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An Analysis of Poverty and Regional Inequalities in Ghana

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Abstract

Regional inequality is very important as it can produce severe consequences such as discontent, conflict and even war, especially if it coincides with divisions along socio-economic lines. This paper examines spatial development inequalities in Ghana. It notes that the present inequalities in spatial development in Ghana have their origins in the country's colonial legacy, but they have been accentuated by post-colonial development policies and strategies. The study found that while inequalities exist between regions (inter-regional), they are more significant within regions (intra-regional). It concludes that the policy choices for government's regional development policies and strategies are not clear-cut, particularly under the current economic orthodoxy of market liberalization and globalization. This is because markets tend to increase rather than decrease regional inequalities. The paper, however, calls for a strong regional development planning approach which facilitates the process of uneven and unbalance regional growth which at the same time promotes inclusive development and economic integration, both within and across regions in Ghana. This requires, more specifically, improvement in public services in all regions, and linking lagging and developing regions with infrastructure (especially transportation) both within and between regions as critical levers of private sector investment and economic growth.

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Introduction

Spatial or regional inequalities refer to the uneven distribution of income and other socio-economic variables across different locations or regions. There is a growing sense across much of the developing world and other transitional economies that spatial and regional inequality of income, economic activities and other social indicators is on the increase (Kanbur and Venables 2003; Aryeetey and McKay 2007; World Bank 2009). On one hand, it is widely recognized that development cannot take place uniformly over space, what is often described as balanced development. On the other, accentuated patterns of development involving wide disparities between regions have been found to be very problematic.

More importantly, the trend towards increased regional inequalities comes within the context of positive economic growth in several parts of the developing world in recent times, especially in previous poor performing regions such as sub-Saharan Africa. The increasing trend towards spatial inequalities comes at the back heel of a renewed focus to reduce poverty and improve well-being across the globe, particularly under various development initiatives such as the Millennium Development Goals (MDGs) as well as the country-specific poverty reduction strategy papers (PRSPs).

According to Kanbur and Venables (2003), spatial inequality matters for a number of reasons. They note that it reflects market failures. In addition, the positive and negative externalities associated with clustering and congestion means that development outcomes are likely to be inefficient. Nationally, spatial inequalities raise policy issues regarding how to manage the disparities in resources and living standards within and across various localities of a country. More importantly, when regional inequality coincides with divisions between socio-economic groups such as migrants and natives, different ethnicities, different religions, etc, it is not the numerical value but its mere existence that is important. Such spatial inequality can produce severe consequences such as discontent, conflict and even war (Kanbur *et al.* 2006).

Indeed, while balanced growth and development has remained elusive (World Bank, 2009), there has been a renewed debate on policies and strategies for achieving a more inclusive and sustainable development pattern. The *World Development Report 2009* highlights this point noting that economic growth and development will continue to be unbalanced. It adds that any attempt to spread economic development to achieve balanced development will entail curtailing economic growth. However, the Report notes that development can still be inclusive in that people who start their lives far away from places of economic opportunity can benefit from the growing concentration of wealth in a few places (World Bank 2009).

In the light of the increasing spatial disparities, some researchers and policy analysts have already called for different policies which focus on excluded regions and groups (Aryeetey and McKay 2004, 2007; Shepherd *et al.* 2004; World Bank 2009). It is suggested that the way to get the benefits of uneven growth and inclusive is through economic integration (World Bank 2009). Other analysts and researchers have called for broad-based growth, complemented with appropriate social spending in poverty reduction as the most obvious policy options for addressing regional and other spatial inequalities in development (Aryeetey and McKay 2004, 2007; Al-Hassan and Diao 2007).

In Ghana, disparities in social and economic well-being are evident between various spatial units across the country, particularly southern Ghana and northern Ghana. Such regional or spatial disparities can also be viewed in terms of urban and rural differentials. The spatial disparities prevail despite sustained economic growth and poverty reduction efforts over the last decade. Regional inequalities in Ghana are largely attributed to the structure of the Ghanaian economy which has changed very little from that inherited from the colonial era. The continuation in the post-colonial era of colonial policy of investing in regions with exportable products, and providing supporting infrastructure in such regions has resulted in inter-regional inequalities among regions in Ghana. Past development efforts at achieving a more equitable distribution of resources and investments have not been successful enough in addressing development imbalances especially due to non-implementation and internal planning weaknesses. The

fundamental reason for non-implementation is that the state has attempted to accomplish more than it is able to, given the limited resources that it is able to command as well as mismanagement of scarce resources. This situation has led to very high levels of deprivation in some parts of the country, particularly in the three northern regions of Ghana, namely Upper West, Upper East and Northern Regions.

This paper examines regional inequalities in Ghana based on the last three rounds of the Ghana Living Standard Survey (i.e., GLSS 3, 4 and 5) as well as other socio-economic variables across regions in Ghana. After the introduction, the paper looks at the theoretical perspectives of spatial inequalities and their relevance in explaining spatial patterns of socio-economic differentials. It then turns its attention to the study's methodology, followed by a brief country background. Next, empirical estimates of key indicators of the state of economic inequality in the country are analysed. The paper ends with a concluding discussion and the policy implications of the study.

Accounting for Regional Inequalities: A Theoretical Perspective

As earlier noted, regional development planners and economists are concerned with spatial inequalities, in and between regions. This is because there is a general recognition that the persistence or concentration of poverty in specific geographical areas is one of the most critical problems facing planners and policy-makers in the developing world (Songsore 2003a; World Bank 2009). As a result, various theoretical propositions have been put forward by regional development planners and economists to explain or account for the emergence and persistence of regional inequalities. Of these theoretical propositions, the most prominent proposition that has received much attention is the theory of cumulative causation by Myrdal (1957) and Hirschman (1958).

The theory of cumulative causation by Myrdal (1957) notes that, once a region by virtue of some initial comparative advantage takes the lead in socio-economic development ahead of other regions, new economic activities and growth tend to be concentrated in the already 'developed' region rather than the 'lagging' or 'undeveloped' localities. It adds that the initial comparative advantage which starts off a process of cumulative growth in

the developed region may result from factors such as location and infrastructure. The theory of cumulative causation argues that the cumulative economic growth of the 'developed' region is due to its derived advantages, which do not exist in the undeveloped or lagged areas. Myrdal (1957) attributed the cumulative growth in the developed region to market forces, which he argues create the tendency to concentrate growth, and increase rather than decrease spatial inequalities.

Critical to the cumulative causation theory is the presentation of a centre-periphery analysis. Here, the developed region is referred to as the 'centre', and the lagged region as the 'periphery'. According to Songsoore (2003a, pp. 6-7), a system of spatial flows of labour, capital and commodities develop to support the centre, a process described as 'backwash effects'. At the same time, goods and services originating in the expanding region flood markets of the lagging regions, displacing the little economic activities taking place in these regions. The model contends that lagging regions will develop only if expansionary momentum from the developed region (spread effects) triggers a growth process in the lagging regions. In the view of Myrdal, government intervention is needed to address such imbalances in development between the developed and lagged regions.

Hirschman (1958) developed a model similar to that of Myrdal. However, rather than assuming Myrdal's cumulative causation process, Hirschman argues that regional inequalities are inevitable in the development of a region. He adds that for a region to develop, it must and will first develop within itself one or several regional centres of economic strength. Songsoore (2003a) notes that in the case of Hirschman's model, the key role in differential growth is accorded to spatial interaction between the growing and lagging regions in the form of 'trickling down' and 'polarization' effects, involving just those movements of capital, labour and commodities analyzed under Myrdal's model. To Hirschman, in the longer term there will be equilibrium in development since counterbalancing factors such as increased production cost contributing to capital flight in the developed region will lead to industrial and population re-location to the undeveloped regions to make use of cheap labour and production costs.

