

# **Production and Marketing of vegetables in Kurunegala District**

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## **Abstract**

Dry and Low country intermediate zone of the Kurunegala district has enormous potential to produce fruits and vegetables in the irrigable lands both during Yala and Maha season, in addition to perennial crops common to the area. Waste of fruits and vegetables be recorded to around 30% of the harvest due to various reasons , predominantly due to marketing problems in the area. As a result of this, the production was also decreased from 2003-2006. This study was aimed at identifying the major fruits and vegetables grown in the area and their production and marketing problems on the part of farmers and traders. Hence, 100 farmers and 16 most experienced traders were interviewed using two questionnaires.

Secondary data was used to identify suitable location for the study. The famous locations were Malasiripura, Polpithigama, Ganewaththa, Wariyapola, Kobeigane, Nikaweratiya, Awulegama, Moonamaldeniya, Bingiriya, paduwasnuwara and Galgamuwa. High cost of production involved in Agrochemicals, Fertilizer, Seeds and Kerosine oil. Further, lack of extension service has badly affected the appropriate use of such inputs to reduce the cost of production. An Agricultural operation in the area has been affected by the marketing problems to a grater extent. Lack of own transport and middlemen involvement were the major problems uncounted by the farmers in the area. Even weekly fares operated in the close proximity has not been supportive to the farmers because of the high entry fees and cost of transport. It was also noted that there are many marketing channels in operation and mostly they are long channels to create low prices to the products. Under these circumstances, it is unavoidable the farmer do away with vegetable production and maintain the life with environmental sensitive jobs like brick making and deforestation.

**Keywords:** Fruits and vegetables, production, marketing, Agricultural inputs, marketing channels, cost of production, environmental sensitive jobs.

Parts of several Agro ecological zones i.e. the dry, the wet and the intimated zones are found in Kurunegala District. However the majority of the land masses of the District represent the low country intermediate zone. Coconut is the prominent perennial upland crop found in the District. Coconut plantations are inter-cropped with crops such as fruits, vegetables and timber trees. Low lands are specially developed for paddy cultivation. Some of the paddy lands are cultivated to other field crops during Yala season where availability of irrigation water is insufficient to raise a crop of paddy. Cultivation of black beetle targeting the export as well as local markets is gaining popularity in both wet and intermediate parts of the district. Production of Pineapple, popular fruits, has confined in two Agrarian's services center areas in the wet parts of the district. Vallies of natural water streams and irrigable lands that are located in the dry and intermediate parts of the District are the areas where vegetable and fruits productions is taking place at a commercial scale.

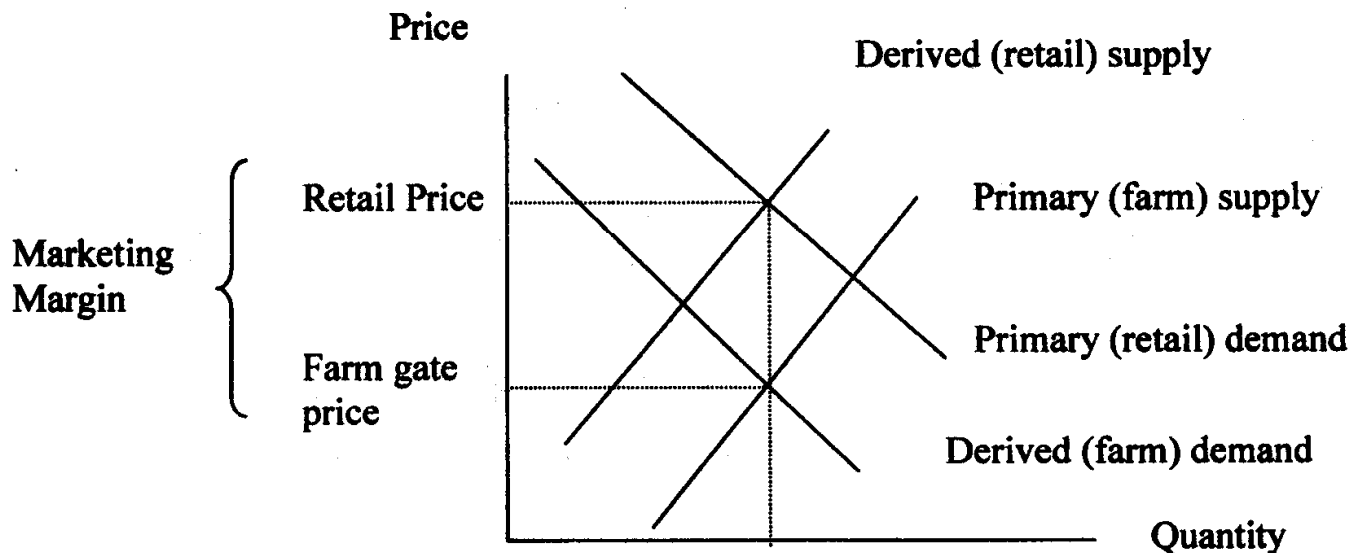
Year around vegetables production allows farmers to grow a maximum of three crops per year. This minimizes seasonal fluctuations in farm income while increasing the annual income. At present it is recorded that nearly 30% of the vegetables produced is wasted after harvesting. This contributes directly to increase consumer price of vegetables according to the finding of a study conducted by Wickramasinghe and Wijayawardana in Kurunegala district in 2006. Loss incurred by the vegetable traders (in transporting vegetables) was 10 percent according to the same study.

