

Original Research Article

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## Market Integration of Vegetables Growers in Bhagalpur District of Bihar, India

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### ABSTRACT

The present study was carried out on the topic market integration of vegetable growers in Bhagalpur district of Bihar. This study has been carried out with objectives i.e. identification of marketing channels and pattern of marketing in selected markets of Bhagalpur district. The study was mainly based on collection of primary data from two villages namely Babupur and Rajandipur consisted of 30 vegetables growers from each villages of Bhagalpur districts covering two markets where farmers make their transaction i.e. sabour and Bhagalpur. 20 wholesalers 20 retailers and 20 consumers from two markets corresponding to the selected villages were selected randomly. It was observed that three main channels were used to pass the vegetables from producers to ultimate consumers. Among three, most preferred channels was direct channel i.e. producer to ultimate consumers through which 60 percent of farmers were sold their vegetables in the selected market. It was mainly due to fact that prices among different locations of related goods follow similar patterns over a long period of time.

#### Keywords

Integration, Market,  
Marketing channel,  
Pattern

#### Article Info

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### Introduction

Market integration explains the relationship between two markets that are spatially (over the space) or temporally (at two point of time) separated. It represents the management of the entire set of production, manufacturing, distribution and marketing activities. It occurs when prices among different locations or related goods follow similar patterns over a long period of time. As a process, it refers to

the expansion of firms by consolidating additional marketing functions and activities under a single management (Kohls and Uhl 2016). Basically it integrates the supply chain of commodities in the state. It is mainly because, over the years a large number of intermediaries have grown and they added little value to the produce but collectively they add significantly to the final cost. That's why integration between market is most important to eliminate the intermediaries. Everyone

knows that market matters to rural people because not only but mainly their occupation is farming in which they grow cereals, vegetables, oilseeds, fruits etc and sell it to the market. After selling of agricultural product they get money. The area that we selected is mainly known for growing of vegetables in which farmers grow vegetables and sell it to market. This study focus on the different marketing channels used by farmers for selling their vegetables in market and the trend of arrivals and prices of vegetables in study area.

For this study we have to select two villages and different markets of Bhagalpur district from which 60 vegetable growers 30 from each and 20 commission agent, 20 retailers, 20 consumers from the market. We have selected two villages name Babupur and rajandipur and two market i.e. sabour market and girdharishah market of Bhagalpur in which we found that basically there are three main channels used by farmers. In patterns of arrivals and prices of vegetables we found that in peak period prices of almost vegetables is low as compared to mid and lean period as maximum availability of vegetables in peak season.

## **Materials and Methods**

This study was conducted to know the different marketing channels used by the vegetables growers for marketing of vegetables and to know the trend and price of vegetables at different season. For this study Bhagalpur district of Bihar was selected purposely for the study, which contributes major share in the production of vegetables, and commercial crops to the district. A list of major vegetable growing blocks falls near to the market of selected districts was selected randomly. A list of major vegetable growing village having area and production falling in the hinterland of selected markets of the districts was obtained from block offices and

from these list two village namely Babupur and Rajandipur was selected randomly. The list of vegetables growers was obtained from the village records and total of 30 sample farmers from each villages of selected districts consisting of large size, medium and small size were selected randomly. The major cropping patterns of selected villages were maize, wheat, chickpea, tomato, Brinjal pointed gourd and oilseed crops etc., The major vegetables crops grown are, cucumber, okra, pointed gourd, tomato, Brinjal, Bottle gourd in the study area.

Based on the maximum arrivals and main channels of transaction of major vegetables used by the producers in the year 2017-18, two markets were selected randomly for the study i.e. Sabour, and Bhagalpur markets and prices was compared with main market i.e. Girdharishah market. The data pertaining to the arrivals and prices of selected crops viz., potato, okra, pointed gourd, tomato, brinjal, bottle gourd was collected for last period of 5 years as we know that there is no APMC regulated market in Bihar. Data were collected on the basis of reliability of private traders as well as producer involved in marketing of the produce.

## **Results and Discussion**

Marketing channel is the activity that is necessary to transfer the ownership of goods from the production to consumption, means from producer to consumers. This is actually useful tool for the management however pattern is a defined as the line connecting common price point over a period of time. To know the marketing channels and pattern of vegetables we did survey of 60 farmers at two villages and found that there are three main channels through which farmers passed the vegetables from producer to ultimate consumers. Three identified channels are as follows.

