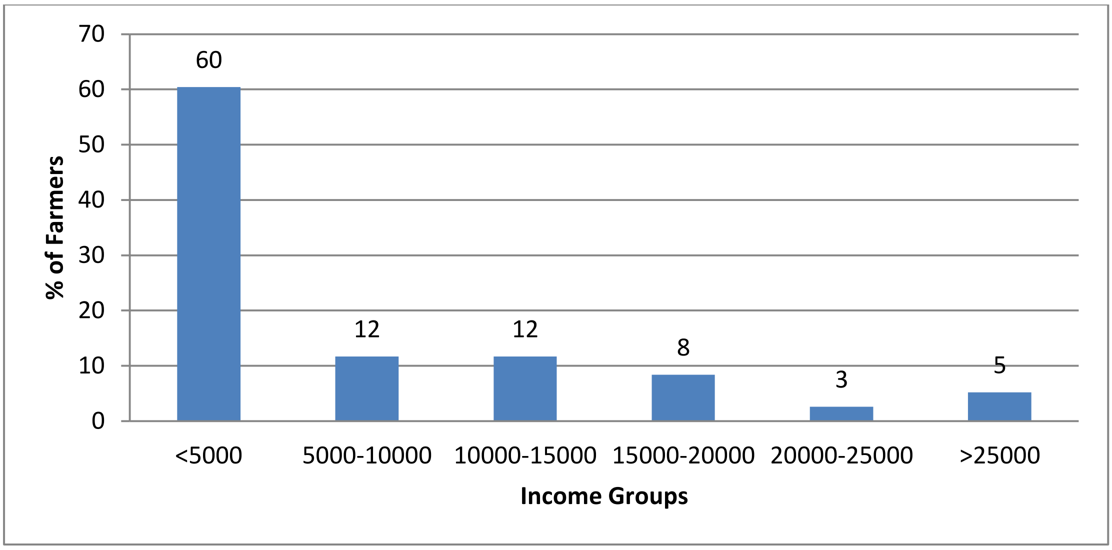
Source: HARTI Field Survey Data 2013

Figure 4.5: Level of Total Income of the Farmers Willing for Direct Marketing



Source: HARTI Field Survey Data 2013

Figure 4.6: Sources of Income of Farmers Willing for Direct Marketing

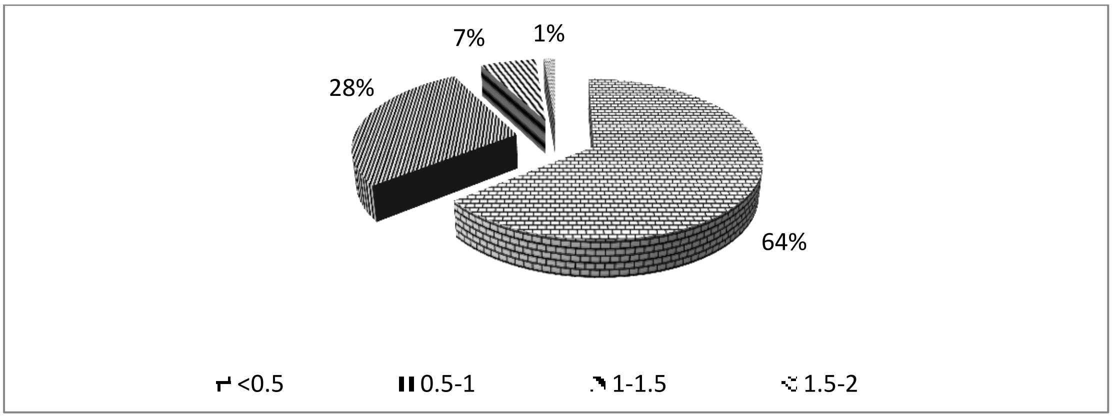


Source: HARTI Field Survey Data 2013

Figure 4.7: Non-Agricultural Income of the Farmers (% of Farmers) and Their Willingness for Direct Marketing

4.4 Cultivated Extent

The study aimed at finding out the land size of the farmers who are willing to practice direct marketing. Of the total farmers who like to practice direct marketing, the land size of the majority (about 64%) is less than 0.5 acre while the land size of another 28% farmers is between 0.5 and1.0 acres (Figure 4.8). This indicates that the farmers who cultivate in small plots of land as well as fairly bigger land with mixed cropping tend to enter direct marketing.



