

Supply Chain Management of Agricultural Products in Rural Market of Azamgadh Region, Uttar Pradesh, India

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Date of Submission: 10-11-2020

Date of Acceptance: 24-11-2020

ABSTRACT: Azamgarh is situated in Uttar Pradesh. The total population of Azamgarh is 110,983 out of which 57,878 are males and 53,105 are females as per 2011 census. The Azamgarh metropolitan Region constitutes the population 116,172 out of which 60,551 are males and 55,621 are females. 86,779 people are literates out of which 47,506 are males and 39,273 are females according to Census 2011. The population growth rate as per Census 2011 is 14.31%. As per Census of India 2011, the total population of Uttar Pradesh is 199,812,341 out of which the rural population constitutes 155,317,278 and the urban population constitutes 44,495,063. Total Cultivators in Uttar Pradesh are 19,057,888 out of which 18,500,982 constitutes rural population and 556,906 are in urban population. According to Indian Census 2011, district Azamgarh has 32nd ranking in terms of the population in Uttar Pradesh, its population density is 1,221 persons per square km, there are mainly 686 inhabited villages which is highest in number. In this paper, researcher highlights the pros and cons of distributors i.e. Wholesalers and retailers in Azamgarh region. The survey conducted among three markets i.e. in Azamgarh region. The sample sizes of 100 respondents are used in this paper. Percentage calculation methods are used and to find out the challenges, opportunities and problems related to business intermediaries of agriculture and allied agriculture items such as milk, curd, fruits etc. of Azamgarh region. This study observes that the market intermediaries of agriculture items are more in comparison to allied agricultural items. This paper highlights the government registration, business intermediaries, markets, qualification of owners/entrepreneurs, GST numbers, own warehouse facility, mode of transportation etc.

Keywords: Rural Population, Business intermediaries, Agricultural business, Supply chain management, rural market, Warehouse facilities etc.

I. INTRODUCTION

For the success of any business supply chain management must be effective and efficient. It means that products are reached to the consumers at right time and right place to the right person. Supply chain management mainly consists of inventory, transportation, warehouses facilities to the business intermediaries etc. Wholesaler, retailer, agent or both have a great role as they reached the products to the end user or consumer. Business intermediaries, transportation mode, warehouse facility, government help etc. are help to supply the product to the customer or consumer in an effective and efficient manner.

Better availability of product is an important aspect as it increases the supply chain management at a great extent. Supply chain management need to improve various factors such as government role, awareness of the business intermediaries in rural markets. The role of the government is to give make policies by the help of which the size of the particular industry increases. Thus, most of the people attracted towards the distribution business. Thus, it would increase in domestic and international competitiveness in particular industry.

Uttar Pradesh have large contribution in business in rural markets as large population of the Uttar Pradesh mainly depend on agriculture itself. Uttar Pradesh have first rank in the production of wheat in India. The total population of Uttar Pradesh is 19,98,12,341 (As per 2011 census) contributes 16.51 percent of the India's population. Uttar Pradesh consists of 20 agro-climatic zones and eight soil groups. Uttar Pradesh have 15,53,17,278 total population contributes 77.73 percent of India's total population (As per 2011 census). Uttar Pradesh has first rank in the total rural population of India. The growth rate of rural and urban population of Uttar Pradesh is 17.96 and 28.82 percent (2001-11). The total population of Azamgarh is 31,00,946 out of which 15,37,436 are males and 15,63,510 are females (2011 Census). The

population density of Azamgarh is 1,221 per square kilometer. There are mainly 16 blocks and 386 inhabited villages which are highest in number.

The research study is conducted in market of Azamgarh region. This market comprises a large number of wholesalers and retailer of agricultural products and allied agricultural product. As literature Review is concerned, it is mostly related to various functions, models and products etc. In this paper, it is mainly concerned with the distributors i.e. Wholesalers and retailers their challenges, opportunities and problems in the rural market. In this paper, the researcher interviews the market intermediaries in three rural markets of Azamgarh district. This paper highlights the advantages and disadvantages of distributors or wholesalers or both, transportation facilities, warehouse facilities and relation with their suppliers etc.

Research Objectives

The objectives regarding this research paper are as follows:

- 1- This paper focuses on the analysis of various problems, opportunities and challenges faced by business intermediaries in rural market of Azamgarh.
- 2- The analysis of various factors such as availability of various facilities i.e. warehouse, transportation etc. to business intermediaries in rural market of Azamgarh district.

