International Journal of Multidisciplinary Research and Modern Education (IJMRME)
ISSN (Online): 2454 - 6119
(www.rdmodernresearch.com) Volume II, Issue II, 2016

A STUDY ON ATTITUDE OF THE ORGANIC FARMERS WITH SUPPLY CHAIN MANAGEMENT ON THE MARKET FOR THEIR COMMODITIES WITH SPECIAL REFERENCE TO COIMBATORE DISTRICT

N. Chandrakala* & Dr. P. Kanchana Devi**

* Assistant Professor, PG & Research Department of Commerce (IB), Hindustan College of Arts and Science, Coimbatore, Tamilnadu

** Assistant Professor, Department of Commerce, Government Arts College, Coimbatore, Tamilnadu

Abstract:

Organic farming is a system which avoids or largely excludes the use of synthetic inputs and to the maximum extent feasible rely upon crop rotations, crop residues, animal manures, off-farm organic waste, mineral grade rock additives and biological system of nutrient mobilization and plant protection. The main objective of the study is that to study about the overall performance of the selected value added organic product based on organic farming and to trace out the problems affecting the some organic farmers in the supply chain management. For this purpose a sample of 50 was collected from the farmers from Coimbatore and the conclusion is that the transaction risk of the farmers can be overcome by using organized retail chain and by disposal of goods through commission agents based on organic farming.

Key Words: Organic Farming, Mobilization & Supply Chain Management

Introduction to the Study:

The developing countries and countries with economies in transition are many and daunting: widespread poverty, low levels of productivity, insufficient infrastructure development, poorly integrated markets, especially in rural areas. These problems are further exacerbated by underdeveloped rural industrial organization characterized by small and medium-size enterprises inadequately linked to world markets, and by a lack of employment and entrepreneurial opportunities for vulnerable segments of society such as women and youth. Value addition refers most generally to manufacturing processes that increase the value of primary agricultural commodities. Value-added agriculture may also refer to increasing the economic value of a commodity through particular production processes, e.g., organic produce, or through regionally branded products that increase consumer appeal and willingness to pay a premium over similar but undifferentiated products.

Organic Farming:

Organic farming is an alternative agricultural system which originated early in the 20th century in reaction to rapidly changing farming practices. Organic agriculture continues to be developed by various organic agriculture organizations today. It relies on fertilizers of organic origin such as compost, manure, green manure, and bone meal and places emphasis on techniques such as crop rotation and companion planting. Biological pest control, mixed cropping and the fostering of insect predators are encouraged. In general, organic standards are designed to allow the use of naturally occurring substances while prohibiting or strictly limiting synthetic substances.

Statement of the Problem:

The enormous losses of fruits and vegetables produced in the country are mainly because of the lack of proper infrastructure for storage and transportation under

controlled conditions. The main problem of the study is to know about the attitude of farmers towards selling organic products based supply chain in their industry.

Objective of the Study:

- ✓ To study about the overall performance of the selected value added organic product based on organic farming.
- ✓ To trace out the problems affecting the some organic farmers in the supply chain management
- ✓ To know about the values of managing supply chain by organic farmers.
- ✓ To provide valuable suggestions to avoid supply chain problems.

Need of the Study:

- ✓ To provide an awareness of supply chain efficiency among the selected organic farmers.
- ✓ To find out the issues that affects the supply chain management in the inbound and outbound process of the organic industry.

Limitation of the Study:

- ✓ The result may not be given generally to the organic product industry due to the study is based on the selected value added organic products produced by the respondents from Coimbatore, Salem and erode region only.
- ✓ The study depends upon primary data and the data is valuated based on the response by the respondents.
- ✓ The sample size is limited to 50 due to time constraints and busy schedule of the proprietors.

Review of Literature:

Kundan Kumar (2016) in his study measure the attitude of farmer towards Organic Farming. A total of 55statement were prepared, for which 'Likert method of summated ratings' was followed. And these statements were administered to the 30 numbers of farmer from non-sample area from two villages each covering of 15 farmers. A final list of 21Statements were selected based on the 't' values (e" 2.145) obtained from the item analysis. The conclusion is that very much necessary to know the attitude of farmers, and for the same purpose a scale has been developed comprising of 21 statements which can be used to measure the attitude of farmers towards organic farming.

M. Priyadharshini (2016) in her study designed a scale to measure the attitude of farmers towards organic farming practices in Tamil Nadu. Edward's equally appearing intervals scale was adopted to develop the scale. The final scale comprised ten statements. This scale was standardized for administration.

B. Subrahmanyeswari (2008) in her study concluded that organic farming in general and organic livestock farming in particular, is in innovative stage in India and moreover, development of organic farming depends on the proper adoption of practices which in turn depends upon the attitude of farmers and the scale developed will be of use to assess the attitude of farmers towards organic livestock farming in order to plan the organic livestock farming developmental programmes.

