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Retail Price Differences of Vegetables in Rural-Urban Area of Bangladesh: An Empirical Study

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Abstract

The study was designed to assess the rural-urban price differences of vegetables. An open-ended questionnaire was developed and used to interview a total of 80 retailers (rural and urban), in 1st February 2016. Price data were collected from rural and urban retailers in selected 5 districts of Bangladesh. It was observed that the retail prices of vegetables were higher in urban markets as compared to rural markets. There is a huge difference - ranging between 14 and 650 percent in the rural and urban prices of vegetables. It was observed that price gap between rural and urban vegetables on an average stay around 125%. Factors such as political turmoil, weak marketing infrastructure, high transport costs and extortion on highways continue to remain a major problem in ensuring fair prices. The Government should take effective management and pricing mechanisms to reduce gap between rural and urban prices of vegetables.

Key Words : *Vegetables; Retail Prices; Rural-Urban.*

1. Introduction

Vegetables are very important for human diet, especially for vitamins and minerals. However, the per capita consumption of fruits and vegetables in Bangladesh is only 211 gm/day against a minimum requirement of 400gm/day (FAO/WHO 2003; BBS 2013), which manifests a poor dietary status of the people in the country. Fair price of agricultural product for farmers and consumers has been a central debate in Bangladesh for decades, but little attention has been given to market responses to ensure fair price. It was observed that the retail prices of vegetables were higher in urban markets as compared to rural markets. It was observed that price gap between rural and urban vegetables on an average stay around 125%. The country's economy is dependent on farmers, readymade garments workers and migrant laborers.

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Among them, the farmers are in the worst condition. They struggle to meet production costs despite bumper harvest. The farmers are not the only ones in danger. The economy as a whole faces long-term threat if the farmers are deprived of a fair price. According to the data of Bangladesh Bank and Bangladesh Bureau of Statistics, if a farmer is deprived of a fair price for his crops, the country's overall economy also is affected that year. On the other hand, when the growth of the agriculture is positive, the gross domestic product (GDP) also stays positive that year. A positive change comes to rural economy when the farmer gets money. If the price of vegetables in rural area is low, the food inflation remains well under control, but it also decreases growth in agricultural sector. The total GDP is also declining. The standard of living declines when the income of the farmer family decreases. Despite increased production, many of the 1.48 crore farmers in Bangladesh were deprived of fair prices of their produce such as potato, maize, vegetables and jute. Factors such as last year's political turmoil, weak marketing infrastructure, high transport costs and extortion on highways continue to remain a major problem in ensuring fair prices.

The vegetable is perishable and marketing is a big problem for the producers, because the seasonal mass production is not usually disposed within the rural and near urban markets. There was and still exists the variability in production, demand and prices of the vegetables among different regions of the country.

Efficient agriculture marketing is critically dependent on efficient transport system. Inefficient transport service coupled with poor storage, can lead to losses as certain crops (such as milk, vegetable, fish) deteriorate quickly over time. On the other hand many developing countries like Bangladesh suffer from monopolistic, low volume, and high cost transport and marketing system. Weak transport and marketing system are hindering agriculture development means country development. On the other hand vegetable are generally more costly to produce per hector than traditional crop. The value or quality of vegetable will decrease rapidly once they are harvested and will keep decaying when being delivered. The revenue of food supplier will depend on the condition of the products when they are received. Thus timely production and delivery of perishable foods significantly affect the supplier’s revenue.

2. Objectives of the Study

The general objective of the Study is to analyze the rural-urban price differences of vegetables in Bangladesh. However, the specific objectives are to :

a) Assess the rural-urban price differences of vegetables of the study area.
b) Examine the magnitude of rural-urban price difference of vegetables.
c) Find out the causes of price differences.
d) Recommend policies to reduce the price difference.