II. REVIEW OF LITERATURE

In this paper, researcher highlights on the different problems, opportunities and challenges of various business intermediaries i.e. wholesalers, retailers or both are considered. Business intermediaries performed an important role in the process of Supply Chain Management (SCM) in rural market of Azamgarh. The literature review is very much useful to find out the research gap. **Mentzer, et al, 2001** gives two definitions one for supply chain and another for supply chain management. **Heskett; et.al** highlights the concept of distribution, coordination and physical flow of

materials in the whole supply chain. **Smykay et .al** emphasized that inbound and outbound movements included in the business logistics. He correlates the concept of integration and synchronization with the concept of SCM.

Forrester describes the integrated nature of organizational relationship and gives a theory of distribution management. He analyses between the company functions and between the company and its markets, industry etc. **Mentzer et, al.** gives a model of supply chain management which highlights the flow regarding inter-functional coordination. Their study covers trust, commitment, dependence, behavior to Inter-corporate coordination. This model includes marketing, sales, research development, forecasting, production, purchasing, logistics etc. which increases the customer satisfaction and profitability of the firm?

Fox, et.al 1993 describes supply chain as a set of activities which focuses on the functions of enterprise. These functions are integrated to each other in such a way so as to operate efficiently. **Lambert, et .al** and **Simchi, et.al 2003** highlights on holistic view of overall optimization in a supply chain. This matrix highlights flows from procurement to production, production to distribution and distribution to sales. **Tan, 2001** analyses that sharing technology with customers and suppliers are risky and unacceptable.

III. DATA AND METHODOLOGY:

The research study is mainly based on primary source of data. In the collection of data simple random sampling are used. The data collected from three markets of Azamgarh. Uttar Pradesh on 17-18 Oct, 2020. Views of 100 respondents are used in this survey. In this paper, it is based on personal interview. Sample involves various business intermediaries i.e. wholesalers, retailers and agents related to agriculture and allied agriculture items. About 32 percent of the sample respondents are distributors, 48 percent are retailers, 08 percent are agents and 12 percent are both wholesalers/retailers.

Table 1: Sampling Details

Categories		Actual Sample size	Percentage
Government Registration	Registered	90	90
	Not Registered	10	10
	Total	100	100
Business Intermediaries	Wholesalers/Distributors	18	18
	Retailers	47	47

	Agents	06	06
	Wholesalers/Retailers	29	29
	Total	100	100
Markets	Azamatgarh	30	30
	Ahiraula	35	35
	Atrauliya	35	35
	Total	100	100
Qualification of Owners/Entrepreneurs	Senior Secondary	49	49
	Higher Secondary	31	31
	Graduation	13	13
	Post-Graduation	07	07
	Total	100	100
GST Number	With GST Number	89	89
	No GST Number	11	11
	Total	100	100
Own Warehouse Facility	With warehouse availability	41	41
	No warehouse availability	59	59
	Total	100	100
Mode of Transportation	Private vehicle	39	39
	Buses	04	04
	Trucks	57	57
	Railways	0	0
	Airlines	0	0
	Total	100	100

Source: Primary survey conducted on 17–18Oct, 2020 in Azamgarh

IV. RESULTS AND DISCUSSION

As data analysis is concerned, researcher fills the questionnaire by 100 respondents of distributors, retailers and both of agricultural products i.e.-wheat, rice, barley, maize etc. and allied agricultural products such as curd, milk,

fruits, vegetables etc. in three markets of Azamgarh. The analysis regarding data is-

1-Registered Retailers or wholesalers: There is a 90% registered retailer or wholesalers are present in Azamatgarh, Ahirauli and Atrauli markets.

S.No.	Number of wholesalers, retailers or both of rural market	Percentage of registered wholesalers or retailers
1	100	90

The retailers or wholesalers are attentive about the registration. Huge number of retailers are registered.

2-Region where survey is done:

S.No.	Number of wholesalers or retailers of rural market	Region where survey is done
1	100	Azamatgarh, Ahirauli and Atrauli

The survey is done in Azamgarh region of Uttar Pradesh in Azamatgarh, Ahirauli and Atrauli market. In these rural areas people are mainly depend on agriculture and allied agricultural items. Agricultural items wheat, rice, vegetables etc.

and agriculture allied commodities such as of milk, Curd, fruit etc. The survey is done on 100 wholesalers or retailers or both.

3-Turnover of wholesalers, retailers or both 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	43	57	Above 50 Lakhs/annum

About 57% of retailers have no any turnover .43% of retailers or wholesalers have turnover. They are the big wholesalers or distributors, their average turnover are appr. Above

50 lakhs/annum.It shows that retailers or wholesalers have limited number of turnover.38% of retailers or wholesalers have no any turnover as they have limited business.