Source: HARTI Field Survey Data 2013

Figure 4.8: Cultivated Extent in a Single Crop in Acre (% of Farmers)

4.5 Labour Utilization

The pattern of labour utilization may determine the adoption of direct marketing**.** The possibility of having hired labour and farmers' tendency to utilize hired labour will enable the farmers to engage in off farm activities and agribusiness. The interviewed farmers mentioned that although the average family size is 4 members, the majority (83%) of the sample employ only1- 2 family members in farming activities (85% of low country farmers and 80% of up country farmers) (Table 4.1). The 72% of the sample farmers employ 1-5 hired labourers in their agricultural activities. These hired labourers are used in peak periods, mainly during crop establishment and harvesting. Further, 15% of the sample do not employ hired labourers and the main reason is they are employing 3-4 family members (Table 4.2). These findings show that farmers' attitude to use a combination of both family and hired labourers and the availability of hired labourers in the field level is an important factor for adoption of direct marketing.

Table 4.1: Use of Family Labour

Labor Units	Low Country		Up Country		Total	
	Farmers	%	Farmers	%	Farmers	%
1-2	83	84.7	45	80.4	128	83.1
3-4	15	15.3	8	14.3	23	14.9
5-6	0	0.0	3	5.4	3	1.9
Total	98	100	56	100	154	100

Source: HARTI Field Survey Data 2013

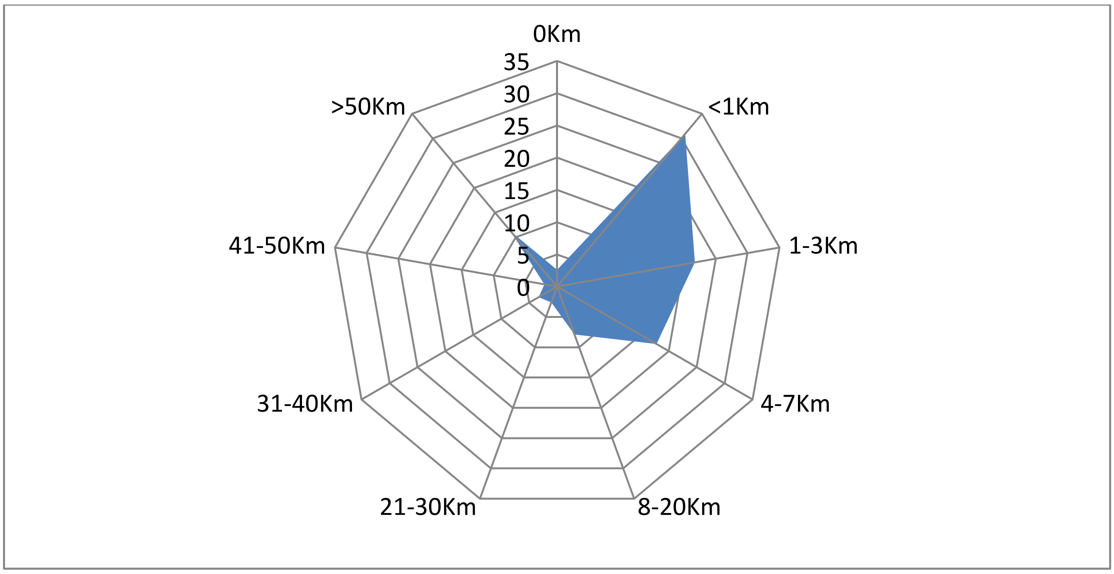
Table 4.2: Use of Hired Labour

Labour Units	Low Country		Up Country		Total	
	Farmers	%	Farmers	%	Farmers	%
No. Hiring	18	18.4	5	8.9	23	14.9
1-5	77	78.6	34	60.7	111	72.1
6-10	3	3.1	13	23.2	16	10.4
>10	0	0	4	7.2	4	2.6
Total	98	100	56	100	154	100