Evidence from much of the developing world reinforces Myrdal's regional development theory of cumulative causation (Potter and Lloyd-Evans 1998), a contrast to Hirschman's model of state of equilibrium and equalization in the long-run. Hirschman's thesis is that that there is no need for intervention to reduce inequalities, for at some juncture in the future there will occur a spontaneous spin-off of growth from the 'developed' centres to 'backward' or 'less developed' regions (Potter and Lloyd-Evans 1998). However, historical evidence from Ghana and elsewhere in the developing world seems to support Myrdal's thesis because some territorial regions have continued to thrive, in part, because of substantial direct and indirect state and private investments in them over a long period of time. As a result, attempts to achieve some balance in the development process by the state and other development actors have largely failed (World Bank 2009).

Nevertheless, recent studies such as the World Development Report 2009 give credence to Hirschman's assessment that regional imbalance is inevitable and concomitant to development. In addition, Hirschman's objection to the state's intervention to influence the correction of imbalances of market forces, as well as his caution for resisting the temptation to scatter investment far and wide (Brookfield 1975) have received recognition in recent regional development discourse (see the World Development Report 2009). The basic underlying view here is that where resources are scarce they cannot be invested everywhere at once, and that efforts to obtain 'uniform development' over a whole country are doomed to inevitable failure (Brookfield 1975).

To what extent do these regional development theories explain the emergence and persistence of regional inequalities in Ghana? More importantly, in the context of Ghana, the national constitution advocates for a balance development of regions in Ghana. Is this feasible? This paper will attempt to provide answers to these questions in the light of exploring and examining regional inequality patterns and trends based on the last three rounds of the GLSS and other socio-economic variables.

Study Methodology

Even though in recent times, non-income indicators such as access to health, education, housing, security and the level of employment have been increasingly considered in the measurement of poverty, the use of the poverty line is still widely used in Ghana (Government of Ghana, 2002). In other words, though various public policy frameworks, more specifically the Growth and Poverty Reduction Strategy (GPRS II), 2005-2009, view poverty as multidimensional, the basis of analyses and projections are, to a large extent, based on the poverty line.² In Ghana, the poverty line is constructed from the Ghana Statistical Service's (GSS) food consumption poverty measurement. It is from this measurement that a poverty line is set that indicates the level of standard of living measure at which minimum consumption (or nutritional requirements) must be met (GSS 2000, 2007).

Data for this food consumption poverty measurement are obtained from the Ghana Living Standard Survey (GLSS). The GLSS is a nationwide representative household survey which report on the overall living circumstances of a random selection of households in Ghana, including responses related to household expenditures and earnings. The latest three waves were conducted in 1991/92, 1998/99 and 2005/06 by the Ghana Statistical Service. These three waves are particularly chosen for the study. This is because these waves of the GLSS happen to be the most comparable datasets among all the five waves of the GLSS available.

The poverty line derived from the GLSS attempts to capture the level and incidence of poverty based on household income. Indeed, household income is regarded here as a critical determining factor of household wellbeing as it significantly determines the economic well-being of individuals and households in an economic system. The level of income of individuals effectively determines the degree of access to economic assets, as it provides the means by which individuals interact with other economic units in

² The GPRS II is a development policy framework to accelerate the growth of the Ghanaian economy, and to propel the country to achieve middle-income status by 2015 and the attainment of the Millennium Development Goals (MDGs). Its four main thematic areas continued macro-economic stability, accelerated private sector-led growth, vigorous human resource development and good governance and civic responsibility.

satisfying their needs and wants. Thus, a perfectly egalitarian economic system, for instance, assures equity in economic well-being only in the sense that the equitable distribution of total income, all things being equal, translates into equity in social welfare. Disparities in the distribution of such income then imply imbalance in the ability to meet needs and wants, and therefore inequity in welfare, among the individuals and the households concerned.

Income inequality in welfare economics therefore provide the conceptual basis for evaluating the distribution of income among individuals in a population, with a focus on assessing the implications on welfare and development. The literature on the subject is extensive and largely based on the characterization of and intuitions attached to observed distribution of income. Beyond intuition, Cowell (1998) suggests mathematical and ethical principles as forming equally important basis for the measurement and discussion of income inequality. Arising from this, various measures of inequality are applied (or debated) in the literature, with varying analytical merits.³

Among these measures are the Gini coefficient and Generalized Entropy (GE) class of inequality measures, which the present study adopts in the analysis of regional inequality in Ghana. As the most widely reported, standard measures of inequality in empirical studies, the Gini coefficient is applied in this study to provide an outline of the changes in income inequality over the period of the study. The GE is however especially chosen to enable a decomposition of the observed trend in income inequality in the country. As will be noted later, the fact that the GE could be adjusted to provide estimates of inequality similar to two other important measures of inequality makes it a useful tool for the present discussion.

The Gini coefficient measure of inequality is derived from the Lorenz curve framework of assessing income inequality. This framework is based on a graphical representation of the distribution of total income among cumulative proportion of a population (De Maio

³ For an analytical exposition on the measures of inequality, see Sen (1973), Cowell (1975, 1988) and Jenkins (1991).

2007). In this sense, an equal distribution of total income presents equal fraction of total income (say, 30 percent) to the same cumulative proportion of the population (that is, 30 percent). The more unequal the distribution, the less the fraction of total income held by this cumulative percentage of the population. Thus, for a population of size N , individual income levels of y and mean income of \bar{y} , Pyatt (1980) formulate this argument to yield a single index of inequality, the Gini coefficient (G), given as:

$$G = \frac{2Cov(y, r_y)}{N \bar{y}} \quad (1)$$

where, $2Cov(y, r_y)$ is the covariance between individual income (y) and the ascending rank of the individuals in the population according to the level of their incomes (r_y). In this sense, the poorest individual in the population attains a rank of 1 whereas the richest is ranked N . The value of the Gini ranges between 0 and 1, with 0 representing a perfectly equal distribution of income in the population. Increasing values of Gini within the range represent increasing levels of inequality in the distribution of income. A value of 1 (or 100%) in this instance then imply a perfectly unequal distribution of income, with the total income held by the N^{th} individual.

Unlike the GE index that allows for the account of different levels of sensitivities to inequality at different segments of the income distribution, the Gini coefficient is noted to be most sensitive to income inequalities at the middle segment of the income distribution. This particular property of the GE allows the formulation of the index to account for different numerical values of the sensitivity parameter. In line with the arguments in (1) above, Kanbur (1999) outlines the index, following Shorrocks (1980, 1984) as:

$$I(y) = \begin{cases} \sum_{i=1}^N f(y_i) \left\{ \left(\frac{y_i}{y} \right)^c - 1 \right\} & c \neq 0, 1 \\ \sum_{i=1}^N f(y_i) \left(\frac{y_i}{y} \right) \log \left(\frac{y_i}{y} \right) & c = 1 \\ \sum_{i=1}^N f(y_i) \log \left(\frac{y_i}{y} \right) & c = 0 \end{cases} \quad (2)$$

where, i is the i^{th} individual in the population and $f(y_i)$ is the population share of y_i in the total population. The parameter c could be regarded as the sensitivity parameter of GE and typically ranges from -1 to 2 in empirical studies. As mentioned earlier, the sensitivity parameter assigns more weight to inequality at different segments of the income spectrum. The more positive the value, the more sensitive is the index to inequalities at the upper segment of the income distribution, and vice versa. It is noted in De Maio (2007) that values of the c equal to 0 and 1 are respectively functionally equivalent to the mean log deviation income and the Theil Entropy measure of inequality, which are themselves two other measures of income inequality discussed in the literature. The values of the GE index ranges from 0 to infinity, where 0 implies perfectly equal distribution of income, and increasing values of GE suggest increasing levels of inequality in the population.