3. Research Methodology

The study is empirical in nature. Emphasize was given on collecting the primary data. But relevant secondary data were used from different sources. The primary data were collected from rural and urban retailers, in 1st February 2016. An open-ended questionnaire was developed and used to interview a total of 80 retailers (rural and urban). Price data were collected from rural and urban retailers of 5 districts of Bangladesh like Dinajpur, Bogra, Jessore, Narayangonj and Dhaka. Urban retail price data was collected from the Mugda, Jurain, Jatrabari and Bashabo of Dhaka city and 10 vegetable retailers from each area were interviewed. Rural retail prices data was taken from the surrounding villages of selected districts and total of 40 rural retailers were interviewed. To find out the actual scenario of price differences, total 29 types of popular vegetables were randomly selected as the samples.

The main thrust of the study was to calculate the price differentials that are why more emphasis was given to collect data from retailers. The study was basically an empirical study and the selected sample was sufficient to attain the desired results as it mainly used the simple arithmetic mean technique to compare the prices at different level of market operations. To analyze the statistical data in this research, tabular presentation have been used to compare the difference between the rural and urban retail prices of vegetables. The percentage difference between the rural and urban retail prices is thus calculated by using the following equation:

$$\text{Percentage Difference in Price} = \frac{RPU - RPR}{RPR} \times 100$$

Where, RPR=rural retail price, RPU=urban retail price.

4. Literature Review

Vegetables are perishable in nature and cannot be stored for longer periods, which result in very sensitive and complicated trading of these horticultural commodities and exposing big challenges to suppliers, processors and traders (Ahmad and Feher, 2009). But intermediaries are essential part of vegetables supply chain in Bangladesh. They share profit with producer. But farmer in Bangladesh cannot avoid intermediaries' for shifting their product to market (Das and Hanaoka, 2010). Intermediaries such like as faria, bepary, retailer, and arathdar. But also important function of intermediaries is transport system.

The vegetable farming in the peasant mode of production within the rice dominated crop agriculture of Bangladesh has been expanded over time for its higher profitability (Hossain and Bose, 2000). The demand for vegetables has also increased as per capita consumption has increased from 112 gram/day to 140.5 gram/day during 1995 and 2000 (BBS, 2003). The

production has increased from 8.90 to 16.04 million MT during 1983 and 2003 for an area increase of 0.12 million ha (MOA, 2004).

The situation of vegetables market in Bangladesh has containing poor marketing infrastructures and huge postharvest losses. Due to seasonal glut and absence of proper marketing system, bulk quantity of harvested produce gets wasted every year. The estimated postharvest loss of fruits and vegetables in Bangladesh ranged from 23.6 to 43.5%. Similar losses of fruits and vegetables have also been observed in other Asia-Pacific countries, for instance, 40% in India, 20-50% in Indonesia, 20-50% in Korea, 27-42% in the Philippines, 16-41% in Sri Lanka, 17-35% in Thailand, and 20- 25% in Vietnam (Rolle 2006). Vegetables are mainly produced by small and marginal holders but due to weak and fragmented supply chain, only a small percentage of the produce reaches the urban market (Mintenet al. 2010). Appropriate marketing infrastructure is crucial for efficient marketing of vegetables in Bangladesh (GoB 2008; Khandakeret al. 2009; BCIP 2010).

In agricultural marketing, there is a lack of direct linkage between the producers and the consumers. In relation to vegetables marketing, a small proportion passes through local retailers directly from growers and a considerable proportion passes from Bepari via Aratdar through Paiker to the consumers (Hassan et al 2010). Ahmed et al. (1990) reported five important marketing channels of winter vegetables, which are Growers-Consumers; Growers-Retailers-Consumers; Growers-Bepari-Aratdar-Retailers-Consumers; Growers Agent-Exporter; and Growers-Aratdar-Exporter.

Seasonality refers to the pattern of monthly or seasonal price variation of any commodity over a certain period of time. Hajong (2011) investigated the seasonal price variation of potato in Rangpur district from the year 2000-2010. Results showed that the price of potato was higher in the months of January and July-December. 19 Monalisa (2011) conducted a study on seasonal price variation of chili in Jamalpur District. Results showed that the price of chili was higher in the months of September and October.

