# A Study on Rural-urban Linkage Created by Growth Centre: A Case Study of Balibhadra Bazar

### Md. Musfiqur Rahman Bhuiya

Assistant GIS Specialist, Capital Development Authority (RAJUK), Bangladesh

Email: musfiq.sifat@yahoo.com

### Md. Soriful Islam

Graduate Assistant, Savannah State University, USA

Email: sorifulislamsojol@yahoo.com

### **Ahmad Jami Safayet**

Graduate Assistant, Georgia Southern University, USA

Email: safayetjami08@gmail.com

### Anika Tasneem

Post-graduate Student, University of Dhaka, Bangladesh

Email: anika0815002@gmail.com

### **Abstract**

Rural-urban linkage is created through commodity, monetary and information flow which reflects the interdependence between rural and urban areas. In an agro-based country like Bangladesh, growth centres contribute to rural-urban linkage by giving it a spatial dimension where interchange between agricultural crops and revenue occurs.Rural-urban linkage is of paramount importance as this ensures supply of agricultural products to urban areas and monetary flow to rural areas to keep rural economy sustaining. This study aims to analyze the characteristics of rural-urban linkage generated by growth centre Balibhadra Bazar. Information related to monetary and commodity flow has been collected through questionnaire survey of grower sellers and wholesalers coming to Balibhadra Bazar. The study has explored rural-urban linkage based on variables including land area cultivated, amount of crop produced, profit earned, tenures, farm type, communication of mode of dealers etc. The study explored impact of rural-urban linkage on local agriculture and interaction between commodity and monetary flow. The study has also suggested possible policy measures that can be taken to strengthen the rural-urban linkage created by Balibhadra Bazar.

### Introduction

The base of rural economy is agricultural production. These agro-based products are supplied to urban areas to meet the demand of people living urban areas. In return, money flow occurs to rural area from urban area. This money flow plays a vital role in boosting rural economy. Information flow works as a supporting process to ensure exchange between commodity and money. Thus, rural-urban linkage emerges which symbolizes symbiotic relation between these two areas (Tacocli,1998). In order to

establish rural-urban linkage, dealers from both urban and rural area are required to meeting in a place to accomplish the exchange between commodity and revenue. Growth centre adds the spatial dimension of rural-urban linkage by creating the opportunity for dealers to bring products to a designated place to supply them in urban areas (Hasan, 2005). Rural economy greatly depends on money flow from urban area and hence, on rural-urban linkage. Strengthening rural-urban linkage is necessary to boost up rural economy. Rural-urban linkage is also important for urban areas as it plays a vital role to food security for people living in urban areas (FAO,2009).

The purpose of this study to the explore characteristics of rural-urban linkage generated in a growth centre. Analyzing characteristics of commodity flow, information and monetary flow associated with rural-urban linkage will be helpful to take policy measures to make this process stronger for the betterment of both urban and rural areas. The study will analyze different aspects of rural-urban created by Balibhadra Bazar growth centre and suggest possible policy measures that can be taken to improve existing rural-urban linkage associated with it.

# **Data Collection Procedure and Study Area Profile**

In order to carry out the study, 200 questionnaire surveys have been conducted in the selected growth centre. Two important stakeholders of rural-urban linkage process: grower sellers and wholesalers have been surveyed for data collection (Hasan, 2005). For the purpose of the study, capital city Dhaka has been selected as urban counterpart and Balibhadra Bazar has been selected as rural counterpart of the rural-urban linkage. It is located in Balibhadra Bazar of Savar. It is an assembly market and type-B growth center as it is located outside the Savar headquarter (LGED 1995, LGED,n.d.).

# **Commodity flow**

It has been found that grower sellers are producing both cereal and non-cereal products in order to sell in the growth centre. Among the cereals crops, grower sellers coming to Balibhadra Bazar, grower sellers have been producing paddy, wheat, maize, mustard to sell in the market. Although surveyed grower sellers sold only 49.42% of produced paddy, proportion of sold cereal crops have been found higher for wheat, maize, and mustard. Surveyed Data reveals that grower sellers sold 85%, 90.24% and 90% of the total production of fruit, vegetable and spices. It is noticeable from Table 1 that vegetables have very high production rate and it can be attributed as a reason behind higher propensity of grower sellers coming to Balibhadra Bazar to cultivate vegetables on highest percentage of land.