Again, an important attribute of the GE, as noted by Kanbur *et al.* (1999) in their study of the evolution of inequality in China, is its additive decomposable property. By this property, GE affords the opportunity to disaggregate total inequality into what is generally referred to as the *between-group* and *within-group* inequality. In the context of this study, the between-group inequality represents the fraction of total inequality arising from disparities in income distribution among the regions of the country, whereas the within-group inequality refers to the fraction arising from disparities in distribution within the individual regions. This is formulated in Shorrocks (1980, 1984) and applied in Kanbur *et al.* (1999) as:

$$I(y) = \sum_g^k w_g I_g + I(\mu_1 e_1, \dots, \mu_k e_k), \quad (3)$$

where, w_g is defined as:

$$w_g = \begin{cases} f_g \left(\frac{y_g}{y} \right)^c & c \neq 0,1 \\ f_g \left(\frac{y_g}{y} \right) & c = 1 \\ f_g & c = 0 \end{cases} \quad (4)$$

Again, within the context of this study, f_g is the share of any given administrative region, g , in total population, and $I_g w_g$ defines the *within* inequality of the region. By extension, $I_g w_g / I(y)$ is the fraction of overall inequality arising from disparities in income within region, g , whereas $I(\mu_1 e_1, \dots, \mu_k e_k) / I(y)$ accounts for the fraction of total inequality arising from inequalities *between* the administrative regions (Kanbur *et al.* 1999).

These analytical tools therefore form the core methodological approaches for the present discussion. As earlier noted, the datasets used are derived from the latest three waves of the Ghana Living Standard Surveys (GLSS). A primary variable used for the study is the total earnings of members of households in the survey sample. These earnings are aggregated and expressed in Accra, January 1999 constant prices (GSS 2000). In the same vein, the 1998/99 national higher poverty line of $\text{¢}900,000$ (or present-day GH¢ 90) per adult equivalent per year is used in the analysis.

The discussion of regional inequality in Ghana is based on regional disparities in income, with the administrative regions as the statistical unit of analysis. It is acknowledged here that the result of such large units of spatial scale tend to produce generalize conclusion, and hide the basic contradictions that exist at lower spatial scales such as districts, and

between rural and urban areas (Songsore 2003a). However, in Ghana, data on income and other socio-economic variables for comparative purposes are far in between and sometimes even absent at lower spatial units, particularly at the district level (see Aryeetey and McKay 2007). The GLSS, however, provides a panel dataset for analyzing the patterns and trends on income inequalities, and by extension other socio-economic disparities at the regional administrative level.

Country Background

Ghana is located in the West Africa sub-region of Africa. It has an area of about 238,537 km², and is bounded on the east, west, and north by the countries of Togo, Cote d'Ivoire and Burkina Faso respectively. To the south is the Atlantic Ocean. Administratively, Ghana is divided into 10 regions. Each region is further sub-divided into districts. Each region and district has its own regional capital and district capital (or administrative centre) respectively. In all, there are 10 regions and 166 districts in the country. The division of the country into districts and regions is largely based on the need to maintain large cultural groups as homogenous units as well as the need for efficient administration of districts and regions (Dickson 1971, 1975; Bening 1999; Ofori 2002).

In 2000, Ghana's total population was 18.9 million, and estimated to be growing at an annual rate of 2.7 percent. About 56 percent of the country's total population lives in rural areas, and the remaining 44 percent live in settlements defined as urban (i.e. settlements with 5000 or more inhabitants) (GSS 2002). The urban population is growing at the rate of about 4.5 percent per annum which is higher than the natural population increase. The country's urban system is dominated by Accra (national capital), Kumasi, Sekondi-Takoradi, Tema and Tamale. However, in recent years, though large towns and cities have continued to grow, the rate of growth of small and medium-sized towns has also been impressive (Owusu 2005, 2008).

The structure of Ghana's economy has not changed significantly from that inherited from its colonial masters (Aryeetey and McKay 2007; Aryeetey and Kanbur 2008). It is dominated by agriculture and the primary sector in terms of their contribution to output, employment, revenue, and foreign exchange earnings. Agriculture accounts for about 40

percent of the Gross Domestic Product (GDP), and employs about 50 percent of all employment (Aryeetey and Kanbur 2008). The main export items of the country are primary commodities, namely cocoa, gold, timber, and bauxite. Cocoa earnings constitute about 45 percent of total export receipts. Ghana's economy recorded its worst performance during the decade prior to the mid-1980s (Aryeetey and McKay 2007; Aryeetey and Kanbur 2008). It has, however, made significant recovery, at least at the macro-level with the institution of the World Bank/International Monetary Fund (IMF) Economic Recovery Programme (ERP)/Structural Adjustment Programmes (SAPs) in the mid-1980s. Since 1984, the GDP has grown at an average annual rate of about 5 percent compared to decline or marginal growth rates of less than 1 percent during the 1976-1983 period (GSS 1999, p. 2; Songsore 2003a, 2003b; Aryeetey and McKay 2007; Aryeetey and Kanbur 2008).

The poverty profile of the country has been expressed in various ways; however, the north-south, and the rural-urban divides are the most common expressions. All major socio-economic indicators show disparities between rural and urban areas. According to the Ghana Living Standard Survey (GLSS) Report 4 (GSS 2000), per capita annual income is ₵69.2 (about USD 289) in urban areas and ₵46.9 (about USD 196) in rural areas.⁴ The Report also indicate that about 80 percent of households in urban areas have access to pipe-borne water, while it is about 18 percent in rural areas. With regard to literacy, it is about 75 percent for urban areas and 53 percent in rural areas. The available socio-economic indicators also show that the three regions in northern Ghana (Northern, Upper West and Upper East Regions) are ranked lowest in all these indicators. These three regions are also the least urbanized regions in Ghana. Fig. 1 shows that the greater majority of settlements, indeed urban settlements, are concentrated in southern Ghana.

The present inequalities in spatial development in Ghana (north-south and rural-urban divides) have their origins in the country's colonial legacy. However, these spatial inequalities have been reinforced and accentuated by post-colonial development policies

⁴ At the exchange rate of about 2394 old cedis (0.2394 new Ghanaian cedi) to the US dollar prevailing in March 1999 (GSS 2000a).

and strategies (Songsore 2003a, 2003b). After achieving total control of the country towards the end of the 19th century, the British colonial power proceeded to divide it into provinces or regions. These were in turn sub-divided into districts. The division of the country into regions and districts, as already noted was based on the need to maintain large or major ethnic groups as homogenous and unified entities as far as possible, and for the effective politico-administration of the country (Dickson 1971, 1975; Bening 1999). Based on three criteria, the colonial administrators then proceeded to invest more in some regions than others. These criteria were: presence of exploitable and exportable resources; the ease with which cultivation could be encouraged of introduced cash or tree crops (mainly cocoa, coffee and rubber); and the ease with which these resources could be transported to the seaports (i.e. proximity to the coast) (Dickson 1971, 1975; Songsore 2003b).

Regions or areas in Ghana satisfying these three criteria were subsequently connected with transportation links, mainly railways and roads, and other infrastructure. Areas of southern Ghana with the climate suited to the introduced cash and tree crops of cocoa, coffee and rubber, and the vegetation suitable for timber exploitation, as well as mining sites closer to the coast or ports attracted colonial investments. In addition, these export-oriented activities were to some extent urban-oriented, resulting in the growth of towns and the emergence of new ones in southern Ghana. On the other hand, northern Ghana with the climate not suited to the introduced cash crops, and relatively far from the coast and seaports received less of colonial investments (Owusu 2005). In addition, urban centres and other major settlements in northern Ghana, which had developed as a result of the long-distance trade between states in southern Ghana (and others in West Africa) and the states in the Sahelian and Mediterranean regions stagnated or declined. This was due to the re-orientation of trade routes as a result of the European maritime trade, and the general interest of the colonialists in southern Ghana (Songsore 2003b). The important urban centres which emerged or continued to grow in northern Ghana did so for administrative reasons, namely because they were mainly colonial administrative centres.

