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# ANALYSIS OF REGIONAL ECONOMIC DEVELOPMENT OF BOGRA DISTRICT IN BANGLADESH

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### **ABSTRACT**

Regional development involves an intervention with the existing pattern of economic or employment related activity of a region and requires knowledge about the region's structure and growth. Economically developed and integrated regions are essential for a country to prosper. But like many other third world developing countries, Bangladesh is facing the problem of unsustainable economic growth. Lack of organized development planning, unstable and insecure employment sectors create poverty prone underdeveloped and disintegrated regions in the country. In broader sense it works behind the reason of maintaining poor living standards of people in overall country. To address this problem each region's regional development has to be analyzed to boost up the economic sectors. Using different tools, components and index value a region's overall status and sustainability in terms of regional economy had been analyzed in this study. The technique quantified and produced index value evaluating the centrality, importance and accessibility of any given region on a particular basis. The research revealed economical as well as regional development of Bogra region and provided index value which would help to observe total regional growth and regional sustainability of a particular region.

**KEYWORDS:** Economic Index, Regional Index, Regional Economic Growth, Regional Development Index, Regional Sustainable Growth, Regionalization

#### INTRODUCTION

With a population of 143 million on a land mass of 147 thousand square kilometers, Bangladesh is among the most densely populated countries on earth (Bangladesh, n. d). Over three quarters of the population lives in rural areas where agriculture is the mainstay of the rural economy and over half of rural dwellers live below the national poverty line (BBS, 2011). Regional development in economic sectors is requisite to attain stronger economy in whole country (Kabir & Sharmin, 2003). Disintegrated regions never can bring the desired result and from this point of view each region has to be economically developed (Kabir & Sharmin, 2003). To begin with some indexes are needed to calculate the regional economic growth or development which will show which sectors require more attention and how much observation or investment they demand. This research is carried on from these points of views so that a region's economic growth can be calculated in a scientific way to understand where the investment is essential.

The main concern of this study is to find out the existing regional development condition and make a comparative analysis of the region for sustainable development. To study the present development pattern in regional economy, "Bogra" district of Bangladesh is selected as it is an important region and sometimes described as the nerve centre of Northern Bangladesh (Bogra, n. d.). The research mainly focuses on the different components, tools and techniques to

assess regional status in terms of economy with other related issues which is new in discussed matter. In this research, different analytical tools have been used and tried to be presented in a conclusive way. Based upon the analysis some possible outcomes have been analyzed to improve the existing conditions of the region as well as to transform it into a stronger economic region. The techniques used here is applicable in other regions of Bangladesh as well as any other region of the world with similar context.

#### **METHODS**

This research followed industrial structure analysis method for regional economic analysis. The approach requires an isolation of the effects of a regions industrial structure on its growth over a particular period of time. This involves the breaking down of a region's growth performance by some representative variables (such as employment, population, income) into a number of components. The usual variable is employment and total regional employment growth had been separated out into shift and share components.

The national Share Component (N) represents the amount by which regional employment would have been grown if it had grown at the national rate over the study period (Glasson, 2006). This is the norm for the region from which deviations can be measured. The shift component represents any deviation in regional employment growth from the national share. It is positive in prosperous growth areas and negative in relatively depressed regions. Net shift can be subdivided into two components namely Proportionality Shift Component (P) and Differential Shift Component (D). Proportionality Shift Component (P) sometimes known as the structural or industrial mix component, measures the amount of net regional shift attributable to the composition of the industrial sectors in the region (Glasson, 2006).

The component would be positive in areas specializing in nationally fast growing sectors and negative in areas specializing in nationally slow growing or even declining sectors. On the other hand Differential Shift Component (D) measures the amount of net regional shift resulting from specific industrial sectors growing faster or slower in the region than nationally owing to internal location related factors (Glasson, 2006). Thus a region with locational advantages, such as good resources, will have a positive differential shift component, whereas a region with locational disadvantages will have a negative component. These components were used in the research to acquire the desired output. Next chapter is going to analyze and interpret the output.

# RESULTS AND DISCUSSIONS

## National Share Component (N) of Bogra District

- Nj = Ejo (Et/Eo) Ejo.
- Ej= total employment in region 'j' and E= total national employment.
- o, t=initial and terminal time periods.
- i= industry subscript.

National share component for BOGRA district = 1604983\*(34000909/29804249) - 1604983 = 225994 (see Table 1 in Appendices).

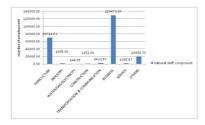


Figure 1: National Shift Component of Different Sectors of Bogra District

It represented the amount by which employment of Bogra could have been grown (1991-2001) if it had grown at the national rate over the study period. But employment growth rate at Bogra district over the study period was less than the national growth rate. Figure 1 depicted that agriculture, business, and other sectors were growing much less than national rate.

### Proportionality Shift Component (P) of Bogra District

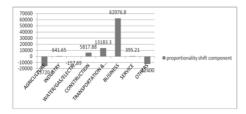


Figure 2: Proportionality Shift Component of Different Sectors of Bogra District

The amount 53836.65 (see Table 2 in Appendices) represented net shift of Bogra district attributable to the composition of industrial sectors in this district. And the component was positive as Bogra was specializing in nationally fast growing sectors such as business, construction, transportation and communication which have shown in Figure 2.

## Differential Shift Component (D) of Different Sectors of Bogra District

This component was negative for Bogra district which indicated that Bogra district had locational disadvantage and it had not had enough resources (Figure 3). And sectors such as agriculture, water, business, others were growing slower in this region than nationally owing to internal locational factors.

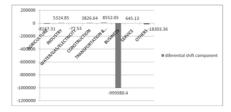


Figure 3: Differential Shift Component of Different Sectors of Bogra District

Total regional employment growth in Bogra district (1991-2001) =Nj+Pj+Dj =225994+53837-1008260 (see Table 2 in Appendices) = -728430.

## **CONCLUSIONS**

Total regional growth is negative (-728430) in Bogra district. Employment is declined in this district from 1604983 to 874467 over the study period (1991-2001) due to shortage of manpower, resources and locational

disadvantage. After looking at all the development sectors in the district Bogra, this research puts forward a number of challenges that are to be addressed if this region is to acquire a more progressive status on economic development. Resources are needed to be invested at different sectors especially water, electricity, construction, business and transportation to improve and strengthen overall economic condition of Bogra district.

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## **APPENDICES**

**Table 1: National Share Component of Different Sectors** 

Sector	National Shift Component		
Agriculture	69722.63		
Industry	1805.86		
Water/gas/electricity	144.05		
Construction	1152.09		
Transportation &	2433.57		
communication			
Business	129473.00		
Service	1305.57		
Others	19956.78		
Total	225993.55		

**Table 2: Total Regional Growth of Bogra District (1991-2001)** 

Sector	National Shift	Proportionality Shift	Differential Shift	Total
	Component	component	Component	
Agriculture	69722.63	-15720.5	-8247.31	45754.8
Industry	1805.86	641.65	5324.85	7772.4
Water/gas/electricity	144.05	-157.69	-77.53	-91.2
Construction	1152.09	5817.88	3826.64	10796.6
Transportation & communication	2433.57	13183.3	8552.05	24168.9
Business	129473.00	62076.8	-999980.4	-808430.6
Service	1305.57	395.21	645.13	2345.9
Others	19956.78	-12400	-18303.36	-10746.6
Total	225993.55	53836.65	-1008259.93	-728429.7