

A STUDY ON SUPPLY CHAIN MANAGEMENT OF AGRICULTURAL PRODUCTS IN RURAL MARKET OF AMETHI REGION,UTTAR PRADESH,INDIA

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Abstract

Amethi is famous for political area in Uttar Pradesh. From 1980 to 2014 there was a strong hold of Indian National Congress in Amethi. Amethi is a district which is located in Faizabad division. Amethi is also famous for a historical fort which is situated in Jungle Ramnagar. Hanumangarhi is a famous temple situated in Amethi have 3,070 square kilometer area. The total population of Amethi is 2,549,935 out of which 1,291,047 are males and 1,258,888 are females. Vidhan Sabha constituencies of Amethi are Amethi, Gauriganj, Jagdishpur and Tiloi. Supply chain is the process in which the manufactured products are finally reached to the end user. In supply chain management, it includes distributor, retailer, wholesaler etc. In this Paper, there is a study about the business intermediaries i.e. distributors and retailers and their transport facilities, warehouse availability relation from big suppliers, customer satisfaction etc. are emphasised. The sample size of 100 respondents are used in this paper. The questionnaire has been filled by intermediaries among three major rural markets of Amethi i.e. Amethi, Jagdishpur, and Gauriganj. We have used the percentage calculation method to find out the actual problem and challenges to various business intermediaries which are related to the agriculture and allied agriculture businesses. The study indicates that more intermediaries are involved in agriculture business in comparison to allied agriculture business. Most of the people use private vehicles and least people use trucks for their transportation facilities. Public mode of transportation is moderate to them in these areas. There are approx. 82 percent of intermediaries who have not their own warehouse facility which somehow affects their businesses.

Keywords: Agricultural business, Supply chain management, Business intermediaries, rural market, Transportation etc.

Introduction

Right product to the right consumer at right time at right place is the success key of any business organisation. Better supply chain management strategy helps the business organisation to make satisfaction to the customer and to earn profit. Inventory, transportation, warehouse facilities to the business intermediaries etc. are come under supply chain management. Wholesaler, retailer, agent or both are considered as a business intermediaries. Product passes through various distribution channels before reaching to the customer or consumer. Transportation mode, warehouse facility, government help etc. are help to move the product to the customer or consumer.

Better availability of product enhances the supply chain management at a greater height. Supply chain management can improve by the government role, awareness of the business intermediaries with appropriate policy and strategies in the particular industry or region. The role of the government is to enhance the size of the particular industry. Big marketers attract towards the better transportation facility, warehouse availability, training and skills, involvement

of bank economic . Thus, there would be increase in domestic and international competitiveness in particular industry .

There is a large contribution of Uttar Pradesh in the area of agriculture and allied agricultural activities because of its large population depends on agriculture sectors.Uttar Pradesh have first rank in the production of wheat in India. Total population of Uttar Pradesh is 19,98,12,341 (As per 2011 census) contributes 16.51 percent of the India's population.Mainly 20 agro-climatic zones in Uttar Pradesh.8 soil groups exist in it.Total rural population in Uttar Pradesh is 15,53,17,278 contributes 77.73 percent of total India's population (As per 2011 census). Uttar Pradesh have first rank in the total rural population in India. The growth rate of rural and urban population in Uttar Pradesh contributes 17.96 and 28.82 percent during 2001-11.The total population of Amethi is 2,549,935(2011 Census). The area of Amethi is approx.3,070 square kilometer.There are mainly 04 tehsils, 13 blocks, and 15 thanas in Amethi.In Amethi, Gauriganj and Musaphirkhana 50, 58 and 56 blocks exist respectively.Thus, such large agricultural areas and huge population has attracted business intermediaries in the business of agriculture and allied agriculture commodities.

The major market in Amethi district are Amethi,Gauriganj and Jagdishpur market. In these market maximum number of wholesaler and retailer of different products like telecom products,luxury products and textile etc. are exist.The major "Mandi" is located in Amethi are Sabzi mandi Amethi and Gudh Mandi.Amethi is located in Faizabad division.Maximum number of wholesalers and local farmers traded various agriculture and allied agricultural commodities i.e.milk,Curd, vegetables and fruits,agricultural seeds etc. and retailers in these markets.

In the previous literature on supply chain management it focuses on various matrix es, functions and models of the supply chain management,logistics,transportation and inventory management. As per Literature Review , none of the studies emphasised on the business intermediaries i.e. wholesalers and retailers who are the important element in supply chain management of rural markets especially in India. In this paper,we have considered three rural markets i.e. Amethi ,Gauriganj and Jagdishpur market. In this study ,it is mainly considered as intermediaries of agriculture and allied agriculture or both . In this study it is focused on various problems and challenges faced by the wholesalers, retailers and agents of these markets.Different issues have also been discussed in this paper.