Research Methodology:

Area of the Study: The research study was done only in Coimbatore.

Research Design: This is descriptive in nature. The researcher here made a method to find out the strategies to be adopted to overcome the business crisis in Coimbatore.

Nature and Source of Data: The study is based on questionnaire method; primary data has been collected from various farmers in Coimbatore.

Sample Size: 50 Farmers

Statistical Tools Used For the Study:

The statistical tools have been used to analyze the primary data.

- ✓ Simple percentage analysis, Weighted average method, Ranking method, and Chi – square

Analysis and Interpretation:

	Particulars	No of Respondents	Percentage
Area of value addition of the product	Procurement of inputs	6	12
	Choice of alternative inputs	14	28
	Processing of inputs	21	42
	Alternative production process	9	18
	Total	50	100
Quality maintained for the value added product	Using authorised chemical inputs	8	16
	Prevention of raw materials from contamination	15	30
	Time and temperature control	13	26
	Highly equipped in processing and handling	11	22
	Ventilation and periodic replacement if necessary	3	6
	Total	50	100
Organised production process for international competitiveness with organic farming	Organic raw materials	9	18
	Genetically modified processing	10	20
	Technical advancement	10	20
	Safety certification	11	22
	New technology implementation	10	20
	Total	50	100
Problems faced by the organisation in the supply chain with organic farming	Procurement of inputs	6	12
	Processing	20	40
	Marketing	14	28
	Supply chain logistics	7	14
	Customer service activities	3	6
	Total	50	100
Usage of cold storage facility by the proprietors	Raw material storage	8	16
	Storage of semi-finished products	12	24
	Storage after packing	12	24
	Transportation	18	36
	Total	50	100

Interpretation:

The above table shows that 38% respondents are sole proprietors, 22% of the respondents are partnership concerns, 22% are private limited companies, and 18% are other type of organisation.12% of the respondent's product are value added in the procurement of inputs, 28% are value added in the choice of alternative inputs, 42 % are value added in processing, 18% are value added in the alternative production process. 16% by using authorised chemical inputs, 30 % by prevention of raw material from contamination, 26% by time and temperature control, 22% by highly equipped in processing and handling, 6% by ventilation and periodic replacement if necessary. 18% by organic raw material, 20% by genetically modified processing, 20% by technical advancement, 22% by safety certification, 20% by new technology implementation. 40% of the problems are faced in processing, 28% of the problems are faced in marketing, 14% of the problems faced in supply chain logistics and 6% of the problems are faced in customer service by the organisation.24% of them in storage of semi-

finished products, 24% of them in storage after packing and 36% of them in transportation of value added organic products.

Weighted Average Mean:

Table Showing the Weight age of the Problems Faced during Processing in Cold Storage of Value Added Organic Products Which Affects the Supply Chain

S.No	Particulars	5	4	3	2	1	Total	Mean Score	Rank
1	Raw material storage	8	27	9	1	5	50	3.64	**2**
		40	108	27	2	5	182		
2	Lack of technically expertised equipment	21	13	7	2	7	50	3.78	**1**
		105	52	21	4	7	189		
3	High cost for cold storage warehousing	10	15	7	12	6	50	3.22	**4**
		50	60	21	24	6	161		
4	Lack of supply of packaging materials	11	19	8	8	4	50	3.5	**3**
		55	76	24	16	4	175		
5	Practicing old method of processing methods	14	19	4	4	9	50	3.5	**3**
		70	76	12	8	9	175		

Interpretation:

The above table shows about the weightage of each problem in processing the value added organic products which affects the supply chain. From the calculated weighted average the Lack of technically expertise equipment is been weighted first by the respondents. The factor raw material storage is been weighted second by the respondents.

Table Showing the Weight age of Industrial Sickness That Affects the Supply Chain

S.No	particulars	5	4	3	2	1	Total	Mean Score	Rank
1	Shortage of organic products due to seasonal change	7	24	6	6	7	50	3.36	8
		35	96	18	12	7	168		
2	Uncertain storage facility for long time	21	21	3	3	2	50	4.12	1
		105	84	9	6	2	206		
3	Lack of power supply for refrigeration	17	9	7	14	4	50	3.48	6
		85	36	21	28	4	174		
4	Faulty choice of products and process	9	17	10	9	5	50	3.32	9
		45	68	30	18	5	166		
5	Conflicts between stakeholders	18	14	10	4	4	50	3.76	5
		90	56	30	8	4	188		
6	Non fertile organic eco system	19	17	7	6	1	50	3.94	3
		95	68	21	12	1	197		
7	Diversification of taste and preference	23	11	5	6	5	50	3.82	4
		115	44	15	12	5	191		
8	Vulnerable climate change	8	19	14	6	3	50	2.46	7
		40	76	42	12	3	173		
9	Accelerated globalisation and trade restrictions	15	25	5	3	2	50	3.96	2
		75	100	15	6	2	198		

Interpretation:

The above table enumerates the industrial sickness that affects the supply chain. From the weighted average calculated it is clear that uncertain storage facility for long time is been weighted more by the respondents. The acceleration in globalization and trade restrictions is been weighted second by the respondents.