Method of price setting is also an important aspect in marketing of vegetables. Myint (2003) reported different methods of price setting in vegetables market. Farmers generally rely on the nearest town, bus or boat drivers, extension workers, and neighboring farmers of the same village come from the nearest town market. Another information source is the agent who comes to village to buy a crop. In Bangladesh, the common sources of market information are the personal visit to market, other farmers, traders, contractors, extension workers, and market information services (Rahman 2003). In the present days, cell phone is mainly used as an important source of market information.

In terms of marketing margins in vegetables trade, Roy (1992) reported that Faria was the most beneficiary group among the traders. In contrast, Sabur (1992) reported that the profit

margin was the highest for Aratdar (93%) followed by Faria (79%), Paiker(75%), Bepari (33%) and retailers (20%). However, the marketing costs were higher for Bepari followed by retailers, Paiker, Faria, and Aratdar. This is quite common that some people look at prices paid to farmers and compare them with the prices consumers pay for the same product. They accuse traders who are exploiting the farmers because the retail price paid by consumers is higher than the price received by farmers.

Although study of vegetables price function is an area research in the field so far, even no mentionable study has been accessed of vegetable price in urban and rural to in the context of the Bangladesh. Due to lack of initiatives and availability of vegetable price in urban and rural, so Bangladesh remains absent from the literatures on vegetables price function estimation.

5. Analysis and Findings

5.1. Rural-Urban Retail Prices of Vegetables in Bangladesh

In accordance with the study of the present research substantial amounts of primary data on rural and urban prices of vegetables have been collected from Dinajpur, Bogra, Jessore, Narayangonj and Dhaka city. The collected primary data have been made structured and tabulated through the Microsoft word. Required tables have been prepared to present and discuss the results. Primary data on the selected vegetables have been collected from various market actors using structured and pre-tested questionnaire and interviews. Results obtained from analysis of primary data are presented and discussed in the following.

Vegetables grow aplenty in Bangladesh recent days not only enough to meet domestic requirements but also are exported across the world to earn handsome amount of money for the country. Almost all types of vegetables are now available round the year beating the on-season off-season barriers. Yet, vegetable growers in Bangladesh are denied fair price and so they keep struggling to meet their ends. It was observed that the retail prices of vegetables were higher in urban markets as compared to rural markets. At rural retail market, a kg of Green papaya was being sold at TK 14.50. But the urban retailers were selling the same Green papaya at TK 31 per kg. Similarly, price of a kg of brinjalat rural retail market is TK 12 while it is being sold at TK 30 at urban retail market. This reality comes starkly to the open when someone takes a stroll across the vegetable growing areas, near or far from the capital Dhaka. Eyes get aptly appeased by seeing huge loads of vegetables heading into the capital from outside every morning, prices go up and down, sometimes abnormally, in the retail markets but the lot of the growers remain unchanged. "We are facing a hard time now as the prices in local (village) market have slumped sharply," said a tomato grower in Brahmanbaria district, east of Dhaka. He said tomato was a high-demand summer vegetable that usually sells at 'good' price. "But the price of tomato has now dropped at TK 10 per kg from 18 a few days

ago," he said, adding that prices of many other seasonal vegetables have also dropped. Hafizur Rahman, a farmer of in Dinajpur district said the middlemen purchase the produces directly from the farmers at a low price - sometimes at a throwaway price -- and supply those to the city markets where they are sold at much higher prices. So, the real beneficiaries are the middlemen whereas the growers are deprived of profit. Potato sold at TK 15 to TK 18 per kg at most of the capital's kitchen markets, but the price was TK 3 to TK 5 a kg at growers' level. Many consumers alleged some traders are manipulating potato prices taking the advantages of a hike in the pay of public servants. (The Daily Observer, 25 March, 2016). The retailers blamed a nexus between the cold storage owners and hoarders for a huge difference between the retail prices and the price at growers' level.