Source: HARTI Field Survey Data 2013

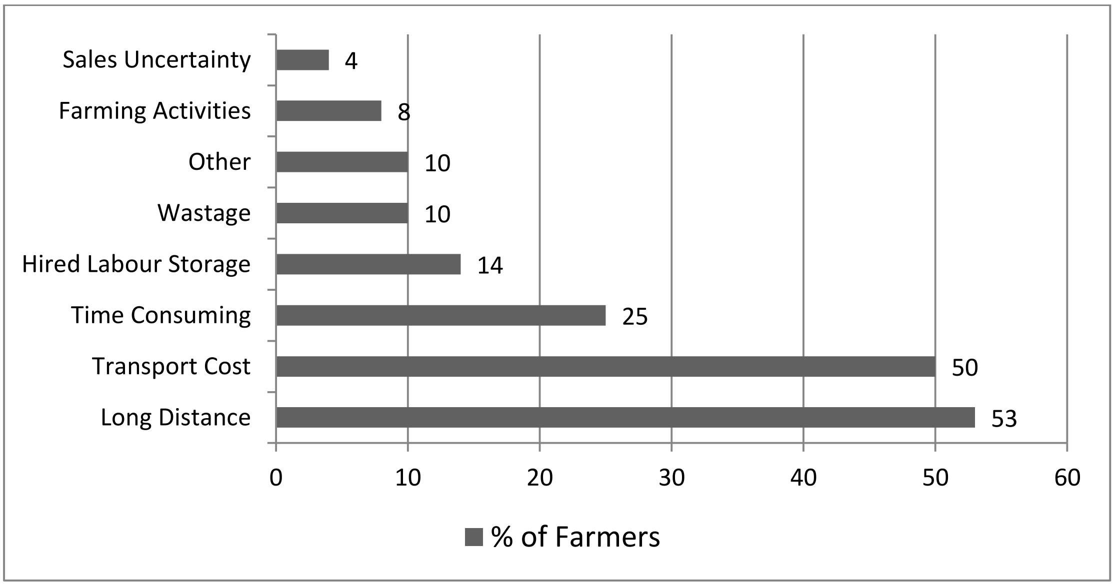
4.6 Distance Willing to Travel for Direct Marketing

Considering the travel distance, nearly 80% of the farmers in the sample do not like to travel more than 20 km to sell their supplies directly to the consumers although they are willing to engage in direct marketing (Figure 4.9). The farmers do not like to travel from these areas to market places in the Western Province if marketing facilities are provided to them. The 73% of the sample farmers dislike traveling this much of distance due to various reasons. The figure 4.10 shows the multiple answers given by the vegetable farmers. Long distance (53%) and the extra transport cost (50%) were the major reasons for not willing to travel to the Western Province. Long distance means that the farmers do not like temporary migration and their wish is to be at home at the end of the day. Security of their properties, family and social relationships and the farm management are also concerns in traveling a long distance. The farmers mentioned about extra transport cost as a major constraint to travel to the Western Province due to their attitudes about direct marketing small quantities individually but not perceiving alterative cost minimizing methods such as group marketing.