Table 1: Production, sell, land area share and production rate of crops by grower-seller

Product	Product		<b>Grower Sellers</b>	
		Percentage of	Percentage of land	Production(mound/
Type	Name	total production		bigha)
		sold	area for cultivation	
	Paddy	49.42%	25.22%	14.34
Cereal	Wheat	64.00%	5.47%	12.36
	Maize	75.00%	9.02%	7.25
	Mustard	70.00%	8.76%	6.95
	Fruits	85.00%	12.48%	35.46
Non-Cereal	Vegetable	90.24%	26.03%	63.28
	Spices	90.00%	7.85%	45.16

Source: Field Survey, 2012

Commercialization and Commodity Flow: Table 2 shows that, among large, medium and small size farm 100%, 47.22% and 30.77% are commercial. So, as the farm size increases, the farm have more possibility of becoming commercial because relatively larger farm can produce more surplus crops to sell commercially in the growth center and contribute more in commodity flow. In order to enhance land area and producing more crops, the farmers are cultivating their land by share cropping. For this, the share cropper and both share and owner cropper has greater tendency to become commercial (Table 3).

Table 2: Distribution of commercial and subsistence farms according to farm size and tenure

Type of farm	Subsistence	Commercial
Large	0.00%	100.00%
Medium	52.78%	47.22%
Small	69.23%	30.77%

Source: Field Survey,2012

Table 3: Distribution of commercial and subsistence farms according to farm size and ownership

Type of farm	Subsistence	Commercial
Owner	86.96%	13.04%
Share	48.72%	43.59%
Both owner and share	0.00%	100.00%

Source: Field Survey, 2012

**Backward and Forward Linkage:** Backward and forward linkages are indispensable part of rural-urban linkage. Backward linkage emerges as grower sellers depend on urban areas for agricultural production. On the contrary, grower sellers and wholesalers sell their agricultural products to urban areas which creates a forward linkage (Gewdy and Malek,2010). 75% of grower sellers said that the inputs they are buying from growth center come from urban areas; among the farms 18% and 57% are getting input from Dhaka and other urban area respectively and only 25% from local areas(Figure 1). From Figure 2, 31%,35% and 34% of grower sellers are selling their products in Dhaka, other urban areas and locally rural areas respectively.

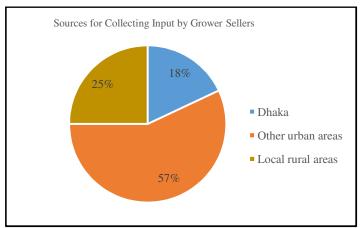


Figure 1: Sources for Collecting Input of Grower Sellers coming to Balibhadra Bazar(Field survey,2012)

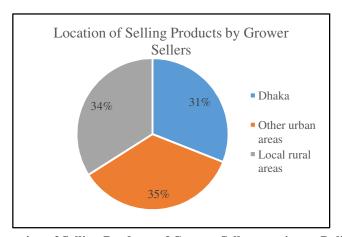


Figure 2: Location of Selling Products of Grower Sellers coming to Balibhadra Bazar(Field survey,2012)

Among wholesalers of Balibhadra Bazar, 35% sells product in urban retail market and 29% in the urban wholesale market. On the contrary, 36% of wholesalers coming

to Balibhadra Bazar sells product in the local retail market. 65% wholesalers are selling their products in urban markets (Figure 3) .This indicates that Balibhadra Bazar maintains strong forward linkages by supplying products to urban markets.



Figure 3: Location of Selling Products of Wholesalers coming to Balibhadra Bazar (Field survey,2012)

# Monetary flow

Contribution of different agricultural products has been shown in Figure 4. It has been found that, non-cereal products vegetable, fruits etc are contributing more in comparison to cereal products like paddy, wheat, maize, mustard in earning revenue for grower sellers and creating money flow from urban area to rural areas. Vegetable has the highest contribution of 54% in monetary flow. Grower sellers are earning 24% of their total revenue from fruits. Wholesalers are earning 40% and 25% of their revenue by selling vegetables and fruits. Grower sellers and whole sellers are earning 78% and 65% of revenue from vegetable and fruit products combined. Products like paddy, wheat, maize has a lower share in monetary flow.