5.2. Assess Rural Retail Prices of Vegetables

Table 1: District wise Rural Retail Prices of Vegetables

Vegetables	**Dinajpur**	**Bogra**	**Jessore**	**N. Gonj**	**Average Price**
Cabbage (Bandakopi)	TK 8/**pc**	TK 10/pc	TK 10/pc	TK 15/pc	TK **11**/pc
Cauliflower (Phulkopi)	TK 7/pc	TK 10/pc	TK 15/pc	TK 12/pc	TK 11/pc
Sweet gourd (Mistikumra)	TK 17/pc	TK 25/pc	TK 30/pc	TK 35/pc	TK 29/pc
Bottle gourd (Lau)	TK 12/pc	TK 7/pc	TK 15/pc	TK 25/pc	TK 15/pc
Wax gourd (Chalkumra)	TK 12/pc	TK 20/pc	TK 20/pc	TK 30/pc	TK 20/pc
Red amaranth (Lalshak)	TK 3 /bndl	TK 3 /bndl	TK 3 /bndl	TK 5 /bndl	TK 3.5 /bndl
Spinach (Palonggshak)	TK 4 /bndl	TK 3 /bndl	TK 5 /bndl	TK 4 /bndl	TK 4 /bndl
Water Spinach (Kolmi)	TK 3 /bndl	TK 3 /bndl	TK 3 /bndl	TK 5 /bndl	TK 3.5 /bndl
Lemon (Lebu)	TK 24 /dzn	TK 15 /dzn	TK 24 /dzn	TK 24 /dzn	TK 22/dzn
Plantain (Kanchkala)	TK 24 /dzn	TK 15 /dzn	TK 30 /dzn	TK 36 /dzn	TK 26 /dzn
Petsai (Natishak)	TK 9 per kg	TK 8 /Kg	TK 9 /Kg	TK 14 /Kg	TK 10 /Kg
Turnip (Shalgom)	TK 10 /Kg	TK 20 /Kg	TK 15 /Kg	TK 18 /Kg	TK 16 /Kg
Radish (Mula)	TK 5 /Kg	TK 10 /Kg	TK 10 /Kg	TK 15 /Kg	TK 10 /Kg
Pea (Motor)	TK 25 /Kg	TK 50 /Kg	TK 40 /Kg	TK 50 /Kg	TK 41 /Kg
Hyacinth bean (Sheem)	TK 9 /Kg	TK 7 /Kg	TK 20 /Kg	TK 15 /Kg	TK 13 /Kg
String bean (Barbati)	TK 15 /Kg	TK 40 /Kg	TK 30 /Kg	TK 35 /Kg	TK 30 /Kg
Cucumber (Shasa)	TK 15 /Kg	TK 25 /Kg	TK 40 /Kg	TK 40 /Kg	TK 30 /Kg
Cucumber short (Khira)	TK 12 /Kg	TK 20 /Kg	TK 35 /Kg	TK 30 /Kg	TK 24 /Kg

Vegetables	Dinajpur	Bogra	Jessore	N. Gonj	Average Price
Bitter gourd (Ucche/karala)	TK 30 /Kg	TK 60 /Kg	TK 30 /Kg	TK 55 /Kg	TK 44 /Kg
Teasle gourd (Kakrol)	TK 30 /Kg	TK 30 /Kg	TK 35 /Kg	TK 60 /Kg	TK 39 /Kg
Palwal (Patal)	TK 28 /Kg	TK 30 /Kg	TK 30 /Kg	TK 45 /Kg	TK 33 /Kg
Potato (Alu)	TK 8 /Kg	TK 15 /Kg	TK 18 /Kg	TK 18 /Kg	TK 15 /Kg
Brinjal (Begoon)	TK 15 /Kg	TK 25 /Kg	TK 20 /Kg	TK 15 /Kg	TK 19 /Kg
Tomato (Tomato)	TK 8 /Kg	TK 12 /Kg	TK 12 /Kg	TK 15 /Kg	TK 12 /Kg
Chilli (Jhalmarich)	TK 20 /Kg	TK 30 /Kg	TK 40 /Kg	TK 50 /Kg	TK 35 /Kg
Indian spinach (Puishak)	TK 10 /Kg	TK 12 /Kg	TK 25 /Kg	TK 10 /Kg	TK 14 /Kg
Carrot (Gajor)	TK 10 /Kg	TK 12 /Kg	TK 8 /Kg	TK 20 /Kg	TK 12.5 /Kg
Green papaya (Papay)	TK 8 /Kg	TK 20 /Kg	TK 10 /Kg	TK 20 /Kg	TK 14.5 /Kg
Mint (Pudinapata)	TK 20 /Kg	TK 40 /Kg	TK 40 /Kg	TK 60 /Kg	TK 40 /Kg
Total	**TK 400**	**TK 577**	**TK 622**	**TK 776**	**TK 597**

