

A Well-Knit Agro Supply Chain As A Precursor To Growth And Development Of Horticulture

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Abstract

India loses a huge amount of horticulture produce every year specially fruits and vegetables. More 25% (Srivastava and Kumar, 2010) horticulture produce goes to natural dustbin which is world's highest spoilage rate. India lacks cold storage, effective food packaging as well as safe and efficient rural transportation system. On agricultural research and development (R&D), India spends only 1% of agricultural GDP, thereby ranking amongst the bottom of 26 lower middle-income countries in the index (Sukhmeet, 2013). India is also facing inadequate and inefficient rural credit supply. This phenomenon poses great challenges before the implementation of National Food Security Act, rural economy and growth and development of horticulture.

This research paper is based on qualitative analysis of interview of 50 farming household chiefs farming around city or Mandi and 50 supply chain stake holders of two districts viz. Lucknow and Jaunpur. The questions poured were regarding rural credit supply and inbound and outbound Supply Chain Management of horticulture produces specially vegetables like potato, onion, cauliflower, ladyfinger, cabbage, beans, ginger, carrot and green coriander, etc. Careful analysis of interview throws astonishing result that a well-knit supply chain management is the key to growth and development of horticulture.

Key Words: Agro Supply Chain Management, horticulture, rural economy, rural credit supply and national food security.

INTRODUCTION

It was Chanakya who suggested and defined responsibility and accountability of a king toward

his subjects. He stated that a king must ensure food, security and justice for his subjects. This statement signifies the concern for food security for the country. It is surprising that in spite of knowing the importance and significance of food security and rigorous effort from centuries the national food security bill could be enacted in

India in 2013. After becoming independent in 1947, India is trying hard to provide employment and fulfill the basic amenities to the whole country especially to the poor and the destitute. For the very purpose priority is given to agriculture sector by the government of India in second five year plan. Various policies and programs like Indira Awas Yojana, Jawahar Rojgar Yojana, SJRY, SJSY and MNREGA etc. were also started and implemented time to time by Government for the poor and the destitute in rural as well as urbane areas of the entire country.

At the time of independence India had around 30 billion people to feed and it was facing huge shortage of grains and other food items. Sensing the situation contemporary Prime Minister Late Pt. Jawahar Lal Nehru invoked people to grow and eat more vegetables in the lieu of bread. This statement signifies the importance of horticulture that could solve the malnutrition and hunger problem of the whole country. Gradually country focused on horticulture and now it has developed a lot but need many improvements to make country self-sufficient in horticulture products.

India loses a huge amount of horticulture produce every year specially fruits and vegetables. Around 25% of produce goes to natural dustbin due to lack of cold storage facilities, effective food packaging, better post-harvest technology and transportation facilities, appropriate market and communication which is world's highest spoilage rate. On agricultural research and development (R&D), India spends only 1% of agricultural GDP, thereby ranking amongst the bottom of 26 lower middle-income countries in the index.

Research and development is the backbone of horticulture as it develops high yielding varieties, better farming and post-harvest techniques necessary to increase the production. Expenditure on Research and development is very low as compare to other developed and developing countries like America, England, France, Russia and China, etc. causing backwardness in the field. One major concern is also associated with research and development that it could not able to make significant contribution to organic farming which is most essential as inorganic farming uses various kinds of fertilizers, pesticides, insecticides causing soil and environment degradation and different health issues in the human beings; it has also negative impact on every plant and creature in long run.

India is also facing inadequate and inefficient rural credit supply. India is a country which soul happens to occur in more than 6 lacks villages exerting rigorous efforts for development. Horticulture is an important field that enriches overall rural socio-economy by generating rural employment and adequate income and enhancing living standard of rural people. In rural India, two kinds of credit supply are prevalent non-institutional and institutional. Non-institutional credit supply is informal and easy in which farmers take loans from friends, relatives, land lords and usurpers, etc. Land lords and usurpers impose very high interest on their loans which increases the cost of produce and often it proves too costly to repay the loans to farmers. And institutional credit supply is formal, it is provided by government and non-government institutions

and organizations like various regional rural banks and NGOs. Interest rate is very low in institutional credits supply as compare to non-institutional credit supply but it has very much complexities, intricacies, and paper work and document verifications in the processing of loans.

The poor and the destitute have the basic problem of not having the documents necessary to take loans from institutions. Illiterate, very less literacy and awareness among the farmers tie chain in their legs to go to these institutions and they also do not able to understand the terms, conditions and paper work hence hesitate to take loans. Apart from these complexities and intricacies there is very pertinent social phenomenon in rural area especially among the poor and the destitute that transaction of lending and borrowing take place on mutual relations which these institutions do not have with them hence they avoid taking loans from these institutions. Insufficient institutional and costly non-institutional rural credit supply hinders the use of qualitative and improved inputs in horticulture resulting in low productivity.

In India, horticulture is significantly dependent on weather for which varies highly and affects badly the productivity. It is also facing the problem of inadequate irrigation facilities which again impedes production and productivity of horticulture. Low productivity causes imbalance in demand and supply mechanism in the market place and hike in the cost of horticulture cultivation. Sudden shortage in production hikes the prices of horticulture produces which do not much help farmers but intermediaries get the real benefit from the overall situation. This increment

also promotes the hike in the various inputs of horticulture demotivating the overall cultivation and decreasing the profits of farmers.