The criteria for investment in regions developed in the colonial period (which was subsequently acted upon by post-colonial development trends) also had implications for rural and urban development. In short, similar to the regional (north-south) inequalities, socio-economic differences between rural and urban areas can be traced to the colonial and post-colonial development policies and strategies. In general terms, the investment policies of the colonial administrators were urban-oriented, as already noted. For effective administration and political control, some centres had to be declared as administrative headquarters or centres, which attracted investments and the attention of the colonial administrators. Many of these centres were also the residence of the colonialists. The administrative centres also served as the buying or collecting centres of the introduced cash and tree crops in many instances. In addition, they became the commercial centres for the demand of European or imported foreign goods due to increased income and wealth (Dickson 1971). It is therefore little wonder that these towns were more concentrated in the resource exploitable and exportable areas of southern Ghana. In fact, as already noted, the administrative centres established in northern Ghana, were purely meant for administrative purposes. After independence, administrative centres have continued to receive attention just like the colonial period. Today, in many towns in Ghana, the location of government offices and residential quarters of public officials are quite distinguishable from the surrounding neighbourhoods and settlements (Owusu 2008).

Another urban-oriented investment programme of the colonial administration was the introduction of modern mineral mining. The beginning of modern mineral mining such as gold, diamond, manganese, and bauxite was responsible for the rapid transformation of many rural settlements into towns in southern Ghana. According to Dickson (1971), some towns in southern Ghana to all intent and purposes are the primary creation of mining activities. Examples of mining towns which emerged during the period and which are still active centres today are Obuasi, Dunkwa, Nsuta, Akwatia, Bibiani, Tarkwa, and Prestea (see Fig. 1). Even though, there were (and still are) mineral deposits in northern Ghana, they have been given less attention in terms of exploitation due to their relative distance

from the coast and the relatively higher costs of transporting mined ore to the seaports for exports (Dickson 1975; Songsore and Denkabe 1995; Songsore 2003b).

The established mining, administrative and agricultural collecting or buying centres were further connected with transport and other infrastructure. These centres also began attracting not only migrant population from other parts of the country and beyond but also the best of the migrant population (in terms of skills and other qualities). The general post-colonial development trend in Ghana has been the further consolidation of these centres and regions. Further greater investments in these areas relative to other parts of the country have hindered the growth of other settlements and regions (Songsore 2003a, 2003b).

The post-colonial inward-oriented policies such as import-substitution industrialization pursued after independence, and the outward-oriented policies carried out under economic reforms and market liberalization for the last two and half decades are yet to re-structure spatial development patterns which emerged during the colonial, a quarter of a century after independence. It has been argued that current policy regime of allowing market forces to determine prices and allocation of resources are more likely to reinforce or strengthen existing socio-economic differences between spatial units. In addition, reforms have put emphasis on the role of exports, and regions that benefit from export orientations are inevitably in the South Ghana which has better access to the seaports and relatively lower transportation costs. What this implies is that spatial units, which have taken the lead in socio-economic development, are likely to be strengthened to the detriment of relatively weaker areas. Under this situation, the resource areas of southern Ghana and the large urban centres will, to a large extent, continue to attract key investments due to the existing relatively better infrastructure and economies of scale enjoyed by these areas (Songsore 2003a; see also Myrdal 1957).

Regional Inequalities in Ghana: Empirical Results from the GLSS, 1991-2006

Poverty in Ghana has generally declined since 1991. Estimates from the GLSS dataset suggest that income poverty in Ghana has falling from 51.7 percent in 1991 (GLSS 3) to 28.5 percent in 2006 (GLSS 5). As noted in Table 1, this represents a decline of 23.2 percentage points, further from the 12.3 percentage points decline recorded from the GLSS 4 (1998).

Table 1: Regional Distribution of and Changes in Headcount Poverty Rate, 1991-2006

Administrative Region	1991	1998	2006	CHANGE		
				1991/1998	1998 & 2006	1991/2006
Western	59.6	27.3	18.6	-32.3	-8.7	-41.0
Central	44.3	48.4	19.9	4.2	-28.5	-24.3
Greater Accra	25.8	5.2	11.8	-20.6	6.6	-14.0
Volta	48.0	43.7	31.7	-4.3	-12.0	-16.2
Eastern	57.0	37.7	14.7	-19.3	-23.0	-42.3
Ashanti	41.2	27.7	20.5	-13.5	-7.2	-20.7
Brong Ahafo	65.0	35.8	29.7	-29.2	-6.2	-35.3
Northern	63.4	69.2	52.2	5.8	-17.0	-11.3
Upper East	88.4	83.9	70.5	-4.5	-13.4	-17.9
Upper West	66.9	88.2	87.9	21.3	-0.3	21.0
Total	51.7	39.5	28.5	-12.3	-10.9	-23.2

Source: Authors' computation

Table 2: Distribution of the Poor by Regions in Ghana, 1991-2006

Administrative Region	1991	1998	2006	CHANGE		
				1991 & 1998	1998 & 2006	1991 & 2006
Western	11.7	8.0	6.6	-3.7	-1.4	-5.1
Central	8.9	11.0	6.1	2.1	-4.9	-2.8
Greater Accra	5.8	1.6	5.7	-4.3	4.2	-0.1
Volta	12.0	12.9	8.3	0.9	-4.6	-3.7
Eastern	9.9	11.9	6.9	2.0	-5.0	-3.0
Ashanti	12.6	11.8	12.1	-0.8	0.2	-0.6
Brong Ahafo	14.9	7.9	9.5	-7.0	1.6	-5.4
Northern	11.6	18.0	22.0	6.4	4.0	10.4
Upper East	5.4	6.9	11.8	1.5	4.9	6.4
Upper West	7.2	10.1	11.0	2.9	0.9	3.8
Total	100.0	100.0	100.0	-	-	-

Source: Authors' computation

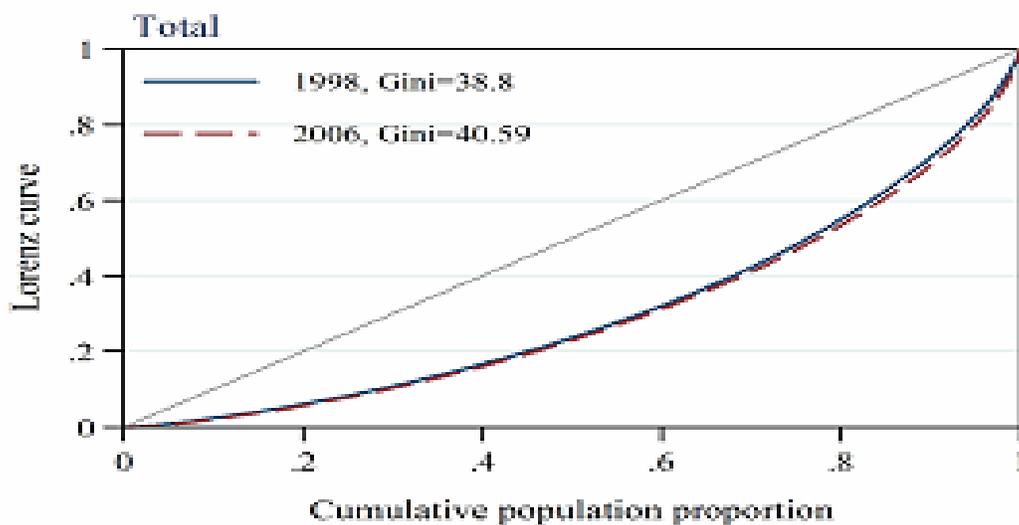
Nevertheless, regional-level analysis shows notable differences in the changes in headcount poverty rate. In particular, between 1991 and 2006, poverty rates in Eastern and Western regions declined by 42 and 41 percent, respectively. Poverty rates in the other regions except the three regions in northern Ghana also declined considerably, more so as these rates were about the same or even quite below the national poverty rate. For instance, though poverty rate in the Central region increased by 4 percentage points between 1991 and 1998, the estimate for 2006 was 19 percent. While this is markedly below the national rate, the decline also represent more than 28 percent drop in poverty incidence in that region. The Volta, Greater Accra and Ashanti Regions, on the other hand, are observed to have experienced a steady decline in headcount poverty, as poverty rates in the regions declined for all the survey years following the GLSS 3. The trend is accounting for a consistent decline in the proportion of the poor in these regions (see Table 2).