**/pc=per Piece; /bndl=/pc; /dzn = per dozen*
Source: Survey data

Rural retail prices data was taken from the surrounding villages of Dinajpur; Notun Bazar, Shajahanpur, Bogra; villages of Jessore; Gawsia, Rupgonj, Narayangonj and total of 40 rural retailers were interviewed, in 1st February 2016. The total price of a certain amount of 29 vegetables item in Dinajpur, Bogra, Jessore and Narayangonj was accounted at TK 400, TK 577, TK 622 and TK 776, respectively. It has been observed in the above analysis that the vegetable price in Narayangonj was higher than Dinajpur, Bogra and Jessore (Table 1).

5.3. AssessUrban Retail Prices of Vegetables

Table 2: Urban Retail Prices of Vegetables

Vegetables	Mugda	Jurain	Jatrabari	Bashabo	Average Price
Cabbage (Bandakopi)	TK 30/**pc**	TK 25/pc	TK 25/pc	TK 30/pc	TK 27.5/pc
Cauliflower (Phulkopi)	TK 25/pc	TK 25/pc	TK 25/pc	TK 30/pc	TK 26/pc
Sweet gourd (Mistikumra)	TK 60/pc	TK 50/pc	TK 80/pc	TK 65/pc	TK 64/pc
Bottle gourd (Lau)	TK 50/pc	TK 60/pc	TK 40/pc	TK 50/pc	TK 50/pc
Wax gourd (Chalkumra)	TK 35/pc	TK 50/pc	TK 40/pc	TK 40/pc	TK 41/pc