Source: HARTI Field Survey Data 2013

Figure 4.9: Distance the Farmers Like to Travel for Direct Marketing



Source: HARTI Field Survey Data 2013Multiple Responsesare Possible

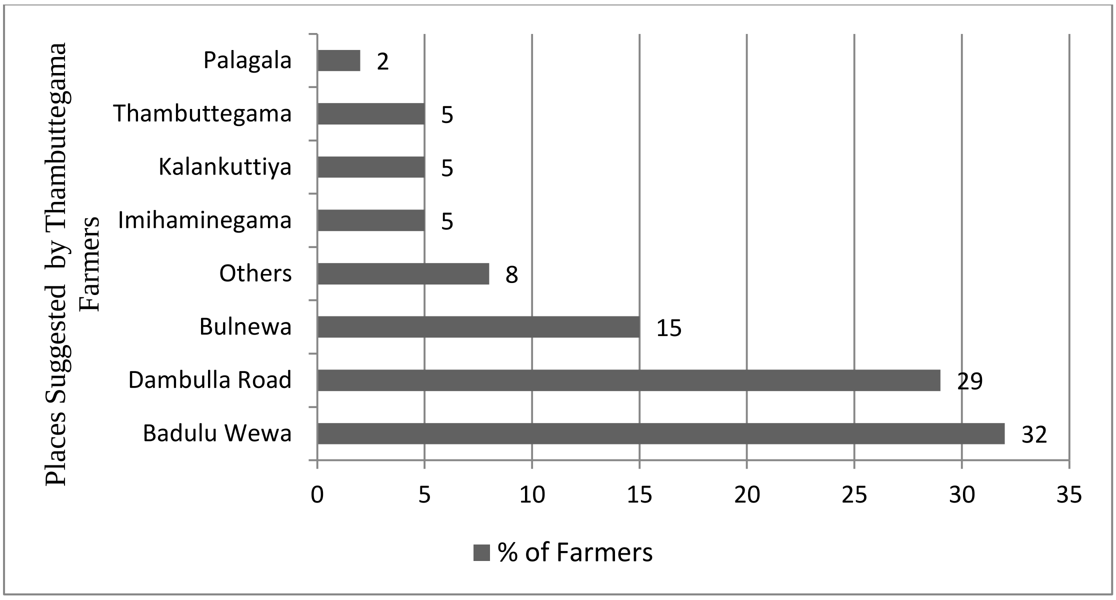
Figure 4.10: Reasons for not Willing to Travel to Western Province for Direct Marketing (% of Farmers)

4.7 Suitable Locations Suggested by Farmers

The researcher found out the views of the farmers about the most suitable place for them to practice direct marketing. The farmers in Thambutthegama, Melsiripura, Bandarawela and Nuwara Eliya, who are willing to engage in direct marketing had given their views on better market places.

4.7.1 Thambutthegama Farmers

In Thambutthegama area the most suitable place for direct marketing is suggested as BalaluWewa junction by 32% of the farmers. Also 52% out of these farmers mentioned that as many consumers pass through this junction this place is a good business point. Another 19% of the sample farmers stated that this place is popular as a local tourist area. Further 17% of Thambutthegama farmers suggested that this place is the most suitable place due to easy access and less transport cost. The distance between Thambutthegama town and Balalu Wewa is nearly 35km. In that case the distance is beyond their preferred limit. The farmers are aware that there are plenty of vegetables in Thambutthegama and surrounding areas to meet the demand. A place between Dambulla and Thambutthegama was the second preferred place suggested by the Thambutthegama farmers. The main reason mentioned by the majority of farmers (51%) was the easy access for both farmers and consumers and the less transport cost. Farmers are aware that passengers travel through Dambulla and Thambutthegama. Therefore, the second reason to suggest this place by 26% farmers was the outside consumers visiting from other areas (4.11).



