

Study of main actors, flow of products, money & information in agroprocessing supply chain in Jabalpur region of Madhya Pradesh

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Abstract

In today's global market, managing the entire supply chain becomes a key factor for a successful business. A consistent supply of quality raw materials for agro-processing industries is lacking in many of the regions, with inefficient handling and transportation systems. In the agro-processing supply chain, produce moves from producer to consumer via the processes of production, processing, distribution, retailing, and consumption; thus, produce moves from farmer to consumer in a domino-like fashion. At the same time, money that consumers pay for processed agri-produces moves from consumers to producers in the reverse process, again in a domino-like fashion from consumer to retailer to distributor to processor to farmer. Thus, the two-sided causality that connects farmers and consumers is mediated by these two sets of domino causalities. This paper discusses the main actors and flow of products, money, and information in the agro-processing supply chain of Jabalpur District.

Keywords: supply chain, actors of supply chain, money flow.

1. Introduction

Supply chain actors, Flow of products, Money & Information has emerged as one of the key dimensions of supply chain and plays a significant role in the effectiveness and efficiency of overall supply chain (SC) practices of various agro processing industries, in particular with agro-processing supply chain involving a large number of stakeholders that includes logistics partners and regulatory bodies. At the same time, there is a growing need for understand the supply chain actors, product, money and information flow because at present, the consumers of processed agricultural products demand to have more information not only on the availability of a product in markets but also on its farming, marketing, distribution, transportation, and processing activities.

Supply Chain Management (SCM) is a very important tool to examine all actors involved in the chain, their network structures and the core functions involved in bringing a product from its conception to its final consumers. It is used to assess the performance of supply chains, including the analysis of product flows, information flows, money flow and overall chain management. The central aim of a SCM is to identify effective ways for improving the performance of the chain as a whole and of the individual actors involved. The supply chain framework has become an increasingly useful approach for understanding the relationships among chain actors and its implications on chains competitiveness and performance especially in developing countries.

2. Scope of the study

These findings are useful for policymakers in formulating development initiatives, and also understanding the supply

chain participant and their information needs along with their activities in the agro-processing supply chain network.

3. Data Collection

For collect primary data a survey form was developed consisting of various questions related to various aspects of the agro-processing industry. In-depth interviews, direct observation & Audio-visual materials are the specific tools that was used to construct primary data. The secondary data about the relevant firms & small holder producers will be documented from various sources the Jila Udyog Karyalaya Jabalpur; Madhya Pradesh, Chamber of Commerce; Jabalpur, Madhya Pradesh Agro Industries, Madhya Pradesh Audyogik Kendra Vikas Nigam, Confederation of Indian Industries, NABARD and also from State Agriculture Department; Government of Madhya Pradesh.

Table 1

| Number of participants responses from the study area | |
|--|-----------------------|
| Area | Number of Respondents |
| Adhartaal | 14 |
| Maneri | 10 |
| Richhai | 16 |

4. Data Analysis

The collected data through interviews and different sources was analysed. Questionnaires was administered and checked for correction on completeness and stored for analysis. The data collected from the field was analysed by using statistical tables and figures, Simple Statistical Tools like Tabular Analysis and for presentation of data Graphical method (Bar graph, Pie graph) was used. Frequencies and percentages were also used to analyze findings.

5. Research Findings

Study identifies the key members of agro-suppliers, producers, processors, wholesalers, retailers and warehousing and transportation partners as well as import and export houses. In addition to actor's flow of product, money and information from procurement to final selling of product has been identified in the research.

In the study to identified the actors, product, money and information flow following has been identified

- **a.** The core processes or supply chain functions such as Input suppliers, production, trading, processing, wholesaling, retailing and consumption has been identified.
- **b.** Actors and their relationships: This describing key supply chain actors, their network structures and activities within the chain; and
- **c. External environment:** The political and socio-economic arena in which the supply chain operates. The supply chain framework was used in this study to analyze the physical flow of feed products as well as the actors involved in the

production, processing, trading and utilization of the processed products.

Based on the interview with the small and medium size agroprocessors farmers serve as the main actor of the supply chain of if we can see the production side of agro products for processing purpose. Farmers are also involved as a supply chain actor in the findings of the study. Agro-processors are identified and most important stakeholder in the study, while agro-dealers/traders are the major sale outlets for selling of the processed products and agro-industrial by-products. Traders also play a crucial role in connecting end users and agroprocessors.

In the study, three main types flows were identified in the agro processing supply chain: Product flow, Information flows and Fund flows. Product flow can be understood by procurement of the raw material from farmers to supply of processed products to end consumers. Fund flows were identified as money or financing allotted for a particular supply chain activity; knowledge flows were considered as linkages in information exchange, technical know-how, training and capacity development.

The results of these supply chain actors and product money and information flow are presented in Figure 1 and 2.

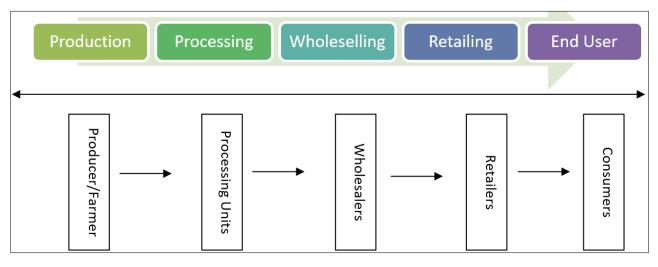
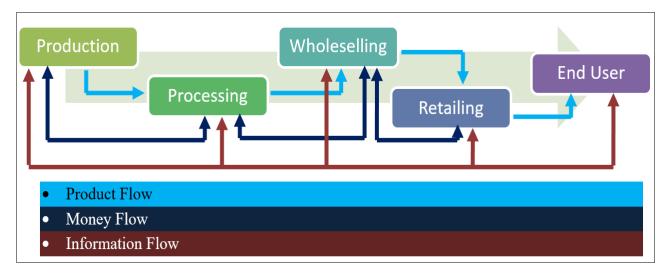


Fig 1: Agro processing supply chain actors



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6. Conclusion

From the study, all key actors involved in the supply chain have been identified. Primary actors of agro-suppliers, producers, processors, wholesalers, retailers, consumers have been identified with two others secondary actors viz. financial partners and regulatory bodies. In the key Information flow was identified which is elaborate in figure 02. The information sharing behaviour of Supply chain entities focused by their own business-level performance objectives which is raises concerns related to security, privacy, and costs and this gives rise to strong disincentives to share information unless the members in the Supply chain accept that shared information is equally beneficial to them. Looking from the point of the product flow the product is flow from the producers to finally en consumers along with the forward and backward direction flow of money among all the actors which shows for the smooth money flow in the chain network. The current supply chain study found stronger focus on delivering products to customers. The innovative capability of different actors of supply chain is clearly required to provide customers with multiple new offerings to get the benefit.

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