Vegetables	**Dinajpur**	**Bogra**	**Jessore**	**N. Gonj**	**Average Price**
Red amaranth (Lalshak)	TK10 /bndl	TK 15/bndl	TK 10/bndl	TK 10/bndl	TK 11 /bndl
Spinach (Palonggshak)	TK 10/bndl	TK 15 /bndl	TK 10/bndl	TK 10/bndl	TK 11 /bndl
Water Spinach (Kolmi)	TK 5 /bndl	TK 10 /bndl	TK 10/bndl	TK 8/bndl	TK 8 /bndl
Lemon (Lebu)	TK 60 /dzn	TK 90/dzn	TK 90 /dzn	TK 60 /dzn	TK 75 /dzn
Plantain (Kanchkala)	TK 45 /dzn	TK 75 /dzn	TK 60 /dzn	TK 60 /dzn	TK 60 /dzn
Petsai (Natishak)	TK 40 /Kg	TK 45 /Kg	TK 40 /Kg	TK 40 /Kg	TK 41 /Kg
Turnip (Shalgom)	TK 25 /Kg	TK 20 /Kg	TK 30 /Kg	TK 20 /Kg	TK 24 /Kg
Radish (Mula)	TK 20 /Kg	TK 20 /Kg	TK 30 /Kg	TK 15 /Kg	TK 21 /Kg
Pea (Motor)	TK 50 /Kg	TK 55 /Kg	TK 50 /Kg	TK 60 /Kg	TK 54 /Kg
Hyacinth bean (Sheem)	TK 30 /Kg	TK 35 /Kg	TK 30 /Kg	TK 40 /Kg	TK 34 /Kg
String bean (Barbati)	TK 60 /Kg	TK 80 /Kg	TK 80 /Kg	TK 60 /Kg	TK 70 /Kg
Cucumber (Shasa)	TK 45 /Kg	TK 40 /Kg	TK 50 /Kg	TK 40 /Kg	TK 44 /Kg
Cucumber short (Khira)	TK 30 /Kg	TK 25 /Kg	TK 20 /Kg	TK 40 /Kg	TK 29 /Kg
Bitter gourd (Ucche/karala)	TK 50 /Kg	TK 60 /Kg	TK 50 /Kg	TK 40 /Kg	TK 50 /Kg
Teasle gourd (Kakrol)	TK 50 /Kg	TK 55 /Kg	TK 60 /Kg	TK 40 /Kg	TK 51 /Kg
Palwal (Patal)	TK 70 /Kg	TK 65 /Kg	TK 70 /Kg	TK 60 /Kg	TK 66 /Kg
Potato (Alu)	TK 20 /Kg	TK 18 /Kg	TK 20 /Kg	TK 20 /Kg	TK 19.5 /Kg
Brinjal (Begoon)	TK 20 /Kg	TK 30 /Kg	TK 30 /Kg	TK 40 /Kg	TK 30 /Kg
Tomato (Tomato)	TK 20 /Kg	TK 20 /Kg	TK 20 /Kg	TK 30 /Kg	TK 22.5 /Kg
Chilli (Jhalmarich)	TK 40 /Kg	TK 40 /Kg	TK 40 /Kg	TK 50 /Kg	TK 42.5 /Kg
Indian spinach (Puishak)	TK 20 /Kg	TK 20 /Kg	TK 30 /Kg	TK 20 /Kg	TK 22.5 /Kg
Carrot (Gajor)	TK 20 /Kg	TK 20 /Kg	TK 20 /Kg	TK 20 /Kg	TK 20 /Kg
Green papaya (Papay)	TK 25 /Kg	TK 30 /Kg	TK 30 /Kg	TK 40 /Kg	TK 31 /Kg
Mint (Pudinapata)	TK 300 /Kg	TK 300 /Kg	TK 280 /Kg	TK 320 /Kg	TK 300 /Kg
Total	**TK 1265**	**TK 1393**	**TK 1370**	**TK 1358**	Tk 1345.5

Source: Survey data

Urban retail price data was collected from the Mugda, Jurain, Jatrabari and Bashabo and 10 vegetable retailers from each area were interviewed, in 1st February 2016. The total price of a certain amount of 29 vegetables item in Mugda, Jurain, Jatrabari and Bashabo was accounted

at TK 1265, TK 1393, TK 1370 and TK 1358, respectively. It has been observed in the above analysis that the vegetable price in Jurain was slightly higher than Mugda, Jatrabari and Bashabo (Table 2).