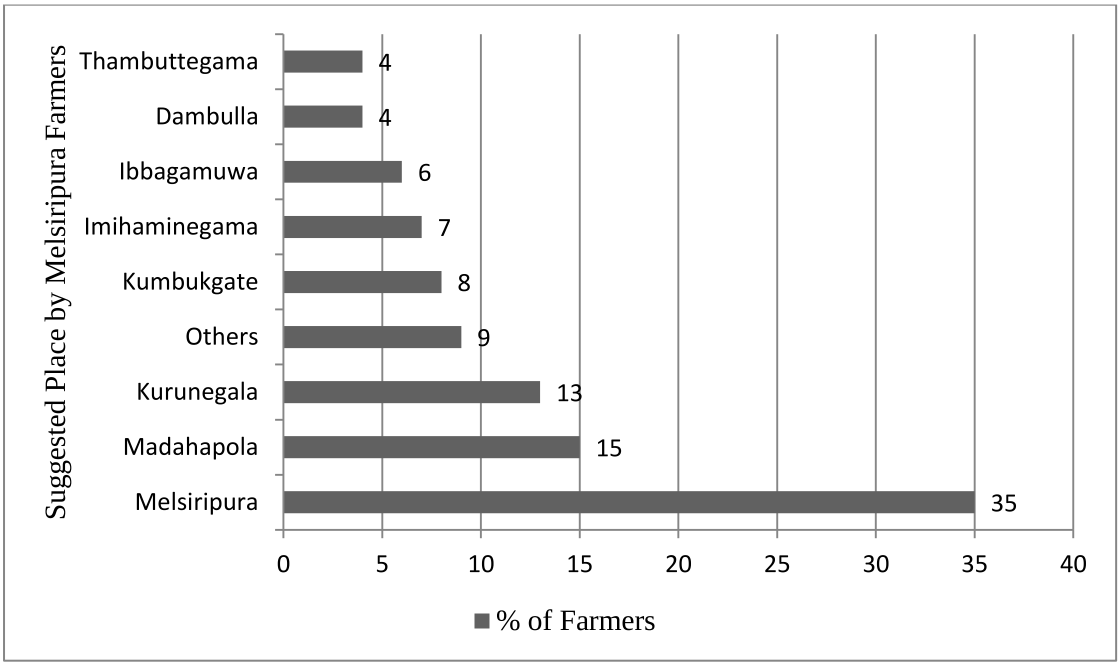
Source: HARTI Field Survey Data 2013

Figure 4.11: Thambutthegama Farmers

4.7.2 Melsiripura Farmers

Melsiripura is located in the Kurunegala District and 35% of the respondents in this area suggested that Melsiripura is the most suitable place for direct marketing. Out of them, 65% stated that there is a good market potential in this area as many consumers travel through Melsiripura. The views of farmers were as same as of

Thambutthegama farmers. The second reason mentioned by 29% of the respondents was the easy access and low transport cost. Another preferred place for direct marketing suggested by 15% farmers in Melsiripura was Madahapola which is located around 30km away from Ibbagamuwa and Melsiripura (4.12). Though the distance is too high there is a possibility of promoting direct marketing because there are many farmers living around Madahapola area. It should be noted that most of the farmers suggested a market place close to their residence. This was the main reason to suggest Melsiripura by one set of farmers while Madahapola by another set in the same location. Farmers' unwillingness to be away from farming activities was further supported in this finding.