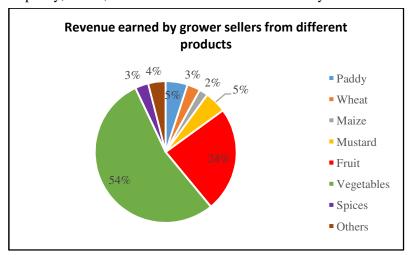


Figure 4: Revenue earned by grower sellers by selling different products in Balibhadra Bazar(Field survey,2012)



Figure 5: Revenue earned by wholesalers by selling different products in Balibhadra Bazar(Field survey,2012)

**Profit of Grower Sellers and Wholesalers:** Most of the grower sellers and wholesalers have monthly profit and net income within the range of 8000-12000 Tk. and 8000-16000 Tk respectively (Figure 6 and 7) . 51% of wholesalers' earn within the range of 8000-16000 Tk and 47% of grower sellers' income range between 8000-12000 Tk.

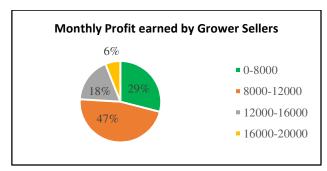


Figure 6: Profit earned grower sellers by selling products in Balibhadra Bazar(Field survey, 2012)

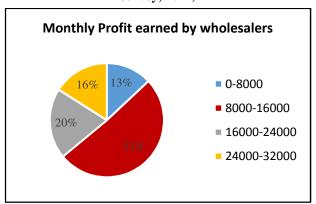


Figure 7: Profit earned wholesalers by selling products in Balibhadra Bazar(Field survey,2012)

According to Table 4 grower sellers selling more non cereals (>50%) products earning 1.55 times more profit per month than grower sellers who are selling less non cereal agricultural products. High profitability of non cereal products might be a reason which is luring grower sellers to produce more non cereal crops and causing agricultural transformation.

Table 4: Variation of profit of grower seller of different composition of product sold

Composition of production sold	Average monthly profit of grower sellers (Tk)
Cereals >50% And Non-cereal <50%	8285
Cereal <50% And Non-cereal <50%	12856

Source: Field Survey, 2012

Monetary contribution of farms according to size and tenure: Contribution of owner croppers has been found smaller in amount than share cropper farmers in monetary flow. Owner croppers constitutes 48% of grower sellers but their contribution in monetary flow is only 32.41%. When the grower sellers cultivate crops jointly, they can produce more crops which is encouraging them cultivate lands together. Table 5 and 6 reveal that 48% of the total farms are small in terms of land area but their contribution is not significant in comparison to medium size farm. Despite low numbers of large and medium sized farms, contribution of large and medium farm in fiscal flow is larger for than small farm.

Table 5: Number and monetary contribution of farms according to ownership pattern

Ownership of farm	Percentage	Contribution in total monetary flow
Owner	48%	32.410%
Share	39%	44.18%
Both owner and	13%	23.41%
Share		

Source: Field Survey, 2012

Table 6: Number and monetary contribution of farms according to size

Size of farm	Percentage	Contribution in total monetary flow
Large (>13 bigha)	20%	28.90%
Medium (6.5-13 bigha)	32%	36.75%
Small (0-6.5 bigha)	48%	34.35%

Source: Field Survey, 2012

Selling Location Affecting Monetary Flow: Both grower and wholesaler can earn greater amount of profit by selling products in urban areas. For this, they are more interested to sell their product in urban markets than rural areas. As a consequence, rural-urban linkage is being generated. The grower seller are gaining 1.39 and 1.42 times profit by selling their products in Dhaka and other urban areas respectively than in locally rural areas. The wholesalers are gaining 1.51 and 1.60 times profit by selling their products in urban wholesale market in Dhaka and urban retail markets respectively (Figure 8 and 9).

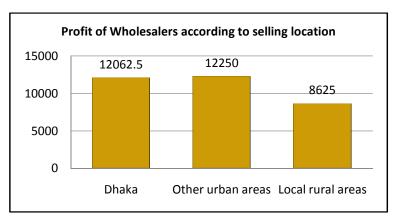


Figure 8: Profit earned by grower sellers of Balibhadra Bazar (Field survey, 2012)

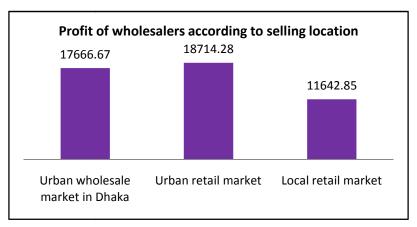


Figure 9: Profit earned by wholesalers of Balibhadra Bazar (Field survey,2012)

## **Information Flow**

Dealers coming to growth centre maintain communication with urban market to keep themselves updated about market condition. From Figure 10 and 11, 90% of growerseller and 88% of wholesalers of Balibhadra Bazar are communicating with urban market. Among the grower sellers, 66% and 34% depends on telephone and face-to-face meeting as a mean of communication. Among the wholesalers, 59% and 39% depends on telephone and face-to-face meeting as a mean of communication.