The main purpose of the study is to focus on the problems, and challenges in Amethi district of Uttar Pradesh. This research study is also an attempt to validate the results of few previous studies based on the same analysis.

Research Objectives

This objective of this research studies are as follow:

- 1-The analysis of various problems and challenges faced by different business intermediaries in rural market of Amethi.
- 2-The analysis of the availability of various facilities i.e. warehouse, transportation available to business intermediaries in rural market of Amethi .

In order to find out the answers of the following objectives, we have adopt percentage calculation methods.The organization of this research study are as follows. In this paper,Section II includes review of literature, Section III is analysis result & discussion and Section IV contains conclusion of the study.

Review of Literature

In this paper, researcher emphasised on the different problems, issues and challenges which are related to various business intermediaries i.e. wholesalers, retailers or both. Business intermediaries performed an important role in the process of Supply Chain Management (SCM) in rural market of Amethi . The literature review helps to identify the research gap. **Mentzer, et al, 2001** has focusses on the difference between the supply chains as a phenomenon used in business and their management. He highlighted on the Supply Chain Management (SCM) as a phenomena which included in business. **Heskett; et.al** focused on the concept of distribution , coordination and physical flow of materials in the whole supply chain. **Smykay et .al** highlights that inbound and outbound movements are involves in the business logistics. He has formulated the concept of integration and synchronization which are the concept of SCM.

Forrester focuses on the integrated nature of organizational relationship and given a theory of distribution management. He emphasised between the company functions and between the company and its markets, industry etc. **Mentzer et, al.** gave a model of supply chain management which shows flow from inter-functional coordination. It covers trust, commitment, dependence, behavior to Inter-corporate coordination .This model involves marketing, sales, research development, forecasting, production, purchasing, logistics etc .This flows increases the customer satisfaction and profitability of the firm.

Fox, et.al 1993 defined supply chain as a set of activities which focussed on the functions of enterprise. These functions may be integrated to each other in such a so as to operate efficiently. Lambert,et .al and **Simchi,et.al 2003** highlights on holistic view of overall optimization in a supply chain rather than functional optimization. **Flychmein and Meyr (2003)** give the matrix which emphasised on the operational, tactical and strategic analysis for decision making at short- term, mid-term and long term levels. This matrix flows from Procurement to Production, Production to Distribution and Distribution to Sales.

Data and Methodology:

This research study is based on primary source of data. Simple random sampling have been used to collect the data. The data has been collected from all three markets i.e. Amethi, Gauriganj and Jagdishpur, Uttar Pradesh on 26–29 Jan, 2020. A total of 100 respondents have been interviewed. In this paper personal interview methods are used. Sample includes different business intermediaries i.e. wholesalers, retailers and agents, based on agriculture and allied agriculture . About 22 percent of the sample respondents are distributors, 54 percent are retailers, 10 percent are agents and 14 percent are both wholesalers/retailers.

Table 1: Sampling Details

Categories		Actual Sample size	Percentage
Government Registration	Registered	97	97
	Not Registered	03	03
	Total	100	100
Business Intermediaries	Wholesalers/Distributors	22	22
	Retailers	54	54
	Agents	10	10

	Wholesalers/Retailers	14	14
	Total	100	100
Markets	Amethi	30	30
	Jagsishpur	35	35
	Gauriganj	35	35
	Total	100	100
Qualification of Owners/Entrepreneurs	Senior Secondary	53	53
	Higher Secondary	30	30
	Graduation	12	12
	Post-Graduation	05	05
	Total	100	100
GST Number	With GST Number	89	89
	No GST Number	11	11
	Total	100	100
Own Warehouse Facility	With warehouse availability	24	24
	No warehouse availability	76	76
	Total	100	100
Mode of Transportation	Private vehicle	39	39
	Buses	0	0
	Trucks	61	61
	Railways	0	0
	Airlines	0	0
	Total	100	100

Source: Primary survey conducted on 26–29 Jan, 2020 in Amethi

Results and Discussion

For the analysis of data, researcher filled the questionnaire by the 100 respondents who are the distributors or retailers of agricultural products i.e-wheat , rice , maize or allied agricultural products such as milk, curd, fruits, vegetables etc. in three markets i.e.Amethi, Gauriganj and Jagdishpur market. The analysis of data in these areas are as follows-

1-Registered Retailers or wholesalers: There is a 97% registered retailer or wholesalers are present in Amethi , Gauriganj and Jagdishpur markets.