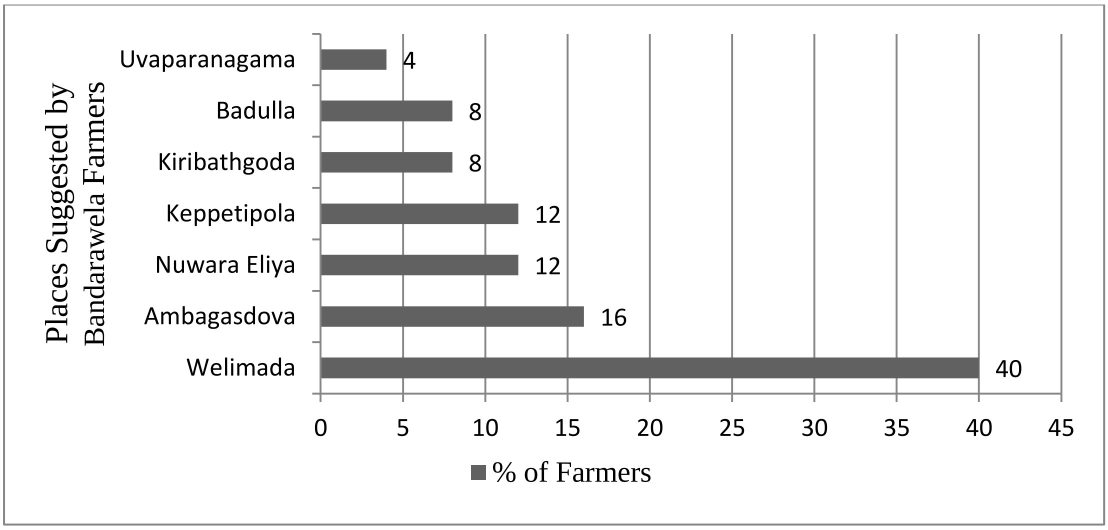


Source: HARTI Field Survey Data 2013

Figure 4.12: Melsiripura Farmers' Views about Places

4.7.3 Bandarawela Farmers

Bandarawela was selected for the study of upcountry farmers' views on direct marketing. Further, 40% of respondents in Bandarawela suggested that Welimada town is the most suitable place for direct marketing. One of the reasons for suggesting Welimada town was the high market potential because there is a large number of consumers in the area. At the same time, 10% of the Bandarawela farmers mentioned that local tourists visiting the area during vacation time can be targeted. As mentioned by the farmers in other areas, 45% of farmers stated that low transport cost and easy access were the other reasons for selecting this location (Figure 4.13).

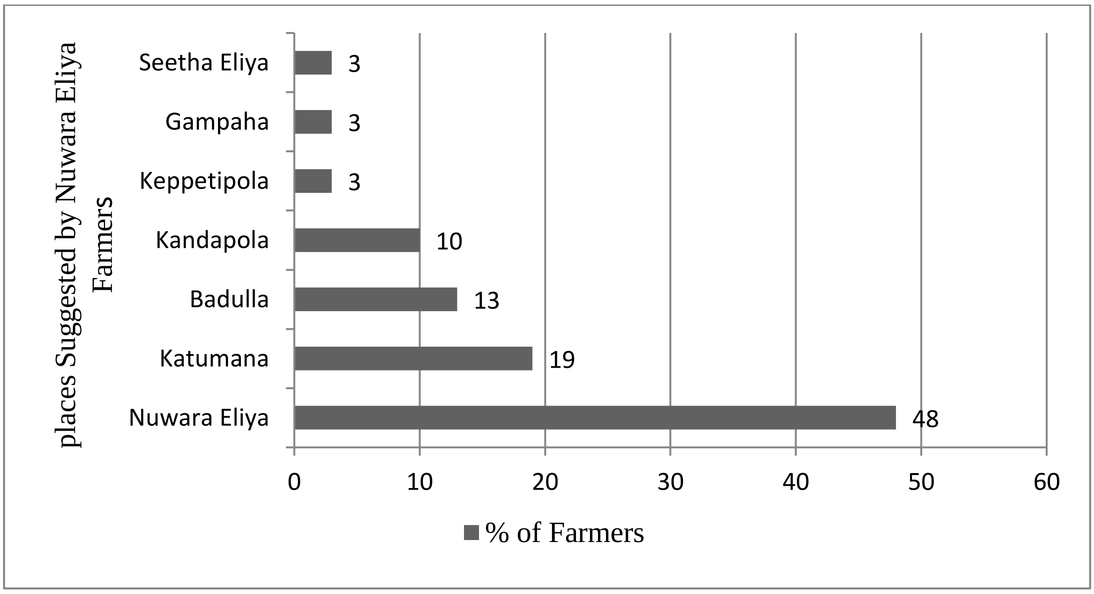


Source: HARTI Field Survey Data 2013

Figure 4.13: Bandarawela Farmers' Views about Places

4.7.4 Nuwara Eliya Farmers

Nearly half of the farmers in Nuwara Eliya (48%) suggested that the Nuwara Eliya town is the most suitable place to establish a direct marketing center. Of them 69% farmers indicated that the consumers visit Nuwara Eliya town to purchase other requirements daily. In addition to that, 28% of these farmers stated that many people visit Nuwara Eliya daily from other districts too and this is a good target. Also, 25% of the respondents indicated that this place is close to their farms and can be reached in a very short time incurring a very little transport cost (Figure 4.14).