Vegetable is an important component of the daily diet of Sri Lankans vegetables provide a considerable amount of vitamins and minerals. Other than that, some of the vegetables can be exported either in raw form or in processed form. Despite the ability of that continues vegetable production to generate continuous flow through out the year it was observed that some farmers of Kurunegala district are moving away from vegetable growing due to high cost of production of inputs, low market prices of vegetables and marketing problems. Central Bank of Sri Lanka (2003) has confirmed this by stating that there was an annual reduction of vegetable production by four percent in 2002. Sri Lanka has exported vegetables worth of Rs 661 million in 2002. Total value of processed fruits and vegetables exported in the same year was Rs 726 million (Central Bank of Sri Lanka 2003)

Un availability of well functioning markets for vegetables has contributed to develop long marketing channels with several intermediaries. (Tomek, et .al ., 1972). Marketing margin is leistered in figure one

Both Macro aspects of marketing focuses on the total system of economic activities between the farm gate and the final consumer and the. Micro aspects finally that performance of businesses activities which direct the forward flow of goods and serves to customers and accomplishing the objectives of the farmer as well as the firm are equally important for the smooth functioning of a market. Important market models that one should pay attention to include are pure competition, monopolistic competition, oligopolistic competition, oligopsonistic competition and monosonistic competition. Marketing options of farmers are limited severely by there competitive

structure and the biological nature of farm products .Thus, much of the interest in marketing options of a farmer focuses on timing of sale (Rhodes, 1978).



**Fig.1. Marketing Margine**

## Objectives

The specific objectives of the study are;

- To identify major vegetable producing areas of the district and local production.
- To study the problems faced by vegetable growers of the district.
- To identify problems faced by vegetable traders.
- To recommend appropriate measure to motivate vegetable growers as well as vegetable traders.

## Material and Methods

Available sources of secondary data were examined in order to identify areas where relevant data was lacking. Then, field surveys with random samples of 100 farmers and 16 traders were conducted using structured questionnaires to collect relevant primary data.. Field surveys were conducted in nine divisional secretariat areas of Kurunegala district.

## Results and discussion

### Leading vegetable producing areas and the quantities produced.

Vegetables belong to families of solanaceae, cucurbitaceae, cruciferaceae and leguminaceae are popular according to the Provincial Department of Agriculture North Western Province (2006) Historical changes in vegetable production are presented in Table 1

Table 1 Extent cultivated to vegetables  
(Kurunegala district)

Year	Extent
1999	4,002
2001	3,983
2003	5,621
2006	4,091

Source: Provincial Dept. of Agriculture (NWP), 2006

Information provided in Table 1 depicts that vegetable cultivation was at a minimum in year 2001 and it has reach a maximum in year 2003. However, extent has declined again in the year 2006 due to marketing problems and high prices of production inputs. Areas popular for vegetable cultivation are the vallies of natural water streams such as Daduru Oya, Kolamunu Oya, Mee Oya, Maguru Oya, etc.: Agrarian Service Center areas famous for vegetable cultivation are Melsiripura, Polpitigama, Ganewatte, Wariyapola, Kobeigane, Nikaweratiya, Maho, Awulegama, Moonamaldeniya, Paduwasnuwara, Bingiriya, Ambanpola and Galgamuwa.

