TRANSPARENCY AND AUTHENTICITY OF BANANA VALUE CHAIN

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ABSTRCT - Banana, a common fruit delicacy among most of the Sri Lankan and the fruit represent all cultural events across diverse ethnicities. Large variety of desert and cooking types banana add diversity to local meals in terms of nutrition and taste. Banana is one of the min sub sector of rural agricultural economy. Key concerns of the study were to map banana value chain in order to identify the key players, functions, architecture along the chain and recognize the existing transparency and credibility within Banana chain. Three banana producing area in Polonnaruwa district and four key banana types (Ambul, Sugar, Kolikuttu, and Cavendish) were considered for the study. Structured questionnaire, in-depth interviews, and participatory observations were used to collect data from the actors along the chain. Data were analyzed using both qualitative and quantitative techniques. Results revealed that conventional and peculiar actors such as input suppliers, producers, farm-gate transporters, wholesalers, processors, retailers, and consumers. Banana value chains are twofold; short regional chains and complex and lengthier export oriented chains. Fragile and scattered regional value chains contain poor transparency system and lack of authenticity significantly affect on customer care. In contrast, few large scale producers were used labels or QR codes and chain wide transparency fulfill the export market requirements. Those revealed producer details, origin, claim on safety and quality standards and certification. The study recommends intervention in the area of linking actors in the value chain to improve transparency and authenticity.

Keywords: Authenticity, Banana, Value Chain,Transparency

1. INTRODUCTION

Bananas (*Musa acuminate*) is considered as the most economically important fruit crop in terms of volume of production and export earnings as it contributes significantly not only to the national income but also to employment (Tacio, 2013). As well as it is the fourth most widely consumed crop by humans; after rice, wheat and corn in terms of consumption quantity. As a tropical country, Sri Lanka has the optimum climatic conditions for banana cultivation throughout the year, hence can provide a continuous supply to fulfill the consumer demand of the fruit. Several varieties of Banana (Musa acuminate) are widely cultivated all over the island in large, medium, and small scale plantations and in home gardens. It is also an attractive perennial fruit crop to farmers as it provides economic benefits throughout the year. Currently, approximately 60,000 hectares (20,000 ha in the wet zone and 20,000 ha and 40,000 ha in the dry intermediate zones) are under banana cultivation in Sri Lanka. Annual banana production is about 780,000 metric tons and the average yield is 13 hectares. Exports account for about 5 percent of total production (Hathurusinghe et al. 2012).

Among the most cultivated varieties of banana in the Polonnaruwa are Ambul, Sugar, Kolikuttu, and Cavendish. There has a very promising banana industry with most of the lands devoted to banana production. Banana crop is of great importance to small scale farmers in the province, in which, most of them are cultivated Ambul, Sugar, and Kolikuttu bananas. After introducing the Cavendish banana cultivation the commercial level large scale farmers are focus on Cavendish banana.

As Bananas are very popular and widely consumed fruit nowadays, consumer concerns about the origin and quality of fruit are extremely high. As a result there is a tendency to spend more on food products that are certified in origin. Existing systems lack transparency and consumer confidence due to the lack of a transparency and fast, reliable way to obtain information about the origin of the product. So, lack of traceability throughout the banana supply chain. Hence, there is a need to analyze or examine more closely the existing interrelationship among players and stakeholders. This is a more targeted and focused research of identifying appropriate stakeholders and linkages in the banana value chain and investigating the existing transparency system and authenticity

2. MATERIALS AND METHODS

2.1. Site Selection

The study was conducted by using 75 respondents from three Divisional Secretariats (Madirigiriya, Hingurakgoda, Thamankaduwa) in Polonnaruwa District involving key informants of the banana value chain: input suppliers, farmers, collectors, whole sellers, intermediaries, transporters, retailers and consumers. The sample was selected by using Random Sampling Technique.