Source: HARTI Field Survey Data 2013

Figure 4.14: Nuwara Eliya Farmers' Views about Places

CHAPTER FIVE

Findings, Conclusions and Recommendations

5.1 Findings

(1) Direct Marketers

About 76% of the direct marketers belonged to higher age categories (40-60 years) and they have practiced direct marketing of vegetables through *pola* marketing system. Primary occupation of more than 67% of the direct marketing farmers was agriculture (mainly vegetable farming). The secondary occupation of these farmers was non agricultural activities such as business (43%) and self employment (25%). Education level of the direct marketing farmers was in a good position and they are able to read and write. The average family size of the sample was 4 and 76% of the sample have 3-5 members in their families indicating that the family members can be used for direct marketing activities.

Nearly 10% of the vegetable sellers in the selected *pola* markets were direct marketers. There was a trend of selling various types of commodities such as vegetable plus fruits or any other crops. From the total direct marketers, 42% sold vegetables only while 39% sold fruits and vegetables together and 14 % sold vegetable, fruits and other crops. The direct marketing farmers do not sell only their own product and of the total quantity sold, 65% were own products while the rest 35% had been purchased from neighboring farmers or from the wholesale market. The number of vegetables sold on one selling day by a single farmer was not limited to one or two and on average six vegetables are sold. On average 50kg of vegetables are sold by a low country vegetable farmer while 84kg are sold by up country farmers a day. The average daily volume of trade for low country farmer was Rs. 2425 and it was Rs.4811 for an up country vegetable farmer.

Farmers' experience on direct marketing ranged from one to above 5 years. Further, 65% of the *pola* marketers and 38% of the roadside marketers had more than five years experience. Further, 25% of the roadside marketers and 18% of *pola* marketers are newcomers to the direct marketing, having less than two years experience. These findings show that there is a possibility of entering the market and sustainability in the industry.

The management of the farm was done by the farm family itself. It found 51% of the farms are managed by the owner while 47% of the farms are managed by a family member since these farmers are not willing to handover the farm management to others. Among direct marketers, 53% use only family labour while 44% utilize both family and hired labour. Nearly 66% of the farmers practicing direct marketing cultivate less than 50 perches with a single crop indicating that small scale landholders are more attracted to direct marketing. Direct marketing farmers have to engage in year round business irrespective of the availability of their own product to sustain in the business. Direct marketers have planned to harvest in a manner to meet the demand of daily customers. It was found that 94% of the sample farmers practice this cultivation system. The excess production which cannot be sold through direct marketing is sold to the wholesalers. Nearly 76% of the sample farmers travel less than 10km for direct marketing and 78% dislike traveling to the Western Province. Considering multiple responses given by the farmers, long distance (54%), extra transport cost (31%), extra time consumption (20%) and influence on farm activities (16%) were the reasons of their inability to travel far off.

(2) Farmers' Willingness towards Direct Marketing

Age distribution among the farmers who are willing to join direct marketing shows a similar age distribution of present direct marketers. About 58% of the sample were in the age category of 40-60 years. The education level of the farmers was in a fair position and more than 73% had received secondary education and above. The average family size was 4 members and it was similar in both up country as well as low country vegetable farmers. About 60% are earning more than Rs.25, 000 per month and vegetable farming was the main primary source of income of a majority of the interviewed farmers (90%). Non agricultural income gained by a very few farmers and about 60% are earning less than Rs.5000 per month indicating the need of income diversification.