However, the level and changes observed in Northern, Upper East and Upper West Regions suggest entrenched income poverty. Indeed, the Upper West in particular report overall increase in the rate of poverty by 21 percent over the 1991 and 2006 survey years. A comparison of the estimates for 1991 and 1998 reveal a mere 0.3 percentage points decline in headcount poverty in that region. This is aside the fact that the rate of poverty in this region, just like the Northern and Upper East Regions, has consistently stayed well over 20 percentage points more than the national income poverty rate. These trends are noted to have translated into a consistent rise in the regions' share of the poor in the country. In particular, a contrast of the changes in the regional distribution of the poor for the 1991 and 2006 survey years reveal that the decline in the share of the poor of all administrative regions in the southern and middle belts of the country are explained by the increase in the share of the poor in all the three regions in northern Ghana. In other words, changes in the number of the poor in the Western, Central, Greater Accra, Volta, Eastern and Ashanti Regions in the past decade and half have only occurred at the expense of adverse changes in the Northern, Upper East and Upper West Regions.

Have these trends in regional distribution of income poverty had any implications on equity in the distribution of economic welfare in the country? An overview of the trend in income inequality, as depicted in Figures 1 and 2, and quantified by the statistics in Fig. 3, suggest a ‘yes’ to this question.

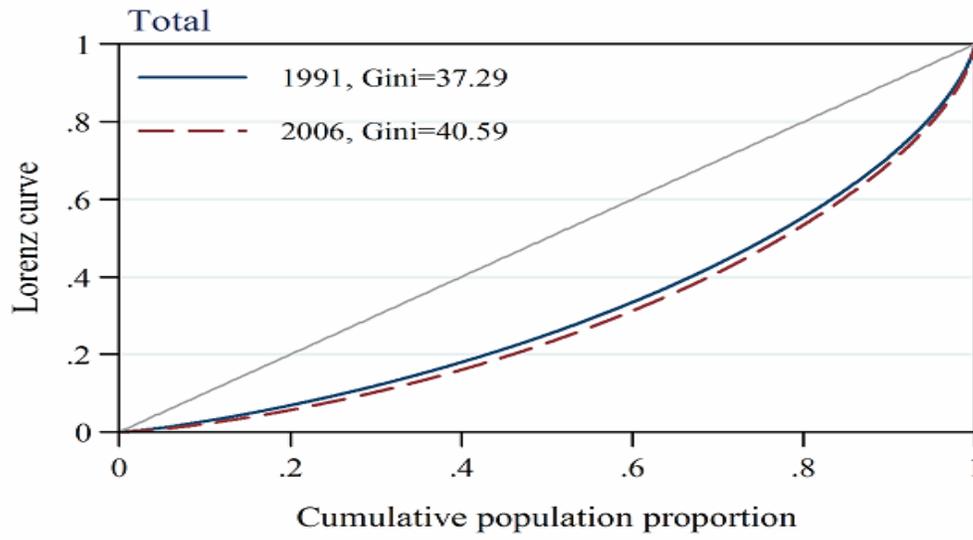
Specifically, in Figures 1 and 2, we apply the Lorenz curve to assess changes in income inequality between the three survey years of the GLSS. For instance, it is noted that while increases in inequality between the survey years were not dramatic, and therefore do not appear to reflect strongly in the Lorenz curves for 1998 and 2006, these marginal increases reinforced each other to produce very conspicuous divergence in the Lorenz curves for 1991 and 2006 (see Fig. 2). By this evaluation, the income distribution for GLSS 3 displays an obvious second order stochastic dominance over the distribution noted for GLSS 5. This implies a deterioration of the overall welfare of the population in GLSS 5, as against GLSS 3, which is particularly reinforced by the observed distribution of total income in GLSS 4 (Fig. 2).

Fig. 1: Lorenz Curve Representation of Changes in Overall Inequality, GLSS 4 & 5



Source: Authors' computation

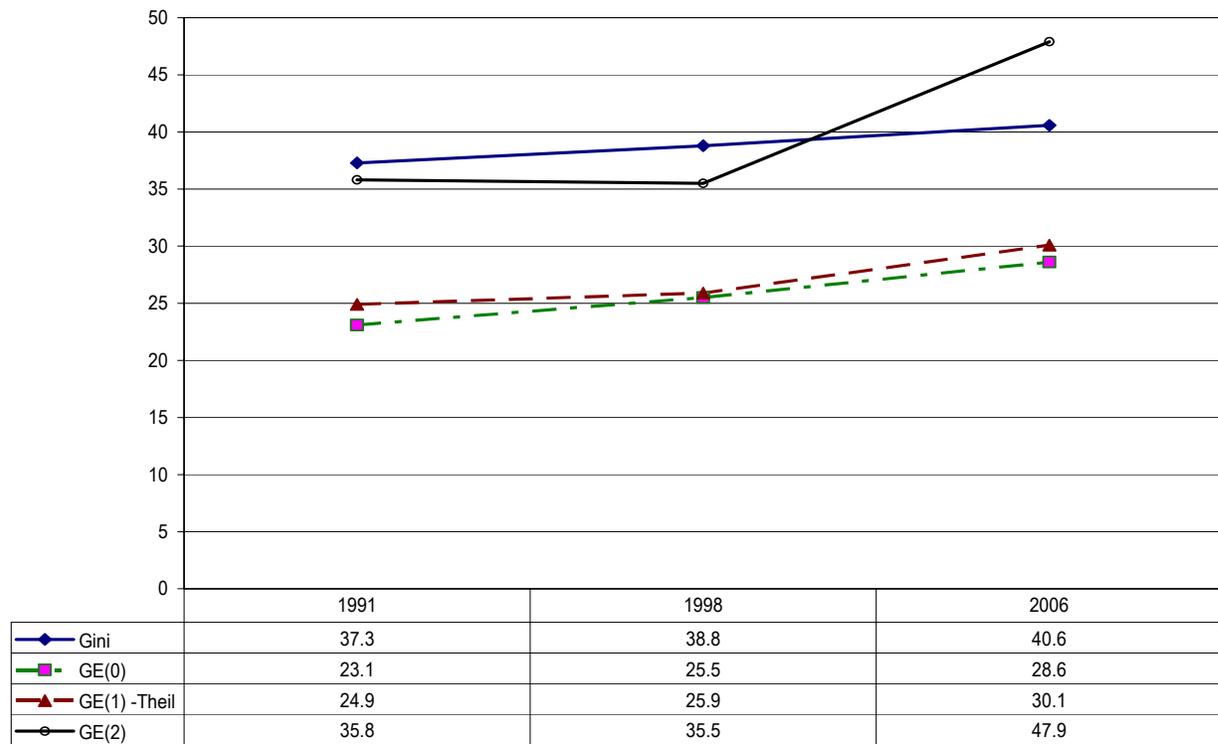
Fig. 2: Lorenz Curve Representation of Changes in Overall Inequality, GLSS 3 & 5



Source: Authors' computation

We give further meaning to the discussion above by discussing the Gini and the GE measures of income inequality. The trend of these estimates for the three survey years are presented in Figure 3, specifically the Gini coefficient, $GE(0)$ and $GE(1)$.