Although, with the implementation of Green Revolution in 1960 the production and productivity of agriculture started improving and India is self-sufficient for a decade in many cereal crops like rice and wheat, etc. but much improvement is to be due, especially in fruits and vegetables. Only some crops like potato, onion, and tomato, etc. in horticulture have reached to self-sufficiency. In spite of increased production and productivity of agriculture and horticulture crops and being self-sufficient India is facing the problem of malnutrition, hunger and poverty across the country. Ineffective Supply Chain Management has been one of the most pertinent reasons behind these social problems.

These phenomenon pose great challenges before the implementation of National Food Security Act - 2013, rural economy and growth and development of horticulture. This research paper is a careful study of supply chain management of potato and onion which has been political spot boiler thereby throws astonishing result that a well-knit supply chain management is the key to growth and development of horticulture.

(Rajbhar, 2014) Supply Chain Management (SCM) is the managerial and operational strategy which removes each and every hurdle at each and every link in a supply chain so that overall cost may be optimized while delivering best value to the customers and ensuring best returns,

information, competence and continuous up gradation of overall supply chain.

During barter era where a product was exchanged with another one, own agriculture was the best business and a farmer is considered to be excellent over any other professionals in the primitive society. Self-sufficient farmers had the higher rank and value in the society and they were the leader of rural economic. But with the advent of money complexion started changing and gradually money annexed almost all the purchasing power and authority which was vested in a commodity in barter system. Now everything is valuated in monetary term across the world and money can purchase all the salable things. This fundamental change shifted the economic leadership from farmers to money lenders and capitalists making farmers dependent on them for various agricultural inputs. Horticulture is one of the most important areas that includes most of the cash crops and can generate livelihood and income for the people employed in this field. Horticulture is facing the problems of ineffective Supply Chain Management across the country causing underdevelopment of the sector.

The conceptual framework of Supply Chain Management of each and every product remains more or less same but it is unique for every product depending upon its nature, value, durability and availability, etc. In this research paper we are analyzing Supply Chain Management (SCM) of two horticulture products potato and onion.

RESEARCH METHODOLOGY: Research Methodology opted in this paper is mixed of descriptive and exploratory involve qualitative analysis based on primary data collected with the help of interview of 50 farming household chiefs farming around city or Mandi and 50 stake holders of supply chain of horticulture produce of two districts of Uttar Pradesh namely Lucknow and Jaunpur. Sampling is convenient sampling and all the respondents selected were engaged in the field since more than ten years. Half of the sample of both category i.e. farming household chiefs and supply chain stake holders have been selected around big city Lucknow and another half have been selected around small city Jaunpur.

OBJECTIVE OF THE RESEARCH PAPER:

Objective of the research paper is to examine whether a well-knit agro supply chain as a precursor to growth and development of horticulture. It also analyses the impact of institutional credit supply on the development of horticulture.

ANALYSIS AND INFERENCE:

In this research paper data collected with the help of interview of different respondents of both the cities have been analyzed qualitatively following Likert Scale. A comparison has been maintained after separate analysis of the data of both the cities. The basic philosophy behind separate analysis is to know whether horticulture is developing in both the cities owing the well-knit Supply Chain Management or not as both the cities are contrary in nature, one is big city (Lucknow) and other is small city (Jaunpur). The

institutional credit supply, problem related to it and roll of Efficient Supply Chain Management of horticulture in rural economy in the area has also been examined.

In the analysis it is found that 70% respondents of Lucknow highly agree, 25% respondents agree and 5% respondents are neutral with the statement well-knit Supply Chain as a precursor to development of horticulture. Whereas in Jaunpur city 50% respondents highly agree, 45% respondents agree and 5% respondents are neutral with the above statements. In the case of institutional credit supply Lucknow 50% respondents state that credit is easily available, 46% respondents state that credit does not easily available and 4% respondents state that credit is not available. In Jaunpur city 40% respondents claim that credit is easily available, 55% respondents say credit does not easily available and 5% state that credit is not available. In Lucknow 94% and in Jaunpur 94% respondent state that presently farmer prefers cultivating horticulture crops specially vegetables in lieu cultivating any other crops. They also agree with situation that today horticulture enhanced the rural income and enforce the rural economy. Moreover 96% respondents of both the cities acclaimed that effective Supply Chain Management ensures better income sufficient to reinvest in the form of horticulture inputs and it also ensure the better livelihood for them. A comparative view also can be seen in both the cities that the intensity of development of horticulture around big city (Lucknow) is more than around small city (Jaunpur).

CONCLUSION:

A well-knit Supply Chain Management is the key to growth and development of horticulture. With the development of cities the demand for horticulture produces increase. Effective inbound and outbound agro Supply Chain Management play key role in the development of horticulture as it ensures the better credit supply for input, better market or Mandi, cold storage facility, transportation and better return in the form of income and information leading to development of rural area and rural economy of the country. National Food Security is subject to development of horticulture hence subject to a well-knit agro Supply Chain Management.

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