5.4. Examine and Compare Rural-Urban Retail Prices of Vegetables

Table 3: Compare Mean Differences of Rural-Urban Retail Prices of Vegetables

Vegetables	**City**	**Village**	**Difference inAmountTK**	**Mean Differences in percentage**
Cabbage (Bandakopi)	TK 27.5/pc	TK **11**/pc	TK 16.5/pc	150%
Cauliflower (Phulkopi)	TK 26/pc	TK 11/pc	TK 15/pc	136%
Sweet gourd (Mistikumra)	TK 64/pc	TK 29/pc	TK 35/pc	121%
Bottle gourd (Lau)	TK 50/pc	TK 15/pc	TK 35/pc	233%
Wax gourd (Chalkumra)	TK 41/pc	TK 20/pc	TK 21/pc	105%
Red amaranth (Lalshak)	TK 11 /bndl	TK 3.5 /bndl	TK 7.5 /bndl	214%
Spinach (Palonggshak)	TK 11 /bndl	TK 4 /bndl	TK 7 /bndl	175%
Water Spinach (Kolmi)	TK 8 /bndl	TK 3.5 /bndl	TK 4.5 /bndl	129%
Lemon (Lebu)	TK 75 /dzn	TK 22/dzn	TK 53 /dzn	241%
Plantain (Kanchkala)	TK 60 /dzn	TK 26 /dzn	TK 34 /dzn	131%
Petsai (Natishak)	TK 41 /Kg	TK 10 /Kg	TK 31 /Kg	310%
Turnip (Shalgom)	TK 24 /Kg	TK 16 /Kg	TK 8 /Kg	50%
Radish (Mula)	TK 21 /Kg	TK 10 /Kg	TK 11 /Kg	110%
Pea (Motor)	TK 54 /Kg	TK 41 /Kg	TK 13 /Kg	32%
Hyacinth bean (Sheem)	TK 34 /Kg	TK 13 /Kg	TK 21 /Kg	162%
String bean (Barbati)	TK 70 /Kg	TK 30 /Kg	TK 40 /Kg	133%
Cucumber (Shasa)	TK 44 /Kg	TK 30 /Kg	TK 14 /Kg	47%
Cucumber short (Khira)	TK 29 /Kg	TK 24 /Kg	TK 5 /Kg	21%
Bitter gourd (Ucche/karala)	TK 50 /Kg	TK 44 /Kg	TK 6 /Kg	14%
Teasle gourd (Kakrol)	TK 51 /Kg	TK 39 /Kg	TK 12 /Kg	31%
Palwal (Patal)	TK 66 /Kg	TK 33 /Kg	TK 33 /Kg	100%
Potato (Alu)	TK 19.5 /Kg	TK 15 /Kg	TK 4.5 /Kg	30%

Vegetables	City	Village	Difference inAmountTK	Mean Differences in percentage
Brinjal (Begoon)	TK 30 /Kg	TK 19 /Kg	TK 11 /Kg	58%
Tomato (Tomato)	TK 22.5 /Kg	TK 12 /Kg	TK 10.5 /Kg	88%
Chilli (Jhalmarich)	TK 42.5 /Kg	TK 35 /Kg	TK 7.5 /Kg	21%
Indian spinach (Puishak)	TK 22.5 /Kg	TK 14 /Kg	TK 8.5 /Kg	62%
Carrot (Gajor)	TK 20 /Kg	TK 12.5 /Kg	TK 7.5 /Kg	88%
Green papaya (Papay)	TK 31 /Kg	TK 14.5 /Kg	TK 16.5 /Kg	114%
Mint (Pudinapata)	TK 300 /Kg	TK 40 /Kg	TK 260 /Kg	650%
Total	Tk 1345.5	TK 597	TK 748.5	125%

Source: Survey data

It was observed that the retail prices of vegetables were higher in urban markets as compared to rural markets. The total average price of a certain amount of 29 vegetables item in Rural and Urban was accounted at TK 597, and TK 1346, respectively. There is a huge difference ranging between 14 and 650 percent in the rural and urban prices of vegetables. It was observed that price gap between rural and urban vegetables on an average stay around 125%.

Disparity between rural and urban Retail prices for essential vegetables like brinjal, cabbage, cauliflower went up beyond 125% during February 2016. All urban retailers are selling vegetables at prices which are significantly higher than the rural price. The difference between rural and urban retail prices on an average stays around 125% as seen in the survey.

The study has considered 10 vegetable retailers from each area including Dinajpur; Notun Bazar, Shajahanpur, Bogra; villages of Jessore; Gawsia, Rupgonj, Narayangonj; Mugda, Jurain, Jatrabari and Bashabo, Dhaka in Bangladesh. The study reveals that all of the centers that have recorded huge discrimination between the rural and urban retail prices.

5.5. Rural-Urban Retail Price Differentials

On the basis of data collected, the differences in retail prices of vegetables between rural and urban market was estimated. The vegetable prices in urban were higher than rural markets (Table 3). The prices of Cabbage (Bandakopi), Cauliflower (Phulkopi), Sweet gourd (Mistikumra), Bottle gourd (Lau), Wax gourd (Chalkumra), Red amaranth (Lalshak), Spinach (Palonggshak), Water Spinach (Kolmi), Lemon (Lebu), Plantain (Kanchkala), Petsai (Natishak), Turnip (Shalgom), Radish (Mula), Pea (Motor), Hyacinth bean (Sheem), String bean (Barbati), Cucumber (Shasa), Cucumber short (Khira), Bitter gourd (Ucche/karala), Teasle gourd (Kakrol), Palwal (Patal), Potato (Alu), Brinjal (Begoon), Tomato (Tomato),

Chilli (Jhalmarich), Indian spinach (Puishak), Carrot (Gajor), Green papaya (Papay) and Mint (Pudinapata) are higher in urban market as compared to rural retail prices and difference ranges 14-650% for different Vegetables (Table 3).