Fig. 3: The Trend in Income Inequality in Ghana, using Estimates from GLSS 3, 4 & 5



Source: Authors' computation

Consistent with the result from the generalized Lorenz Curves reported above, all three measures indicate increasing levels of overall income inequality in Ghana. Though the trend is established using only three data-points, an important attribute of the observed rise in inequality is the fact that the change is positive and steady for all years. Indeed, the trend observed for both GE indices reveal the steady deterioration in income inequality for all the three data points (years) but especially between GLSS 4 and 5. The latter observation demonstrate that while changes in income inequality might have been positive though marginal in the past, the phenomenon is actually worsening.

Expressed differently, the trend generated by the three inequality measures in Figure 3 suggest that disparities in household welfare appear to be fundamental and consistently contributing to increasing disproportional distribution of welfare. It could be argued further from the observed trend that over a period of about two decades since GLSS 3, no

(policy) influence has been able to generate any systematically dampening effect on the growing income disparity. Considered within the overall view of the country's development process (especially as related to the pursuit of the MDGs), the trend portend a development problem for Ghana. Could this be resulting from differences in development between regions, or even differences in development within the administrative regions of the country?

In developing a clearer perspective on the subject, we proceed further to decompose the GE index of inequality by administrative regions in Ghana. This is aimed simply at assessing the state of inter-regional and intra-regional inequalities, as the defining factors of overall income inequality. Given that the administrative regions in Ghana are constructed more from considerations of ethnic homogeneity than the other possible basis, this assessment is very relevant and would provide important inputs for development policy decision. The discussion would also suggest the merit in targeting intra-regional inequities in income distribution, as against the inter-regional focus that have dominated discussions in the past. Table 3 presents the results for the decomposed Generalized Entropy index, using sensitivity parameter values of 0, 1 and 2, though we focus on GE(1) or the Theil index for the present discussion.

Table 3: GE Decomposition of Inequality by Administrative Regions in Ghana, GLSS 3-5

	1991			1998			2006		
	<i>GE(0)</i>	<i>GE(1)</i>	<i>GE(2)</i>	<i>GE(0)</i>	<i>GE(1)</i>	<i>GE(2)</i>	<i>GE(0)</i>	<i>GE(1)</i>	<i>GE(2)</i>
Total Inequality	23.1	24.9	35.8	25.5	25.9	35.5	28.6	30.1	47.9
Western	17.2	19.0	26.1	17.4	19.8	33.8	20.7	22.7	31.7
Central	19.2	20.0	25.9	17.7	18.8	24.0	24.5	27.8	42.2
Greater Accra	20.5	22.3	31.2	14.9	15.8	21.6	28.2	32.3	57.5
Volta	17.4	19.2	26.8	20.1	19.8	23.6	19.1	20.6	26.8
Eastern	18.5	19.7	25.5	15.2	16.0	20.5	17.1	18.6	27.6
Ashanti	23.3	25.6	37.6	24.5	24.0	29.2	23.6	25.3	36.5
Brong Ahafo	19.8	22.4	32.2	18.3	19.0	24.2	21.0	21.7	27.9
Northern	27.6	28.5	42.3	24.7	29.1	48.9	26.7	27.2	35.7
Upper East	17.5	20.3	30.2	16.5	16.1	18.0	26.2	27.4	36.3
Upper West	19.7	19.5	22.7	16.1	17.6	23.0	29.1	36.0	75.6
Within Region	20.3	22.1	32.9	19.1	19.8	29.4	23.3	25.5	43.7
Between Region	2.8	2.8	2.9	6.4	6.1	6.2	5.3	4.6	4.2
Between Region (% of Total Inequality)	12.0	11.2	8.0	25.2	23.6	17.4	18.7	15.3	8.8

Source: Authors' computation

The analysis indicates that for development policy targeting, between-region income inequality is not as important as the within-region inequalities. Most importantly, though inter-regional differences contribute somewhat to total income inequality in Ghana, the size of this contribution is small compared with that of within-region inequalities. For instance, the contribution of between-region inequality to total inequality in GLSS 3 was only 11 percent. This increased to 24 percent in GLSS 4 but contracted to 15 percent in GLSS 5.

The implication of this finding is that, currently, any policy measure that corrects inter-regional inequality (by correcting the inequities in income distribution among households to the national mean income, without affecting income distribution within the regions) would succeed in removing just about 15 percent of total income inequalities in the country.

On the other hand, correcting inequalities within the administrative regions by equalizing incomes of households to the mean of that region's income would resolve over 80 percent of total economic inequities discussed earlier. Thus, contrary to any perception that differences in development between regions of the country underlie disparities in income distribution, the results of this study reveal intra-regional inequalities as being the primary driver of aggregate income inequalities in Ghana. Any policy decision on this growing problem should therefore target inequalities within the country's administrative regions. The proportion of overall inequality contributed by the inequalities between regions is generally small, though it does exist.

While this observation generally contends with longstanding arguments about disparities in inter-regional income distribution in Ghana, it provides an important opportunity for a re-evaluation of these arguments. In particular, past studies have employed regional analysis of disparities in socio-economic development indicators and little or no emphasis on the possible contribution from the inequalities within the regions. Could it be that development research and policy had all along been looking at the wrong place in

maintaining balanced distribution of income in the country? If so, then the present result reveals a dimension to the inequality discussion that has either not been broached or analysed in detail in the literature.

It is to be noted that this observation does not deny the existence of inter-regional economic inequalities. Indeed, considering the historical background to the formation of the various administrative regions in the country (as outlined earlier), it is true that the existence of even marginal inequality in income distribution between regions could be accentuated by the ethnic considerations underlying the formation of these administrative regions. To such possibilities, this result identifies intra-regional income inequalities as more of the problem and could be the better target for any policy action.

Regional Inequalities in Ghana: Using Other Socio-Economic Indices

The observed inequalities in income across regions, particularly the disparities between northern and southern Ghana, are also recognized using other socio-economic indices. Nevertheless, these socio-economic indices also reveal important within region inequalities, particularly the disparities between rural-urban areas. In short, to a large extent the observed regional income inequalities between and within regions are replicated taking other socio-economic indices into account (Songsore 2003a, 2003b).

A seminar work on regional inequalities by Dickson (1975) found a wide contrast in development between northern and southern Ghana, as well as between rural and urban areas within and between regions. Table 4 shows some socio-economic indices by administrative regions in the 1970s as revealed in Dickson (1975). The Table reveals that on the basis of the selected socio-economic indices the Greater Accra and the Ashanti Regions were ranked as the most developed with the rest of the administrative regions in southern Ghana, namely, Eastern, Central, Western, Volta and Brong-Ahafo Regions following in that order. Regions in northern Ghana which were then made of two regions, Northern and Upper Regions, were ranked as the least developed regions.