4-Business Type:

S.No.	Percentage of Distributors	Percentage of retailers	Percentage of Agent	Percentage of wholesaler/retailer both
1	18	47	06	29

Thus, retailers have large number of percentage i.e.47 and agents have less percentage i.e.06 in rural market of Azamgarhregion. Percentage of both Wholesalers and retailers are in second rank in number i.e. 29.

5-Qualifications:

S.No.	% of Xth pass	% of XIIth pass	% of UG Pass	% of PG Pass
1	49	31	13	07

Thus, 49% retailers or wholesalers have Xth passed, 31% have XIIth passed and 13% have UG passed and 07% have PG passed. Maximumpercentages of distributors, retailers or

both have Xth passed.PG passed people have least percentage i.e. 07%. This shows that few peoples are interested in study at higher education and more focused on trading business.

6-Dealings:

Sl. No.	Percentage of agricultural items	Percentage of Allied agricultural items	Percentage of both
1	71	19	10

Thus, the dealings of maximum items are of agricultural items such as wheat, rice, pulses etc. in rural market of Azamgarh region i.e. 71%. Hence,a production of agricultural items is

maximum in these areas. People are lessinterested in trading business of both agricultural items and allied itemsi.e. 10%.

7-Getting on time material from manufacturing/supplier:

Sr.no.	Per. of Less time	Per. of Below Average time	Per. of Average time	Per. of Above average time	Per. of More time
1	19	27	34	15	05

19% retailers or wholesalers are agreeing to get on less time material from manufacturer/Supplier, 27% to get the material on

below average time, 34% receive the product on average time, 15% are of above average time and 05% take more time to supply.

8: Product range:

Sr.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	16	29	37	08	10

Thus, 37% of retailers and wholesalers of rural market have average product range. It is more in percentage. 10% have more product range, 29% have below average range, 16% have less product

range and 08% have above product range. It means that percentage of average range is maximum i.e. 37 and percentage of above average range are least in numbers. i.e. 8%.

9-Transportation facilities:

Sr.no.	Per. of Private vehicles used	Per. of Buses used	Per. of Trucks used	Per. of Railways used	Per. of Airways used
1	39	04	57	0	0

Large number of retailers or wholesalers used trucks i.e. 57%, 39% retailers and wholesalers used private vehicles, 04% used buses, railways and airways.

10-Own Warehouse availability:

Sr.no.	Percentage of retailers those have own warehouse	Percentage of retailers those have not their own warehouse
1	33	67

As own warehouse availability is concerned 33% of wholesalers or retailers have their own warehouse whereas 67% of retailers have not their own warehouse. Thus, average or small retailers are more in numbers in this market.

11-Government financial aid to expand the business:

Sr.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	32	48	16	04	0

Thus, 32% of retailers or wholesalers agreed to provide less financial aid by the government, 48% supports below financial aid, 16% agreed average financial aid and 04% supports above average financial aid and 0% supports to

provide more financial aid by the government. Maximum retailers agreed that government does not provide any financial aid in these areas.

12-Government help in case of any loss:

Sr.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	64	09	0	02

Hence, 64% retailers or wholesalers supports below government help, 25% supported less government help, 09% agreed average government help 0% says above government help

and supported 2% have more government help. Most of the retailers say that in case of any loss no help is provided by the government immediately. It takes long time.

13-Training and skills provided by the government:

Sr.no.	Percentage of retailers supports that government provide no any training and dev. Skills programs in rural market
1	96

Thus, 96% of retailers or wholesalers of rural market of Azamgah region supports that government does not provide any training and skill

development programs to them. Only 4% retailers or distributors are agreeing to provide the help by the government.

14-GST Number:

Sr.no.	Percentage of retailers or wholesalers have GST number	Percentage of retailers or wholesalers have no GST number
1	91	09

91% of retailers or wholesalers in rural market of Azamgarh region have GST number whereas

only 09% has no any GST number as they are the small retailers.

15-Customer Satisfaction:

Sr.no.	Per. of less satisfaction	Per. of below satisfaction	Per. of average satisfaction	Per. of above average satisfaction	Per. of more satisfaction
1	17	02	38	27	16

Hence, 17% retailers supports that customers are less satisfied 02% of customers are below satisfied. 38% retailers agrees that customers are average satisfied. 27% retailers says that customers are above average satisfied and 16%

retailers supports that customers are more satisfied. Most of the customers are average satisfied i.e. 38% from their retailers or wholesalers. Wholesalers or retailers are more concerned to provide a better service to their customers.