2.2. Data gathering procedure

Data was gathered through a survey using a structured questionnaire, focus group interviews, in-depth interviews, and Participatory observations. The collection of data started from the downstream players (relevant market) up to the upstream players (farmers). Other than the mixed mode approached, the Value Chain Mapping Analysis was used to find out the relationship, linkages, structure and functions of the Banana Value Chain.

3. RESULTS AND DISCUSSION

3.1 Banana value chain actors and their map

3.1.1 Banana Value Chain
The major banana value chain actors identified in the study area were input suppliers, producers, collectors, wholesalers, retailers, and consumers. The main phases characterizing a banana value chain are described as follows;
- Production: The production phase represents all agricultural activities implemented within the farm. The farmer uses raw and organic material (fertilizers, seeds, animal breeds and feeds) to grow crops and livestock. In this stage, care and management activities contributed the highest percentage to the total cost. Care and management activities include among others de-suckering, de-leafing and de-blossoming. These activities contributed higher labor costs since these are most frequently done in one year.
- Processing: Banana as a fresh fruit the large scale farmers were packed their product and sell, where each package might be uniquely identified containing information such as the farmer location, contact details, nutritional values, packing location and etc.
- Distribution: Once packaged and labeled, the product is released for the distribution phase. Depending on the product, delivery time might be set within a certain range and there might be a product storage condition.
- Retailers: At the end of the distribution, bananas are delivered to retailers who perform the sale of the product (Retailers). The end-user of the chain will be the customer, who will purchase the banana (Customer).
- Consumption: The consumer is the end user of the chain, he/she buys bananas and demands traceable information on quality standards, country origin, production methods, etc.
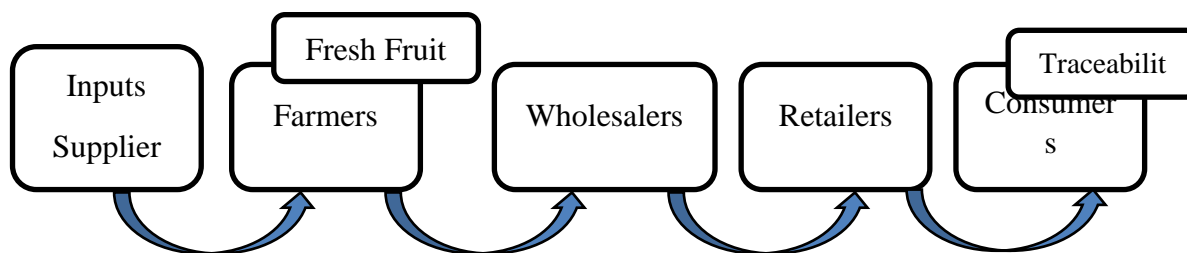
Figure 1. Linkages among Value Chain Parties

3.2 Traceability and Authenticity among Banana Value Chain

Food authenticity is about reliable exchange of food in the supply chain. Each actor should deliver complete details about the origin of the goods. This study identified types of existing traceability system and mechanisms that the value chain parties were followed. Most of the small and medium scale farmers were followed traditional methods like put the initial on bunches, cutting shapes of banana bunches. Large scale farmers were labeling or coring boxes while processing.

Figure 2. Exciting Transparency System

4. CONCLUSION

Bananas can be considered as a major fruit and important cash crop in many regions of the country. Multiple role of the crop make it as one of the essential item in any home garden catering to diverse needs of the people while ensuring economic returns. Regional value chains are short, few nodes and fragile. Traditional authenticity mechanism plays vital role in regional value chains. Export orineted banana value chains are complex, lengthier and govern by the exporters. The banana chain is highly multi-actor based and distributed, with numerous different actors involved, such as farmers, input suppliers, wholesalers and retailers, distributors, and finally consumers. All value chain parties were interconnected to improve the transparency, authenticity and food safety. This study showed present transparency system like labels, codes, traditional methods followed by the value chain parties. However, existing transparency system is poor and lacking in credibility and authenticity.

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