

Income Creation and Distribution along the Value Chain: A Case of Finger Millet Value Chain in Hambanthota District

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Abstract

This research aimed to explore the income creation and distribution along the value chain of finger millets. The objectives were (1) to identify the structure of the value chain, (2) to find out the functions and roles of value chain actors placed in different nodes, (3) to recognize the current income flow, and (4) to determine the factors influencing the value creation and income generation in finger millet value chain. Hambanthota district was selected as the research area and the total sample size was 150. Sample technique was a purposive sampling technique and the interviewer administered questionnaires were used as a data collection tool. Mainly descriptive and the Pearson Chi-square analysis were used to the analyses data. Processors who provide product base value addition and other actors provide service based value additions. The most complex node was the middleman node which shows a network. Before processing activities, actors are called middleman level 1 and after the processing, actors are called middleman level 2. There is a significant positive relationship between market margins of the farmers and the level II middlemen. Age, educational levels and the experiences about their professionals are the causal factors of income generation and value addition in finger millet value chain nodes. Farmers and middlemen experiences positive for profit margin. This research concluded that, finger millet value chain structure is very complex and driven by the middleman actors.

Keywords: Income Flow, Income Margin, Value Chain, Finger millets

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Introduction

Finger millet is one of the minor crops cultivated in several districts of Sri Lanka. Sri Lanka produces an average of 6,000 MTs finger millet per year and it was 5,984MT in 2012 (Central Bank of Sri Lanka, 2014). Finger millets are well grown in dry and intermediate climatic zones. Anuradapura, Polonnaruwa, Monaragala and Hambanthota districts are the major cultivation regions in Sri Lanka. This research was focus on the finger millet cultivation in Hambanthota district and its income creation and distribution between each node in the value chain.

The value creation and the distribution of finger millet value chain are still unidentified. The identification of finger millet value chain and its income functions in Sri Lanka is important for the value chain nodes, actors and the number of government and the non-government institutions. Intermediaries, who are the actors involve mainly in value adding functions in the finger millet value chain. Finger millet intermediaries collect finger millet for processing and prepare value added products and service. This research focuses on identification of finger millet value chain

structure, actor behaviours, income flow throughout the value chain and the factors involvement in the income creation and value additions of the value chain.

Materials and Methods

This research used the deductive approach. A survey was conducted during the months of June -July in 2015. The pre tested interviewer-administrated questionnaires was used for data collection from the research area.

This study carried out using purposive sampling technique. Hambanthota district was selected because it reported the 4th largest amount of finger millet cultivation in Sri Lanka (Central Bank of Sri Lanka, 2014). 150 respondents were selected of which 50 were farmers, 50 were middlemen and 50 were consumers. Sooriyawewa divisional secretariat leading the cultivation region of finger millet and the most of small scale processors in that DS division. The consumer data were collected from the Hambanthota DS division.

In order to test the association between the variables measured and find the significance of

hypothesizes developed the questionnaires analyzed using analytical tools such as Person Chi-square analysis.

All cross tabulations and graphical representation of data and findings carried out primarily through Statistical Package for Social Sciences (SPSS) version 16.0, and then compiled on Microsoft Office Excel 2013 at certain occasions to generate clearer and more visually attractive graphical representations.

Descriptive statistics used in the analysis of the questionnaires. Descriptive statistics include the numbers, tables, charts, and graphs used to describe, organize, summarize, and present raw data.

Results and Discussion

Kaplinsky and Morris, (2000) have defined that, a value chain is the full range of activities which are required to bring a product or service from conception through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final customers, and final disposal after use. According to the definition, the core value chain is underlying with main three nodes; farmers, middlemen and consumers. Value chain complexity is mainly due to the middlemen level which contains main five actors namely collectors, wholesalers, processors, retailers and importers.

Farmers produce finger millet and sell them to collectors, processors and wholesalers. Middlemen then show the complex links between them and according to that collector's link with the wholesalers, processors and the

retailers. Processors play a vital role and then have links with farmers, collectors, retailers, wholesalers and the importers. Wholesalers also play vital role in finger millet value chain and spread the branches to farmers, processors, retailers, collectors and importers. Importers link with processors and wholesalers only. Retailers possess main direct link with the consumers and collectors, processors, importers play other links.

According to the Figure 1, middleman node can be divided two parts as a middleman level 1 and middleman level 2. Dolan and Humphrey, (2000) shown that the complexity of value chain driven by the expanding of the value chain and it caused to the creation of unequal situation for all actors and the nodes. Level one represented collectors, wholesales and the importers. The level 1 middleman did not involve in the conversion of finger millets into new products. They provide services related value addition like a collection, storage and transport. Level 2 middleman started point of new product creation, which was from finger millet flour. Processors who are the actors involved the finger millet flour making, packaging and retailers involved in the final products transport for the end consumers.