There is a clear variation between the prices producers receive and the prices that consumers pay. It has been observed in the above analysis that all of the vegetable prices in urban were higher than vegetables in all the four location (Table 3).

6. Causes of Retail Price Differences of Vegetables in Rural-Urban Area

Fair price of agricultural product for farmers and consumers has been a central debate in Bangladesh for decades, but little attention has been given to market responses to ensure fair price. It was observed that the retail prices of vegetables were higher in urban markets as compared to rural markets. Factors such as political turmoil, weak marketing infrastructure, high transport costs and extortion on highways continue to remain a major problem in ensuring fair prices. The some other causes of retail price differences of vegetables in rural-urban area are to:

a) Poor transportation system between urban and rural area has an impact on the price and supply circumstances.

b) Lack of strong marketing policy, the middlemen or wholesalers can easily deprive farmers.

c) Every year, at the time of harvest, growers have to sell vegetables at throwaway prices in absence of specialized cold storages and proper transport facilities.

d) Absence of competitive market for direct transaction between growers and consumers.

e) Absence of proper management and monitor the market very closely.

f) Lack of perfect information of market to the farmers and consumers.

g) The vegetable is perishable and marketing is a big problem for the producers, because the seasonal mass production is not usually disposed within the rural and near urban markets.

h) Weak distribution infrastructure.

i) Intension to earn more profit.

j) Corruption.

k) Political turmoil and unrest.

7. Recommendations

To ensure fair and equitable price of vegetables in rural and urban area for the farmers and consumers the following steps should be taken –

a) All the stakeholders have to join hands to improve the system which should be started from farmers to consumers.

b) The Government should take effective management and pricing mechanisms to reduce gap between rural and urban prices of vegetables.

c) The Government should improve transportation and information system.

d) Ensuring of fair prices of all agricultural products including vegetables, should be a strong marketing policy so that middlemen or wholesalers cannot deprive the farmers.

e) The government and private entrepreneurs should set up cold storages so that farmers can preserve their produces and trade successfully.

f) Efficient agriculture marketing is critically dependent on efficient transport system. Inefficient transport service coupled with poor storage, can lead to losses as certain crops (such as milk, vegetable, fish) deteriorate quickly over time.

8. Conclusion

In a country like Bangladesh, where majority of population lives in rural areas, the benefits of improved pricing system of vegetables would have implications on a good number of people. Government has to join hands with private players in building infrastructure which require huge investments and long term and multiple uses like roads, storage system and communication technologies. Bangladesh has the potential not only to cater the domestic demand but also to the major global requirement. The existing pricing situation in rural and urban retail prices of vegetables is not quite equitable in Bangladesh. This would not only improve the economic and social status of consumers but also facilitates the consumers to get quality product at economical rates. The intermediaries and all the stakeholders in the supply chain benefit from the improved fair price infrastructure. The government has a responsibility to ensure fair price, competition and transparency in retail prices of vegetables between rural and urban market. It was concluded from this study that there is a huge difference ranging between 14 and 650 percent in the rural and urban prices of vegetables. It was observed that price gap between rural and urban vegetables on an average stay around 125%. Therefore, in order to ensure fair prices of all agricultural products including vegetables, there should be a strong marketing policy so that middlemen or wholesalers cannot deprive farmers. At the domestic level, bringing new and effective agricultural technologies, and above all, ensuring fair prices and giving incentives to growers will be the key to maintaining the buoyancy in

farm production. The government should immediately pay attention to improving the marketing system. Otherwise, growth of vegetables will be uncertain.

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