16-Responsiveness by big supplier/manufacturer:

Sr.no.	Per. of less response	Per. of below response	Per. of average response	Per. of above average response	Per. of more response
1	06	05	29	43	17

In this paper, 43% of retailers have above average response, 17% have more response, 29% have average response, 06% have less response and 05% has below response by their big supplier or manufacturer. Most of the retailers have better relationship from their manufacturer or supplier..

both. About 57% of retailers have no any turnover. 43% of retailers or wholesalers have turnover. They are the big wholesalers or distributors, their average turnover are approx. Above 50 lakhs/annum. It shows that retailers or wholesalers have limited number of turnover. 38% of retailers or wholesalers have no any turnover as they have limited business. Thus, retailers have large number of percentage i.e. 47 and agents have less percentage i.e. 06 in rural market of Azamgarh region. Percentage of both Wholesalers and retailers are in second rank in number i.e. 29. Thus, 49% retailers or wholesalers have Xth passed, 31% have XIIth passed and 13% have UG passed and 07% have PG passed. Maximum percentages of distributors, retailers or both have Xth passed. PG passed people have least percentage i.e. 07%. This shows that few people are interested in study at higher education and more focused on trading

V. FINDINGS & CONCLUSIONS

This research paper highlights that in market out of 100 respondents in Azamgarh region. There is a 90% registered retailer or wholesalers are present in Azamgarh, Ahirauli and Atrauli markets. The survey is done in Azamgarh region of Uttar Pradesh. In these rural areas people are mainly depend on agriculture and allied agricultural items. Agricultural items wheat, rice, vegetables etc. and agriculture allied commodities such as of milk, Curd, fruits etc. The survey is done on 100 wholesalers or retailers or

business. Thus, the dealings of maximum items are of agricultural items such as wheat, rice, pulses etc. in rural market of Azamgarh region i.e. 71%. Hence, a production of agricultural items is maximum in these areas. People are less interested in trading business of both agricultural items and allied items i.e. 10%. 19% retailers or wholesalers are agreeing to get on less time material from manufacturer/Supplier, 27% to get the material on below average time, 34% receive the product on average time, 15% are of above average time and 05% take more time to supply. 37% of retailers and wholesalers of rural market have average product range. It is more in percentage. 10% have more product range, 29% have below average range, 16% have less product range and 08% have above product range. It means that percentage of average range is maximum i.e. 37 and percentage of above average range are least in numbers. i.e. 8%. Large number of retailers or wholesalers used trucks i.e. 57%, 39% retailers and wholesalers used private vehicles, 04% used buses, railways and airways. As own warehouse availability is concerned 33% of wholesalers or retailers have their own warehouse whereas 67% of retailers have not their own warehouse. Thus, average or small retailers are more in numbers in this market. 32% of retailers or wholesalers agreed to provide less financial aid by the government, 48% supports below financial aid, 16% agreed average financial aid and 04% supports above average financial aid and 0% supports to provide more financial aid by the government. Maximum retailers agreed that government does not provide any financial aid in these areas. 64% retailers or wholesalers supports below government help, 25% supported less government help, 09% agreed average government help 0% says above government help and supported 2% have more government help. Most of the retailers say that in case of any loss no help is provided by the government immediately. It takes long time. 96% of retailers or wholesalers of rural market of Azamgarh region supports that government does not provide any training and skill development programs to them. Only 4% retailers or distributors are agreeing to provide the help by the government. 91% of retailers or wholesalers in rural market of Azamgarh region have GST number whereas only 09% has no any GST number as they are the small retailers. 17% retailers supports that customers are less satisfied 02% of customers are below satisfied. 38% retailers agrees that customers are average satisfied, 27% retailers says that customers are above average satisfied and 16% retailers supports that customers are more satisfied. Most of the customers are average satisfied i.e. 38% from

their retailers or wholesalers. Wholesalers or retailers are more concerned to provide a better service to their customers. In this paper, 43% of retailers have above average response, 17% have more response, 29% have average response, 06% have less response and 05% has below response by their big supplier or manufacturer. Most of the retailers have better relationship from their manufacturer or supplier.

Limitations of the Study: Limitations regarding this research paper are as follows:-

- 1-The above research study covers only three rural markets of Azamgarh region i.e. Atrauli, Azamatgarh and Ahirauli market.
- 2-This research study does not cover other rural markets of Uttar Pradesh except Atrauli, Azamatgarh and Ahirauli market of Azamgarh region.
- 3-There is limitation to the markets i.e. the sample size of Azamatgarh, Ahirauli and Atrauli market is 30, 35, and 35 respectively.

Recommendations: The recommendations regarding government are as follows-

- 1-The government should provide proper training and skill development programs to the retailers wholesalers or both in the rural market of Azamgarh region.
- 2-The process of sanctioning a loan to the people in case of loss should not be more complex. It should be simple.

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