Channel I:- producer – village trader – wholesaler – retailer – consumer

Channel II:- producer – village trader– retailer – consumer

Channel III:- producer – consumer

Table 1.1 clearly shows that in 1<sup>st</sup> village i.e. village Babupur where 3.40 percent farmers were using channel I followed by channel II (40 percent farmers) and 56.66 percent farmer used channel III means they directly sell their vegetables into the market. In 2<sup>nd</sup> village i.e. village Rajandipur where same trend was observed as most of them were using channel III for marketing of vegetables. For transaction, channel I was only used by 3.40 percent, followed by channel II (36.66 percent farmer) however 60 percent farmer were mainly using channel III for marketing of produce in both of villages under study. Agricultural price movement have been a matter of concern for policy maker in our country as fluctuation of price of vegetables has been violet, affecting adversely the

economy. The trend of price level of vegetables which shows difference in price as well as arrival over period. Even the relative structure of the vegetables prices does not show a uniform pattern of behavior. The disequilibrium of demand and supply in agriculture is a universal phenomenon. The fluctuation in arrivals and prices of vegetables is no exception, the price fall in the peak period while price rise in lean period.

Seasonal variation in the arrivals and the prices of vegetables occur every year. The variation may be due to the seasonal production, nature and extent of perishability of different vegetables. The seasonal fluctuation affects the income of the growers adversely because arrivals and prices are generally inversely related.

The table that shows the trend of arrivals and prices of different vegetables in different time is given below.

**Table.1** Different identified marketing channels in selected villages in term of percentages

|                  | Babupur (%) | Rajandipur (%) |
|------------------|-------------|----------------|
| <b>Channel 1</b> | 3.40        | 3.40           |
| <b>Channel 2</b> | 40          | 36.66          |
| <b>Channel 3</b> | 56.66       | 60             |

**Table.2** Percentage arrivals and prices of cucumber in (Peak, mid and lean period) in Bhagalpur market from 2014 -2018

| Year        | Peak period  |               | Mid period | Lean period  |              |              |
|-------------|--------------|---------------|------------|--------------|--------------|--------------|
|             | Arrivals (%) | Prices (Rs/q) |            | Arrivals (%) | Prices(Rs/q) | Arrivals (%) |
| <b>2014</b> | 42.33        | 1490          | 33.89      | 1545         | 24.57        | 1585         |
| <b>2015</b> | 41.22        | 1550          | 33.88      | 1615         | 25.61        | 1675         |
| <b>2016</b> | 41.32        | 1605          | 33.58      | 1685         | 25.19        | 1735         |
| <b>2017</b> | 41.52        | 1700          | 35.05      | 1775         | 22.62        | 1845         |
| <b>2018</b> | 44.44        | 1810          | 36.66      | 1865         | 28.68        | 1905         |

**Table.3** Percentage arrivals and prices of pointed gourd in (Peak, mid and lean period) in Bhagalpur market from 2014 -2018

| Year        | Peak period  |               | Mid period   |              | Lean period  |              |
|-------------|--------------|---------------|--------------|--------------|--------------|--------------|
|             | Arrivals (%) | Prices (Rs/q) | Arrivals (%) | Prices(Rs/q) | Arrivals (%) | Prices(Rs/q) |
| <b>2014</b> | 41.52        | 1490          | 33.89        | 1545         | 24.57        | 1585         |
| <b>2015</b> | 40.98        | 1550          | 33.6         | 1615         | 25.4         | 1675         |
| <b>2016</b> | 39.84        | 1605          | 34.7         | 1685         | 25.7         | 1735         |
| <b>2017</b> | 42.02        | 1700          | 35.5         | 1775         | 22.46        | 1845         |
| <b>2018</b> | 36.55        | 1810          | 34.48        | 1865         | 28.96        | 1905         |

**Table.4** Percentage arrivals and prices of tomato in (Peak, mid and lean period) in Bhagalpur market from 2014 -2018

| Year        | Peak period  |               | Mid period   |              | Lean period  |              |
|-------------|--------------|---------------|--------------|--------------|--------------|--------------|
|             | Arrivals (%) | Prices (Rs/q) | Arrivals (%) | Prices(Rs/q) | Arrivals (%) | Prices(Rs/q) |
| <b>2014</b> | 39.09        | 1800          | 32.33        | 1855         | 28.57        | 1995         |
| <b>2015</b> | 39.43        | 1835          | 33.09        | 1865         | 27.46        | 1925         |
| <b>2016</b> | 39.07        | 1900          | 31.78        | 1955         | 29.13        | 2005         |
| <b>2017</b> | 39.1         | 1945          | 33.97        | 1990         | 26.92        | 2015         |
| <b>2018</b> | 42.43        | 2000          | 35.24        | 2065         | 26.13        | 2105         |