Findings:

- ✓ In the area of production the value addition is more in processing of organic products which is calculated as 42%
- ✓ The quality of products been maintained during primary production is high as 26% in time and temperature control
- ✓ The organised production process to strengthen the international competitiveness from the observed respondents is higher in safety certification for the product
- ✓ From the area of supply chain of value added organic products it is observed that 40% of the organisation faces problems in conversion of input into finished product i.e. processing.
- ✓ The stage in which cold storage is mainly used by the respondents is 36% of transportation
- ✓ From the stage of handling of selected value added organic products 26% of the respondents are affected sorting and grading of products in supply chain.
- ✓ 64% of the respondents use imported packing material for packing their products.
- ✓ In the inbound supply chain 24% of problems are faced in tracking and tracing the products.
- ✓ In the outbound supply chain 28% of the problems are faced in vulnerable climate change.
- ✓ A smooth supply chain needs organised retail chain leads to reduce transaction risk.
- ✓ Merchandiser's involvement can result in efficient supply chain in an organisation.
- ✓ Practicing green supply chain is the strategy selected by the respondents which can be adopted to capture the global market.
- ✓ Only 46% of the organisations uses supply chain professionals to normalize their supply chain.
- ✓ Among the 46% supply chain professionals make use of the course called as ISM certification course.
- ✓ Improvement in processing and tracking or tracing of products is the main technical improvement found in the cold chain.
- ✓ Shortage of power supply is the fore most problem found in the problem of cold storage
- ✓ Technical expertisement is been ranked first in the processing problems
- ✓ High price variability in raw material is the problem in the existing supply chain structure
- ✓ Uncertain storage facility for long time is the major sickness in the organization that affects the supply chain
- ✓ Lack of information sharing in the logistical advancement needed
- ✓ The future value addition will be mainly focused due to overcome seasonability of products.

Suggestions:

- ✓ The quality of the product produced by the exporter is the main expectation of the foreign buyers. By increasing the quality and by getting HACCP certification sustainability can be improved.
- ✓ By using organically farmed raw materials and using technical advancement the international competitiveness can be strengthened easily.

- ✓ Establishing of own cold storage system by the organization, the problem of lack of cold storage facility can be avoided.
- ✓ Buying packing material from the domestic manufacturers the problem faced in the supply of imported packing materials can be avoided.
- ✓ Proper information flow from the producer and the communication between the employees from the employer the inbound side of the organizational supply chain will be efficient.

Conclusion:

Organic farming system in India is not new and is being followed from ancient time. It is a method of farming system which primarily aimed at cultivating the land and raising crops in such a way, as to keep the soil alive and in good health by use of organic wastes (crop, animal and farm wastes, aquatic wastes) and other biological materials along with beneficial microbes (biofertilizers) to release nutrients to crops for increased sustainable production in an eco friendly pollution free environment. The conclusion is that the transaction risk of the farmers can be overcome by using organized retail chain and by disposal of goods through commission agents based on organic farming.

References:

1. Kundan Kumar (2016) "A Scale to Measure Attitude of Farmers' towards Organic Farming" Indian Res. J. Ext. Edu. 16 (1).
2. M. Priyadharshini (2016) "A Scale to measure attitude of farmers towards organic farming practices in Tamil nadu" International journal of farms and science, ISSN: 2229-3744 Print; 2250-0499 Online
3. N. H. Rao Sustainable Agriculture: Critical Challenges Facing the Structure and Function of Agricultural Research and Education in India in New Delhi 2002
4. John Storey and Caroline Emberson - The Open University Business School, Milton Keynes, UK, International Journal of Operations & Production Management, Vol. 26 No. 7, 2006, pp. 754-774.
5. K. Veerakumar (2016) article titled "A Study on Impact of Customer Satisfaction on Brand Loyalty" International Journal of Scientific Research and Modern Education, Vol-I, Issue-I, June – 2016. P.No.661-663.
6. Agro-Industrial Supply Chain Management: Concepts And Applications - Jack G.A.J. Van Der Vorst - Professor In Logistics And Operations Research, Department Of Social Sciences, Wageningen University, Food And Agriculture Organization Of The United Nations, Rome 2007
7. Presidential Address of S.S. ACHARYA at the 15th Annual Conference of Agricultural Economics Research Association (India) (AERA), organized by University of Agricultural Sciences, Dharwad, October 25-26, 2007in Agricultural Economics Research Review.