Table 4: Some Socio-economic Indices by Administrative Region, 1970s

Socio-economic Index	Region								
	Greater Accra	Eastern	Volta	Central	Western	Ashanti	Brong-Ahafo	Northern	Upper
Population Density per Sq. Mile (1970)	858	164	119	234	83	157	50	27	81
No. of Settlements of 5000 or more (1970)	8	32	15	22	14	17	19	8	3
Number of Secondary Schools (1972)	21	26	20	15	13	30	11	5	8
Population per Doctor in Government Hospital (in Thousands)	9.1	63.0	55.1	81.0	32.0	38.0	95.3	61.0	143.0
Percent of Regional Population Consuming Electricity	6.0	0.7	0.3	1.0	1.6	1.3	0.2	0.4	0.1
Gallons of Water per Head in 1969 (in Thousands)	11.6	0.5	0.4	1.1	2.1	1.2	0.2	0.4	0.1
Number of Manufacturing Industries	526	36	6	17	35	119	6	2	1
Length of Standard Road per 100 Sq. Miles	21.6	5.6	4.0	8.7	2.3	4.3	2.2	0.8	1.4
Overall Rank in Development	1	3	6	4	5	2	7	8	9

Source: Dickson (1975, p. 107).

Table 5 attempts to use similar socio-economic indices as captured in Dickson (1975) to assess the present level of development and inequalities among administrative regions in Ghana. The Table reveals that three decades after Dickson's work, little has changed by way of the rankings of the regions in terms of the broad contrast between northern and southern Ghana. Table 5 shows that the Greater Accra and Ashanti Regions continued to be the most developed region with the regions in northern Ghana, now made up of the Northern, Upper East and Upper West Regions (following the splitting up of the Upper Region into two in the 1980s) still ranked as the least developed regions. In southern Ghana, some changes have occurred in the ranking of

Table 5: Some Socio-economic Indices by Administrative Region, 2000s

Socio-economic Index	Region									
	Greater Accra	East-ern	Volta	Central	West-ern	Ashanti	Brong-Ahafo	North-ern	Upper East	Upper West
Level of urbanization (2000)	87.7	34.6	27.0	37.5	36.3	51.3	37.4	26.6	15.7	17.5
Access to Secondary school (2003)	63.4	47.1	39.4	52.1	35.1	56.1	34.2	21.5	7.9	17.5
Illiteracy rate (2000)	18.4	36.4	41.7	42.9	41.8	35.0	48.5	76.2	76.5	73.4
Population per Doctor (public/private) (2006)	3,706	19,125	20,720	24,178	22,413	7,169	24,337	63,614	28,670	44,317
Percent of Regional Population Consuming Electricity (2000)	54.7	36.0	32.8	45.0	49.4	50.5	40.5	33.5	30.0	31.0
Proportion of regional population with access to potable water (2006)	61.0	34.3	42.0	46.3	43.0	53.0	34.4	44.1	43.7	43.0
Number of Manufacturing Industries (2003)	6708	2975	1312	2498	1922	6440	1754	1232	839	408
Prop. of regional trunk road classified as good (2007)	83.0	53.7	47.5	69.6	62.5	70.8	54.0	59.0	46.9	23.0
Overall Rank in Development	1	5	7	3	4	2	6	8	9	10

Source: GSS (2005a): Population Data Analysis Report: Policy Implications of Population Trend Data, Vol. 2, Accra: GSS; GoG/NDPC (2007): Implementation of the GPRS 2006-2009: 2006 Annual Progress Report, Accra: GoG/NDPC; GSS (2006): 2003 National Industrial Census, Accra: GSS; GSS (2008): Statistical and Analytical Report: Transport Indicators Database Project, Accra: GSS/GoG.

the other regions besides the Greater Accra and Ashanti Regions. Two regions, the Eastern and Volta Regions have moved down the ranking: the Eastern Region is two places down from a third place in the 1970s to fifth place in the 2000s, while the Volta Region has moved from sixth to seventh. The other three regions in southern Ghana, Central, Western and Brong-Ahafo Regions have moved up one place from their ranking in the 1970s (see Tables 4 and 5). The decline in the ranking of the Eastern and Volta Regions may be due to improvements in the other regions as well as the declined of the cash crop agriculture (especially cocoa) of the two regions. Besides, in the case of the Eastern Region, the decline may partly be attributed to poor performance of diamond, and to some extent gold mining. The decline of cash crop (and mining in the case of the Eastern Region) partly account for the movement of large section of the population of the two regions to the urbanized Greater Accra Region in search of alternative economic opportunities (Agyei-Mensah and Owusu 2009).

Nevertheless, Table 5 shows that there has been significant improvement regarding the general population's access to basic social services such as potable water and electricity consumption in spite of the continued imbalances between regions. Shepherd *et al.* (2004) attribute this development to the influx of NGOs, especially in northern Ghana, which has resulted in significant attention being paid to donor priority areas of basic services provision. They, however, added that while this has improved human development, NGO engagement in northern Ghana has not resolved the economic roots and structural causes of poverty. In addition, the Core Welfare Indicator Survey (CWIQ) 2003 results show that compared to the other regions, it takes relatively longer time for residents of the three northern regions to access potable water, health and other social services (GSS 2005b). For instance, up to 38 percent of the residents of northern Ghana takes 15 or more minutes to access drinking water compared to less than 20 percent who use the same time to access the same facility in southern Ghana (ISSER/CEPA 2004). ISSER/CEPA (2004) adds that in the Northern and Upper East Regions close to 40 percent of the residents use more than 60 minutes to reach a health care facility, compared to less than 20 percent who use similar time in the other regions.

Table 6: Rural-Urban Differentials in Potable Water, Electricity and Illiteracy Level

Region	Potable water supply		Electricity consumption		Level of Illiteracy	
	Urban	Rural	Urban	Rural	Urban	Rural
Greater Accra	73.0	48.9	82.9	26.4	18.8	35.3
Eastern	18.0	50.5	66.1	15.8	21.7	35.7
Volta	35.0	48.6	47.6	18.0	29.0	40.3
Central	44.0	48.5	66.6	23.4	29.3	36.7
Western	44.0	41.8	78.1	20.7	27.1	41.4
Ashanti	43.0	63.1	81.7	19.2	27.5	39.5
Brong-Ahafo	17.0	51.7	68.0	13.0	31.3	48.7
Northern	30.0	58.1	61.6	5.4	52.2	80.0
Upper East	36.0	51.2	56.6	3.2	48.2	73.6
Upper West	12	67.2	60.2	2.9	43.7	75.6
National average	56.0	53.2	74.6	16.1	26.7	48.9

Source: GSS (2005a): Population Data Analysis Report: Policy Implications of Population Trend Data, Vol. 2, Accra: GSS; GoG/NDPC (2007): Implementation of the GPRS 2006-2009: 2006 Annual Progress

Similar to income inequalities among regions, the disparities regarding other socio-economic indices appear also to be very wide within regions, especially in the least developed regions of northern Ghana. We exemplify this observation with Table 6 which captures the rural-urban dichotomies of potable water supply, electricity consumption and illiteracy. With the exception of rural potable water supply which has seen significant government, donor and NGO supports (see Shepherd *et al.* 2004), rural Ghana does not compare favourably with urban Ghana regarding other socio-economic indices. Rural Ghana's seemingly favourable position in terms of water supply, especially in northern Ghana, is largely due to bore-hole water supply (ISSER/CEPA 2004). In all, differentials in socio-economic development between rural and urban areas is far wider in the regions of northern Ghana compared to southern Ghana (see Table 6).