S.No.	Number of wholesalers or retailers of rural market	Percentage of registered wholesalers or retailers
1	100	97

The retailers or wholesalers are aware about the registration. Maximum number of retailers are registered it shows that they follow the rule and regulations and business ethics. They believe in code of conduct of trading business.

2-Region where survey is done:

S.No.	Number of wholesalers or retailers of rural market	Region where survey is done
1	100	Amethi ,Jagdishpur,Gauriganj in Amethi region

The survey is done in Amethi region of Uttar Pradesh in Amethi ,Gauriganj and Jagdishpur market . In these rural areas people have limited resources to use in daily basis and maximum people have small business in these markets.They are mainly depend on agriculture or trading of allied commodities such as business of milk,Curd,fruits etc.

3-Turnover of wholesalers or retailers of agricultural products in rural market:

S.No.	Percentage of retailers or wholesalers have turnover	Percentage of retailers or wholesalers have no any turnover	Amount of turnover
1	56	44	Above 50 Lakhs/annum

About 44% of retailers has no any turnover .They are not come under the criteria of income tax.56% of retailers or wholesalers come under the criteria of income tax, their average turnover are appr. Above 50 lakhs/annum.It shows that retailers or wholesalers have limited number of turnover.44% of retailers or wholesalers have no any turnover they have limited business.

4-Business Type:

S.No.	Percentage of Distributors	Percentage of retailers	Percentage of Agent	Percentage of wholesaler/retailer both
1	22	54	10	14

Thus, retailers have maximum number of percentage.i.e 22 and agents have less percentage i.e.10 in rural market of Amethi region. Percentage of both Wholesaler as well as retailer in these markets are 14 in number.

5-Qualifications:

S.No.	% of Xth pass	% of XIIth pass	% of UG Pass	% of PG Pass
1	53	30	12	5

Thus, 53% retailers or wholesalers are Xth passed, 30% are XIIth passed and 12% are UG passed and 5% are PG passed.Thus,the maximum percentage are of Xth passed.PG passed people have least percentage.This shows that people are less interested in study at higher education and more focussed to do the trading business.

6-Dealings:

Sl. No.	Percentage of agricultural items	Percentage of Allied agricultural items	Percentage of both
1	68	13	19

Hence , the dealings of maximum items are of agricultural items such as wheat,rice,pulses etc. in rural market of Amethi region. The production of agricultural items are more in these areas.People are more comfortable in the business of agricultural items. Allied agricultural items such as milk, curd etc. have less percentage i.e 13 in these markets .

7-Getting on time material from manufacturing/supplier:

S.No.	Per. of Less time	Per. of Below Average time	Per. of Average time	Per. of Above average time	Per. of More time
1	26	23	36	12	03

About 26% retailers or wholesalers are agreeing to get on less time material from manufacturer/Supplier, 23% to get the material on below average time, 36% receive the product on average time, 12% are of above average time and 03% are of more time. It takes average time to get material on time from the manufacturer or supplier. The main reason is that the transport facility are average and good relationship of the retailers from their suppliers.

8: Product range:

S.No.	Per. of Less Product range	Per. of Below average range	Per. of Average range	Per. of Above average range	Per. of more range
1	17	29	36	09	09

Thus,36%of retailers and wholesalers of rural market have average product range.It is maximum in percentage.9% have more product range,29% have below average range,17% have less product range and 09% have above product range.It means that percentage of above average range and more range are same in numbers and are least in percentage i.e.9%.

9-Transportation facilities:

S.No.	Per. of Private vehicles used	Per. of Buses used	Per. of Trucks used	Per. of Railways used	Per. of Airways used
1	39	0	6	0	0

Maximum number of retailers or wholesalers 61% of retailers and wholesalers used trucks., 39% used private vehicles and 0% used buses, railways and airways.It shows that the maximum number of retailers or wholesalers receive the product in bulk from their suppliers .Small retailers or Wholesalers used private vehicles.

10-Own Warehouse availability:

S.No.	Percentage of retailers those have own warehouse	Percentage of retailers those have not their own warehouse
1	24	76

As own warehouse availability is concerned 24% of wholesalers or retailers have their own warehouse whereas 76% of retailers have not their own warehouse.They are the average or small retailers.

11-Government financial aid to expand the business:

S.No.	Per. of Less Gov. financial aid	Per. of below financial aid	Per. of average financial aid	Percentage of above average financial aid	Per. of more financial aid
1	35	57	05	03	0

Thus, 35% of retailers or wholesalers agreed to provide less financial aid by the government, 57% says below financial aid provide by the government, 05% says are of average financial aid and 03% are above average financial aid and 0% says to provide more financial aid by the government. Maximum retailers says that government does not provide any financial aid in these areas if they try to get financial benefit the process is so complex thus they do not apply for financial aid.