The extent cultivated by the farmers willing to practice direct marketing provided some insight into the possibility of direct marketing. The allocated land extent for one crop was less than 0.5 acre by the majority farmers (64%). While practicing direct marketing, farmers are interested in utilizing both family and hired labour. About 83% of the sample farmers use 1-3 persons as family labour while 72% employ 5-6 persons as hired labour in their field during peak period. This finding indicates that farmers are not interested in releasing total family labour from the field and handing over the total responsibility to hired labour. About 80% of the samples do not like to travel more than 20km and 73% are not willing to travel to the Western Province for direct marketing.

Farmers suggested different places to establish direct marketing centers considering various factors. About 32% of Thambutthegama farmers suggested the BALALU WEWA junction while the 29% suggested Dambulla main road. Among Melsiripura farmers, about 35% suggested Melsiripura while 15% suggested Madahapola. Further, 40% of the Bandarawela farmers suggested the Welimada town while 48% of Nuwara Eliya farmers suggested the Nuwara Eliya town.

5.2 Recommendations

It was realized that direct marketing is not openly discussed in the farming community. The survey team had to describe about the concept of direct marketing to the farmers before interviewing. Hence there is a need to bring the concept of direct marketing to the farming community. Therefore, awareness creation on advantages of direct marketing for consumers as well as farmers is recommended to promote this particular practice in agriculture marketing. Agriculture extension officers, small entrepreneur development officers, and NGOs can initiate this work. Except for a few events, direct marketing farmers have benefitted from different supportive programmes. For example, loans are granted from Samurdhi Movement to commence business as self-employment. Direct marketing farmers can also benefit from this loan but the loan falls under the category of self-employment and not as direct marketing. Therefore, the present situation is a hidden practice and limited. Hence, inclusion of direct marketing in the main stream development programmes such as *Divi Neguma* can help farmers obtain more facilitation such as location, awareness and training for direct marketing. *Divi Neguma* is one of the main development programmes in the agricultural policy. But it is mainly focused on small scale production and not on marketing. Hence the future development of *Divi Neguma* programme can be directed to marketing too especially through direct marketing.

Findings of this study reveal that vegetable direct marketing farmers have allocated smaller land extents for a single crop presently (mixed crop). Also farmers who expressed their willingness to practice vegetable direct marketing are engaging in the same practice in the cultivation. Therefore, farmers who can allocate small land extents for a single crop, can cultivate at least 5- 6 crops which are more suitable for direct marketing. Forming small groups and promoting one or two farmers for direct marketing will provide benefits to all the members in the group. As the farmers are not willing to leave the farm totally while practicing direct marketing, training one person from a farm family for direct marketing is recommended. The existing periodic rural and urban *pola* system can be recommended as a suitable place to promote direct marketing. The majority of direct marketers met in this study were in *pola* market. In this regard, local government authorities should pay attention to promote direct marketing through *Pola* system. Allocating a separate zone or a particular day in the *pola* for farmers is recommended. Especially *pola* is re-constructed, additional space will be created and part of those spaces can be given to trained farmers for direct marketing. This type of action may be opposed by the present vegetable traders in *pola* markets. This situation should be tackled by creating a win - win environment.

Local tourism will be a favourable factor for establishing a new direct marketing center. Therefore, locations connected with Anuradhapura, Polonnaruwa, Kandy Nuwara Eliya and Bandarawela will be suitable.

Consumers are more interested in purchasing vegetable directly from farmers because they are concerned about the freshness and especially the quality, health and the nutritional value. Hence, direct marketing should be differentiated with special features that are sought after by consumers compared to the traditional marketing channel. Those eager to enter direct marketing should be much knowledgeable about these facts. Therefore, introduction of a regulatory system for direct marketing is recommended.

Vegetable cultivation in pots is recommended for institutional buyers such as hotels, restaurants and supermarkets. Vegetables such as carrot, radish, and leeks can be cultivated in pots including 5-10 plants in a pot and be transported to institutional buyers. In this method, freshness will be highly protected while minimizing the wastage.

Data on direct marketing of agriculture is not available in the national statistics system. This is a constraint to promote this particular sector. Hence, including direct marketing in the Agriculture Census is needed for future promotion.

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