Concluding Discussion and Policy Implications

It is widely acknowledged that in the thousand years before the beginning of any serious penetration of the African continent by Europeans, the basic social and spatial structure of Africa changed very little, especially the area south of the Sahara Desert. What altered this picture were European colonization and the introduction of Western economic enterprise and its market economy (Little 1974; Fage 1961; Kea 1982). In Ghana, the presence of Europeans unleashed a series of repercussions that have had far reaching consequences on the spatial distribution of economic activities in the country. More importantly, a combination of some political and economic factors that came into operation in the second half of the nineteenth century set the tone or basis of this development trend. These were the British attainment of hegemony of Ghana (then called Gold Coast); the introduction of modern mining techniques; the spread of cash or tree crops cultivation especially cocoa; and the improvement and linking of areas or regions with exploitable and exportable resources with transport infrastructure (Dickson 1971; 1975; Donkor 1997; Songsore 2003a). The effects of these factors were further acted upon by post-colonial development policies and strategies – thus, setting some regions ahead of others in terms of socio-economic development. Therefore, present regional inequalities in development in Ghana are a combination of colonial and post-colonial legacies.

According to Dickson (1971, 1975) and Songsore (2003a) contemporary regional inequalities in development in Ghana have their origins in the country's colonial legacy. However, these inequalities have been accentuated by post-colonial development policies and strategies. One cannot therefore understand contemporary inequalities in development without reference to the past. Bening (1999) has therefore argued that meaningful solutions of the current regional inequalities cannot ignore historical experience since the past is the key to the present just as contemporary developments are an indication of things to come in the immediate and foreseeable future.

It must, however, be stressed that awareness of spatial inequalities in socio-economic development in Ghana has long been recognised by various governments. Evidence exist that even before the end of colonial rule, the colonial administrators have recognised this problem, especially the underdevelopment of northern Ghana relative to southern Ghana (Dickson 1975). Subsequent post-colonial governments have also recognised and attempted to solve the regional as well as the rural-urban disparities through various direct and indirect policies and strategies. In spite of these efforts, regional inequalities still persist, and in some cases have widened across and within regions in Ghana (Shepherd *et al.* 2004).

Article 36 (clause 2d) of Ghana's Constitution places a binding obligation on government to promote an even and balanced development of all regions, as well as eliminate inequalities in development between rural and urban areas. It states specifically that government shall undertake:

“even and balanced development of all regions and every part of each region of Ghana, and, in particular, improving the conditions of life in the rural areas, and generally, redressing any imbalance in development between the rural and the urban areas.”

The constitutional obligation on government to resolve or address disparities in regional development in Ghana is a recognition of the limitations of neo-classical economic theories in regional development which states that socio-economic and spatial inequalities between regions are merely short-term disequilibria that arise from structural factors (Hirschmann 1958). Consequently, these models assumed that inequalities created between the rich and poor, and between prosperous and depressed areas would melt away over time (Konadu-Agyemang 2001). Therefore, government attempts to reduce inequalities are falsification of this neoclassical economic models, and an endorsement or recommendation for government intervention to restore spatial disequilibria.

On the other hand, the failure of government's development efforts over the years to address regional inequalities suggests the reinforcement of Myrdal's regional development theory of cumulative causation which states that once a centre or region moves ahead of others, it will continue to grow due to its attraction of new socio-economic investments and people (Myrdal 1957). In contrast to Myrdal, Hirschman (1958) postulates that the forces of concentration (or polarization) are inevitable and fundamental to the process of growth and development. However, in the long-run a state of equilibrium and equalization would result from a spontaneous trickle-down process that aids the development of all regions. The clear policy implication of Hirschman's thesis is that governments should not intervene to reduce inequalities, for at some juncture in the future, there will occur a spontaneous spin-off of growth from the 'developed' regions to 'backward' or 'less developed' regions (Potter and Lloyd-Evans 1998). However, historical evidence from Ghana seems to support Myrdal's thesis because the principal centres (regions) of southern Ghana which emerged during the colonial period as the 'developed' region have continued to thrive during post-colonial period because of the continue attraction of these regions to direct and indirect state and private investments relative to northern Ghana.

Even though this study indicates that intra-regional inequalities are more significant than inter-regional inequalities, the state to a large extent has focused on the former. The reasons for this situation may be due to politics than economics, especially given the

extent to which regional agitations for equal distribution of national resources have resulted in conflicts across the African continent, particularly West Africa. Here, the case of Cote d'Ivoire whose civil war had a key dimension related to a geographical (North/South/West) divide – a country with comparable economy and geography to that of Ghana. Though regions and other spatial units felt marginalized in Ghana have voiced their anger and frustrations, these are yet to result in explosive situations. In recent years, a group calling itself BONABOTO (Bolgatanga, Nangodi, Bongo and Tongo (all in the Upper West Region), and claiming to represent the three northern regions has consistently called on the state to implement meaningful policies and strategies to address the inequalities in development between northern and southern Ghana.⁵ The call from groups such as BONABOTO for equitable regional development is a reminder to policy-makers and researchers of the possible consequences of continually neglect of some regions in national development.

The policy choices for government's regional development policies and strategies are not clear-cut, particularly under the current economic orthodoxy of market liberalization and globalization. This is because markets tend to accentuate or increase rather than decrease regional inequalities (Myrdal 1957; Songsore 2003a; Shepherd *et al.* 2004). However, a strong counter argument has been made that regional development and planning have been given little consideration and attention, and sidelined in much of the developing world (including Ghana), more especially under the period of structural adjustment and economic reforms (UNFPA 2007). The argument forcefully made here is that an invisible hand will not resolve the challenges of regional inequalities and other regional development issues. Developing countries like Ghana would have to revive their urban and regional development planning functions which have been put on the back burner.

The regional imbalance in development has impacted on the level and distribution of urban centres in Ghana. The most developed regions in Ghana, namely the Greater Accra and Ashanti Regions, are also the most urbanized regions. On the other hand, the least developed regions in northern Ghana are also the least urbanized regions in the country.

⁵ See www.ghanaweb.com, General News, Accessed on January 8, 2002

With the exception of Tamale (Ghana's fourth largest city), all the key urban centres are located in southern Ghana. The relationship between urbanization and economic development has been well-established. Cities concentrate economic activities and wealth. To get a share of this wealth, people would have to live close by – migrating to these centres to reduce their distance to economic opportunity. Therefore, people move to cities to take advantage of economic density. The World Development Report 2009 argues that some places are doing well because they have promoted transformations along the three dimensions of economic geography: higher densities as seen in cities; shorter distances as workers and businesses migrate to higher densities (cities) and; fewer divisions as countries via their cities through globalization enter world markets to take advantage of scale and specialization. The differential regional levels of urbanization and regional development in Ghana reflect the tendencies outlined in the World Development Report 2009 (World Bank 2009). Northern Ghana with relatively very limited densities (cities), and located relatively further away from the centres of densities, seems to perform poorly compared to southern Ghana.

The development history of Ghana and other countries suggests that to a large extent the level of development of regions depend to some degree on their natural endowments and their history, and perhaps even on luck. However, these factors shaping regional development depend much more on the policies that are put in place, because policy reform at the international, national and sub-national level can initiate large and lasting changes in economic geography. The implication for welfare and development of regions is that some people, because of their location, will always benefit much more than others. Nevertheless, there is a role for government to facilitate or ameliorate these responses, to the extent that these adjustments are either not automatic or have large associated welfare costs. This is because as Thomi (2000, p. 229) argues, the state in general can be regarded as a regulatory framework for a given territory and its population in order to secure, control, and utilize the natural and human resources of its area of jurisdiction for the sake of the overall national well-being, or for other reasons. In other words, national sector policies (whether positive or negative, implicit or explicit) have a great impact on the development of all regions.

The way for the state to facilitate the process of uneven and unbalance regional growth, and at the same time promote inclusive development is to promote economic integration both within and across regions in Ghana for effective resource exploitation and utilization. This requires, more specifically, improvement in public services in all regions, and linking lagging and developing regions with infrastructure (especially transportation) both within and between regions as critical levers of private sector investment and economic growth. This study has shown that inequalities exist between regions, but are even wider within regions. The policy response should aim at addressing both inequalities within and between regions.

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