In the finger millet value chain, farmers absorbed 61.17% of revenue and 50.19% of profit margin in the research area. Farmers contributed to 35.7% of the total cost in finger millet value chain. According to the above results, farmers got the considerable amounts of revenue and the profit margin. Reason behind the significant difference of revenue and the cost is the use of limited resources for finger millet cultivation. Usually farmers incur a cost for the

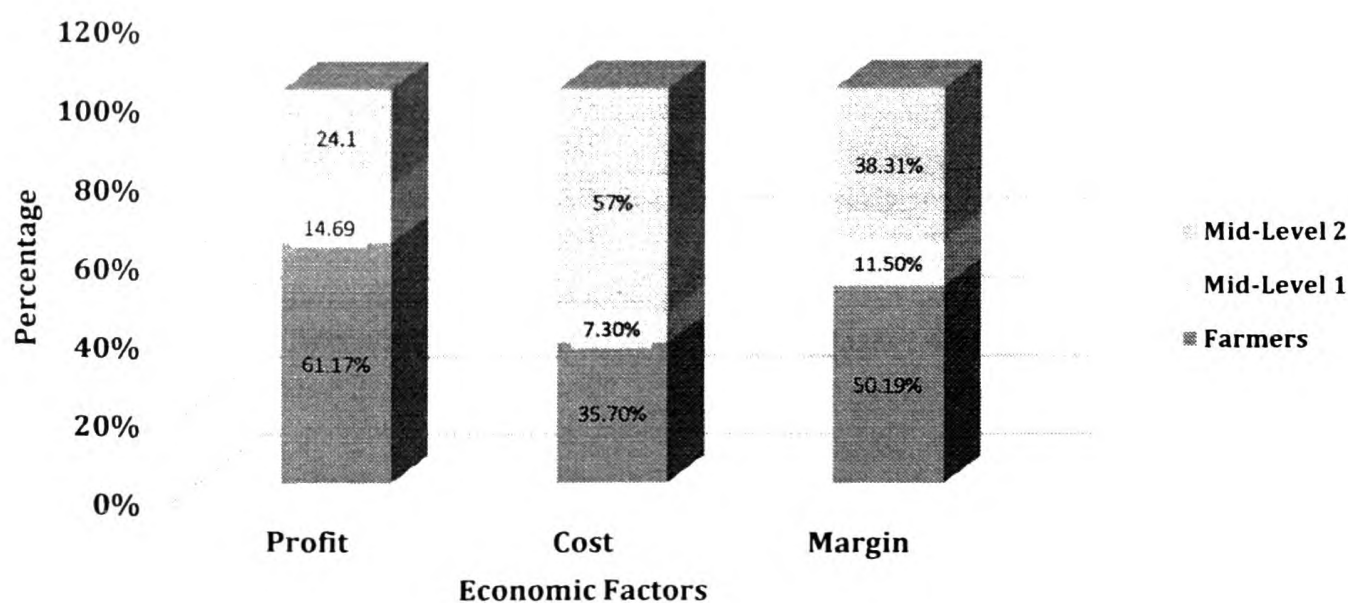


Figure 1: The distribution of revenue, cost and profit of 1kg finger millet

land preparations and the harvesting stages only. They did not use the fertilizer or Agrochemicals for the cultivation which reduces costs drastically.

Middleman level 1 absorbed the 14.69% of revenue and 11.50% profit margin from the finger millet value chain. It relatively lower than the other nodes in the value chain. In the middleman level 1 actors, not added product base value addition for the value chain that based on the services provided like storage, collection and the transport.

The middleman level 2 actors gained higher revenue and the income margin than level 1 actor. Processors and the retailers were represented middleman level 2 and they got 24.15% of revenue and 38.31% of income margin. Here processors produced the finger millet flour using the seeds and that flour packaged to the retail market and the stock market. Processing increases the cost of them unlike for farmers and the middleman level 1. It represented the 57% of the total cost of the value chain.

Farmers in the value chain still not play important nodes and the value adding products about the finger millet value chain. However, farmers gained high amounts of revenue and income holding in the finger millet value chain. It

created the significant income to the farmer household income.

Finger millet value chain in the research area shows the complexity than the expected level. It was driven by the middlemen by their actions and the behaviours in value chain activities. However, if the complexity of value chain middleman behaviour can be reduced, value chain efficiency and the profitability will be increased. Finger millet value added products are lacking in the research area. Especially processors should promote their products in the area.

Generally, consumers are knowledgeable about the importance finger millet and the nutritive value. Middlemen should arrange proper marketing programs to increase the awareness level of the consumers.

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