12-Government help in case of any loss:

S.No.	Per. of less govt. help	Per. of below govt help	Per. of average govt. help	Per. of above govt help	Per. of more govt. help
1	25	67	08	0	0

Hence, 67% retailers or wholesalers are supported below government help, 25% supported less government help, 08 % agreed average government help 0% says above government help and 0% supported more government help. Most of the retailers agreed that in case of any loss no help is provided by the government immediately. It takes long time for recovery of loss. Thus we are less involved to take government help in case of recovery or loss from the government.

13-Training and skills provided by the government:

S.No.	Percentage of retailers agreed that government provide no any training and dev. Skills programs in rural market
1	100

Hence, all the retailers or wholesalers of rural market of Amethi region are agreed that government does not provide any training and skill development programs to them. Maximum retailers says that training program should be provided by the government related to their business.

14-GST Number:

S.No.	Percentage of retailers or wholesalers have GST number	Percentage of retailers or wholesalers have no GST number
1	89	11

89% of retailers or wholesalers in rural market of Amethi region have GST number whereas 11% have no any GST number they are the small retailers.

15-Customer Satisfaction:

S.No.	Per. of less satisfaction	Per. of below satisfaction	Per. of average satisfaction	Per. of above average satisfaction	Per. of more satisfaction
1	02	0	54	27	17

Hence, 02% retailers says that customers are less satisfied 0% are below satisfied. 54% retailers says that customers are average satisfied, 27% retailers agreed that customers are above average satisfied and 17% retailers have more customers are satisfied. Maximum customers are average satisfied from their retailers or wholesalers. Wholesalers or retailers also emphasize to provide a better quality product from their supplier.

16-Responsiveness by big supplier/manufacturer:

S.No.	Per. of less response	Per.of below response	Per .of average response	Per. of above average response	Per. of more response
1	08	0	31	47	14

In this paper, 47% of retailers have above average response, 14% have more response, 31% have average response, 08% have less response and 0% has below response by their big supplier or manufacturer. Maximum retailers have good relationship from their manufacturer or supplier. The main reason is that Retailers are hard worker, give better business and take more and more order from their wholesalers. They are sincere to their work as a result good business is given by the retailers and gives more benefit to them.

Findings & Conclusions

The research paper shows that in Amethi, Gauriganj and Jagdishpur markets out of 100 respondents in Amethi region 97 percent of business intermediaries wholesalers and retailers are registered, 68 percent intermediaries' deals agricultural items whereas, 13 percent intermediaries deal with allied agricultural items and 19 percent deals in both. There are approx. 61 percent business intermediaries use trucks and 39 percent use private vehicles for their transportation facilities. The situation of having any type of warehouses whether own or government is also very pathetic. There are 76 percent intermediaries do not have their own warehouse facility and 24 percent of big wholesalers or retailers have their own warehouse in Amethi. There is less government support in terms of financial aid. 67% support below government help, 25% agreed less government help and 8% support average government help, 0% support above government help and more government help respectively. 100% retailers or Wholesalers agreed that no any training and skill development programs are provided by the government to the intermediaries. 89 percent intermediaries have GST number and other 11 percent do not have GST number. Maximum retailers agreed that 54% customer or consumer are average satisfied, 27% are above average satisfied, 17% are of more satisfied and 02% are of less satisfied. 47% respondents or Wholesalers says above average response from their big supplier/manufacturer, 31% of retailers wholesalers have average response, 14% have more response and only 8% retailers or Wholesalers have less response from their big suppliers or manufacturer. Hence maximum wholesalers or retailers have above average response from their big suppliers/manufacturer.

Limitations of the Study: There are following limitations of this paper :-

- 1-The above research study covers only three rural markets of Amethi region i.e. Amethi, Gauriganj and Jagdishpur market.
- 2-This research study does not focussed on other rural markets of Uttar Pradesh.
- 3-There is limitation to the markets i.e the sample size of Amethi, Gauriganj and Jagdishpur is 30,35,35 respectively.

Recommendation: The recommendations to the government are as follows-

- 1-The government should provide proper training and skill development programs to the retailers or wholesalers of rural market. As a result, wholesalers or retailers do their business in more efficient and effective way.

2-There should be flexibility to provide loans and in case of any loss or any mishappening the recovery process should not be more complex,it should be simple to the retailers or distributors.

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