### Production Problems.

High cost of production and low vegetable prices were major problems reported by vegetable growers. Findings of the field survey revealed that this situation has resulted due to the and inefficient use of expensive production inputs. Nearly 73 percent of the farmers interviewed had used seed purchased from private dealers. Eventhough, 98 percent of farmers indicated high price of chemical fertilizers was a problem only 29 percent of farmers had used organic manure (a low cost alternative to chemical fertilizers), in vegetable production. Another 98 percent of farmers reported that high price of agrochemicals as a problems they faced in vegetable production. Adoption of integrated pest management (IPM) and maintaining crop hygiene are alternatives that can bring the cost of production down. Farmers who had cultivated vegetables under lift irrigation stated that they were facing difficulties due to ever increasing prices of Kerosene that is used in pumping water. Under these circumstances agricultural

extension service could play an important role in order to bring the cost of production of vegetables down. Findings of the field survey revealed that the role played by the agricultural extension service was not satisfactory because that service was either individual biased or location biased. Individual biasedness is the serving for influential and capable once neglecting the rest of the population while location biasedness is focusing on locations with high productivity. Details of the findings are presented in Table 2

Table 2. Sources of Agricultural Information.

Type of information	Source	Percent farmers reported
Crop selection	Self	70
Use of fertilizers	Self	62
Use of agrochemicals	Self	56
Time of harvesting	Self	73
Vegetable Prices	Traders	66

It was clear that farmers had made almost all important decisions in vegetable production based on their experience. This is not a bad practice if farmers can make accurate decisions. During the field survey it was observed that the majority of the farmers did not possess sound technical knowledge on vegetable production and they were keen to listen to the agricultural extensionists. Therefore, it is mandatory to design agricultural extension programs for the benefit of the vegetable farmers living in interior places too.

Apart from this, scarcity of irrigation water was reported by a minority of vegetable growers. Extension services can play an important role by introducing moisture conserving techniques and educating farmers on the selection of appropriate crops when vegetable is grown in uplands where irrigation water is scarce.

### Marketing Problems

Similar to marketing problems reported in various parts of the country, farmers of Kurunagale district also have faced problems due to lack of smoothly functioning markets in the close vicinity, lack of own transport facilities (or high cost of transportation) and middlemen's involvement in vegetable marketing in vegetable marketing. Even though a large number of weekly fares are functioning in the study area, farmers expressed that they are not prepared to sell their produce at weekly fares due to high transport cost they and unbearable entry fees charged by the management of the weekly fares. Part of this problem has resulted because local government

institutions had tendered out the management of weekly fares to the private sector individuals. The cumulative and the long-term effect of these factors has eroded competition among traders in buying vegetables at weekly fares, forcing the small scale producer to sell their products to traders who visited them. Under these circumstances vegetable growers who were not financially strong to bear a high transport cost had soled vegetables to visiting traders at the price offered by the trader. Those traders as well as resourceful farmers had transported vegetables to distance markets located at Thambuttegama, Dambulla, Melsiripura, Colombo and Pannipitiya. It was found that prices traders received at distance markets were almost four times higher than the price they paid to farmers.

Average quantity of vegetables transported by a village level collector was nearly six mt per day. They had transported vegetable daily during the season and three or four times a week during the off - season to distance markets. However, vegetable traders were also facing a series of problems in playing the role of market agents and are presented in Table 3

Table 3. Problems faced by vegetable traders.

Problem	Percent trader reporting
Ever increasing fuel price	80
Poor road conditions	50
High maintenance cost of vehicles	60
High labour wages	50

Information presented in Table 3 reveal that the escalation of consumer price of vegetables is primarily due to high cost of production and high transport costs incurred by the traders. Traders were not using improved methods of post- harvest handling in order to minimize post- harvest losses. Survey also revealed that a village level collector had traveled an average distance of five Km in collecting vegetables while he had traveled an average distance of 97 Km to sell vegetables. Altogether trader had traveled more them 100 Km in completing buying and selling tasks in vegetable marketing. It is of prime important to reduce the distance that the trader has to travel by establishing vegetable collecting centers in and around leading vegetable producing areas.

### Marketing Channels

Marketing channels through which vegetables reach the consumer are presented in figure 2. The shortest channel is the channel (A) and this was observed at weekly fares. Due to the influence of middlemen, brokers high transport cost and high entry fees charged by the management of weekly fares popularity of this channel is declining rapidly over time. The channel (B) is also not that popular due to over exploitation of farmers by the middlemen/ brokers. The bulk of the vegetable is

marketed through channels 'C', 'D', 'E', 'G', and 'H'. Figure 2 illustrates that the popular marketing channels were the long ones. The longer the channel the lower the price received by the producer because the cost in maintaining the channel was high. Therefore, shortening of these channels is a must. Field survey revealed that, under these circumstances vegetable production has become financially less attractive enterprises. Farmers who did quit vegetable production were engaged in alternative employments such as brick making. This is a very unfavorable situation and society should not encourage commercial brick making in prime agricultural areas, as it can create a series of environmental problems such as deforestation, floods and spreading of diseases while increasing the acuteness of land scarcity. According to the findings of the survey one acre of vegetables could produce 85 percent return over investment per season, in average. Therefore, this enterprise should be promoted as an alternative way of raising family income through out the year.