**Table.5** Percentage arrivals and prices of brinjal in (Peak, mid and lean period) in Bhagalpur market from 2014 -2018

| Year        | Peak period  |               | Mid period   |              | Lean period  |              |
|-------------|--------------|---------------|--------------|--------------|--------------|--------------|
|             | Arrivals (%) | Prices (Rs/q) | Arrivals (%) | Prices(Rs/q) | Arrivals (%) | Prices(Rs/q) |
| <b>2014</b> | 39.42        | 1790          | 34.13        | 1855         | 26.44        | 1995         |
| <b>2015</b> | 38.35        | 1830          | 33.78        | 1865         | 27.85        | 1925         |
| <b>2016</b> | 37.6         | 1910          | 34.61        | 1955         | 27.77        | 1995         |
| <b>2017</b> | 36.58        | 1955          | 34.14        | 1990         | 29.26        | 2020         |
| <b>2018</b> | 40.67        | 2000          | 34.18        | 2055         | 29.46        | 2105         |

**Table.6** Percentage arrivals and prices of okra in (Peak, mid and lean period) in Bhagalpur market from 2014 -2018

| Year        | Peak period  |               | Mid period   |              | Lean period  |              |
|-------------|--------------|---------------|--------------|--------------|--------------|--------------|
|             | Arrivals (%) | Prices (Rs/q) | Arrivals (%) | Prices(Rs/q) | Arrivals (%) | Prices(Rs/q) |
| <b>2014</b> | 38.25        | 1025          | 33.64        | 1195         | 27.86        | 1095         |
| <b>2015</b> | 39.36        | 1075          | 33.16        | 1155         | 28.15        | 1145         |
| <b>2016</b> | 39.1         | 1110          | 32.44        | 1105         | 27.55        | 1185         |
| <b>2017</b> | 37.85        | 1150          | 33.87        | 1065         | 28.5         | 1205         |
| <b>2018</b> | 41.31        | 1200          | 34.73        | 1045         | 29.2         | 1300         |

**Table.7** Percentage arrivals and prices of bottle gourd in (Peak, mid and lean period) in Bhagalpur market from 2014 -2018

| Year | Peak period  |               | Mid period | Prices(Rs/q) | Lean period  |              |
|------|--------------|---------------|------------|--------------|--------------|--------------|
|      | Arrivals (%) | Prices (Rs/q) |            |              | Arrivals (%) | Prices(Rs/q) |
| 2014 | 38.74        | 1455          | 34.78      | 1495         | 24.98        | 1525         |
| 2015 | 38.73        | 1495          | 34.29      | 1545         | 26.52        | 1595         |
| 2016 | 39.18        | 1500          | 33.99      | 1555         | 27.27        | 1505         |
| 2017 | 40.22        | 1575          | 34.48      | 1625         | 26.77        | 1665         |
| 2018 | 42.7         | 1600          | 35.38      | 1675         | 25.44        | 1705         |

Table 1 - 7 shows that percentage of arrivals and prices of different vegetable crops in Bhagalpur market from 2014- 2018. Data shows that in all the crops prices of vegetables in peak period is low as compared to mid and lean period because of availability of vegetable is maximum in peak period. Arrival of vegetables from 2014 to 2018 is increasing from last year means in 2014 arrival was low as compared to 2015 and so on.

### References

Acharya SS (1999) Agricultural marketing in India, oxford and IBH press, New Delhi  
Agarwal NL, Saini TC (1995) Vegetable Marketing-A Case Study of Jaipur Market (Rajasthan), Indian Journal of Agricultural Marketing, 9(1):36-43  
Aziz M, Sherzod A (2014) Supply chain management concepts: literature review; IOSR Journal of Business and

Management (IOSR-JBM); 15(6): pp 60-66  
Chauhan RN, Singh JM, Thakur DR (1999) Marketing of Vegetables in Uttar Pradesh; Indian Journal of Agricultural Marketing, 13(2): pp 56  
Devaraja, TS (2000) Channels and price spread in fruits and vegetables marketing - a study in Mysore District, Karnataka, Agricultural Marketing; 43(2): pp 23-26.  
Hwang, TC (1992) Alternative marketing channels available to wholesale suppliers of fresh fruit and vegetables in Taiwan; Journal of Agricultural Economics, (51): pp 79-101  
Mehta BM, Madhuri S (2012) Study of existing vegetable marketing channel with special emphasis on agricultural produce marketing committee (APMC), Dumbhal, Surat; Asian Journal of Horticulture, 7(1): pp 78-81

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