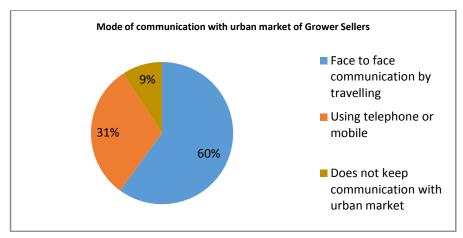


Figure 10: Mode of communication with urban market of Grower Sellers (Source: Field Survey,2012)

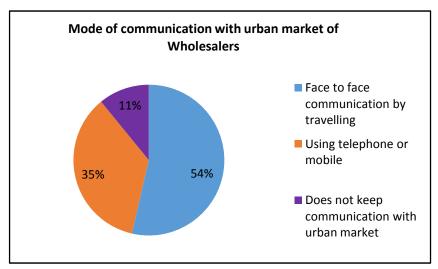


Figure 11: Mode of communication with urban market of Wholesalers (Source: Field Survey,2012)

**Impact of Distance on Means of Information Flow**: Figure 12 shows that with increase in distance from the growth centre, grower sellers become reluctant to communicate by travelling and relies in technology like telephone for communication. From the table 12, it is seen that the all grower sellers from 0-2 km distance depends on face-to-face communication but it reduced with enhancement in distance from growth centre.

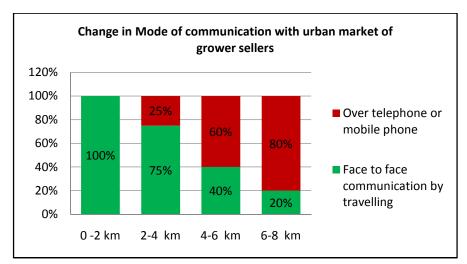


Figure 12: Change in Mode of communication with urban market of Grower Sellers with Distance (Source: Field Survey,2012)

### **Discussion**

Balibhadra Bazar mostly depends on non-cereal products for monetary flow to the grow sellers. Grower sellers are getting more interested in cultivating non cereal agricultural products because better profitability and higher production rate and causing agricultural transformation. Both grower sellers and wholesalers prefer to sell products in urban areas as it is more profitable which is making rural-urban linkage stronger.

The share cropper and large farms have greater contribution to monetary flow from selling agricultural products. The key reason behind enhancement in number of large scale farms and share cropping is the revenue earning motive of the grower sellers. Agricultural farm is becoming more commercial due to existence of rural-urban linkage created by Balibhadra Bazar. Commercialization can be ascribed as ultimate outcome of rural-urban linkage. Majority of grower sellers and wholesalers of Balibhadra Bazar keeps communication with urban market and development of mobile technology is positively influencing rural-urban linkage.

### Conclusion

Rural-urban linkage plays a vital role to keep the rural economy sustaining. Increase in farm size, commercialization of agricultural farms, agricultural transformations are outcomes of rural-urban linkage. These positive outcomes are contributing to make rural linkage stronger as well as in the development of rural agriculture system and rural economy. Joint partnership based cultivation of land may enable the farmers to cultivate on large parcel of land. Agricultural intensification by using modern technology, fertilizers, and HYV seeds will wax agricultural production and thus, money flow from urban areas to rural areas can be raised (Faroque et al., 2011). Policies should be taken for extensive cultivation of non-cereal as they grow better than cereal crops by providing special facilities, subsidy etc to grower sellers.

Besides, ensuring required facilities for the growth center like storage required loading-unloading place etc, improved transport network can draw more grower sellers in the Balibhadra Bazar (Banglapedia 2012). Mobile based communication service should be improved to keep dealers coming to Balibhadra Bazar updated about market condition. All these initiatives can contribute greatly to strengthen rural-urban linkage and contribute to boost up rural economy of surrounding areas of Balibhadra Bazar.

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