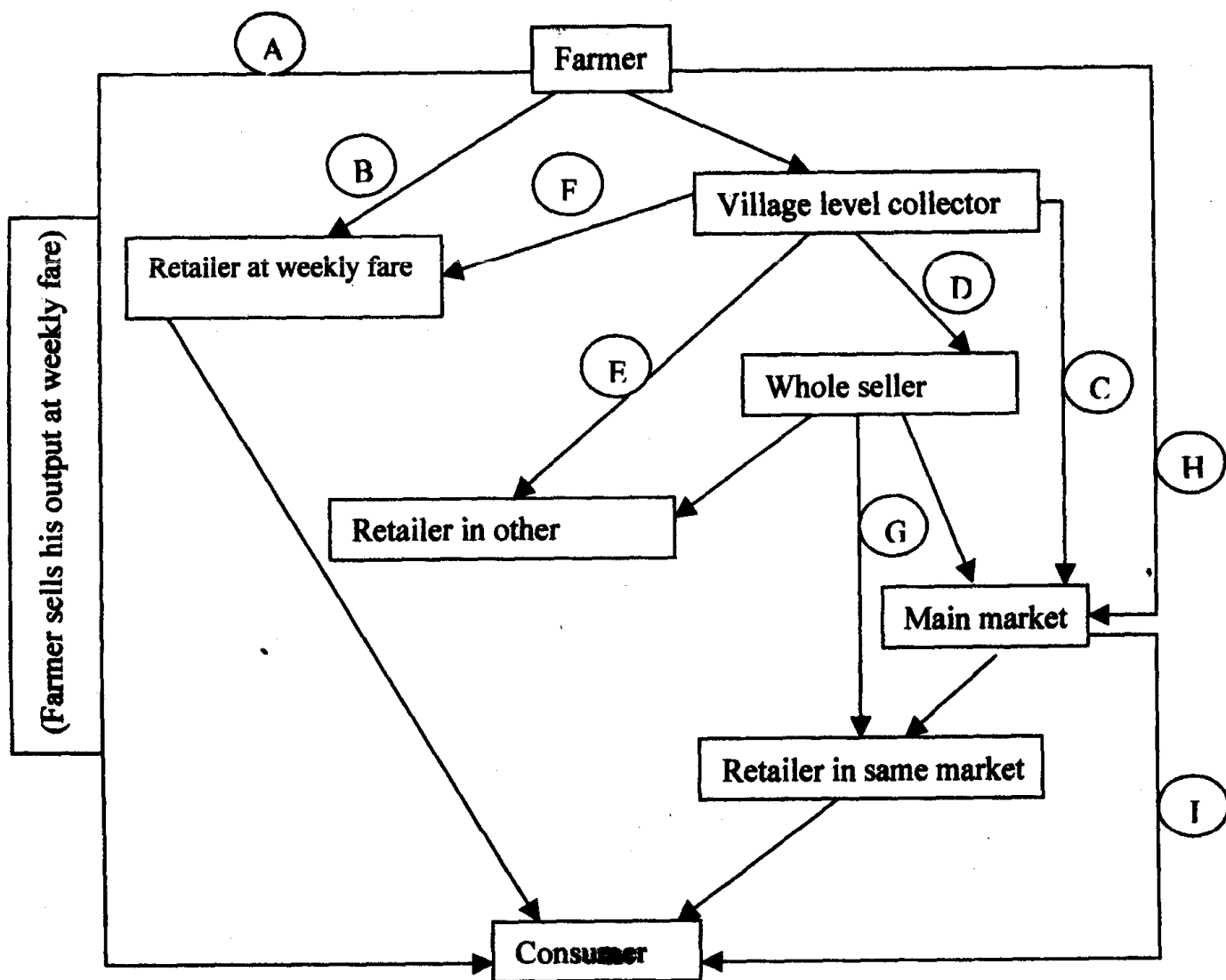


Figure 1: Marketing channels of vegetable and fruits in the study area