The Urban Transition in Ghana: Urbanization, National development and Poverty Reduction

Jacob Songsore
Department of Geography and Resource Development
University of Ghana
Legon-Accra, Ghana

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Ghana's urbanization in the African and Global Context

The first point to note is that the intensive urbanization of the industrial nations which occurred in the past is currently underway in developing countries. Although the rate of urbanization in the developing world is proceeding at a fairly comparable rate as what pertained in the industrial nations in the heyday of their rapid urbanization, the rate of population growth of cities in developing countries is rather unprecedented (Songsore, 2003a; Davis, 1967; Satterthwaite, 1996; Preston, 1979). In 2008, for the first time, more than half of the world's population, 3.3 billion people, were living in urban areas. This number is projected to increase to some 5 billion by 2030 (UNFPA, 2007: 1; UN-HABITAT, 2008a). "Over 80 per cent of this growth will accrue to Asia and Africa, with most of the rest to Latin America" (Martine et al, 2008:1).

Much of this urban population is concentrated in Asia and Latin America which have a good number of mega-cities which are increasingly integrated into functional networks of economic linkages with global or core cities (Rakodi, 1997: 52). Between 2000 and 2030, while Asia's urban population of 1.36 billion will almost double to 2.64 billion, that of Africa which is far smaller will more than double from 294 to 742 million if the impact of HIV/AIDS can be held in check. At this rate, by 2030 seven out of every ten urban inhabitants of the globe will be from Asia and Africa (Martine et al., 2008: 5). By 2050, Asia will host 63 per cent of the global urban population, or 3.3 billion people; Africa will have an urban population of 1.2 billion, or nearly a quarter of the world's urban population. Altogether, 95 per cent of the world's urban population growth over the next four decades will be absorbed by cities in developing countries' (UN-HABITAT, 2008a: 15).

Table 1. Percentage of Total Population that is Urban, 1950-2010

Region	1950	1965	1980	1995	2010*
Africa	14.6	20.7	27.3	34.9	43.6
	17.4	22.4	26.7	34.7	43.6
Asia	41.4	53.4	64.9	73.4	78.6
Latin America and the Caribbean					
Rest of the World **	55.3	64.1	70.5	74.2	78.0

**Projected. Rest of the World includes all countries in Europe, Northern America and Oceania.

Source: Drawn from figures in United Nations, 1998, World Urbanization Prospects: the 1996 Revision (Population Division, New York).

As illustrated in Table 1, Africa is currently rated among the least urbanized regions of the world and has hardly any of its mega-cities, although its process of urbanization is very rapid (UNCHS (Habitat,1996: 13). Until independence in the 1960's, European colonial powers deliberately kept down the populations of urban centres by imposing restrictions on migrations of the indigenous African population to the towns (Satterthwaite, 1996). As a result, Africa is only in the early phases of its urban transition. With a 3.3 per cent growth rate per year between 2000 and 2005, the rate of change of Africa's urban population is currently the highest in the world. With growth rates of 4.02 for West and Central Africa, and 4.05 for East Africa, these are the fastest growing regions in Africa (UN-HABITAT, 2008b: 4). The percentage share of the total urban population in West Africa in 2007, which was 41.75, was well above the average of 38.70 for the continent, while that of East Africa, which was 20.48, made the region the least urbanized in Africa (UN-HABITAT, 2008b: 4).

It is however the belief that Africa, with its relatively rapid rate of urbanization, will in future also be part of what Toynbee has called the 'world city' or 'ecumenopolis', according to Doxiadis, with the majority of the world's population living in a network of urban centres (Songsore, 2000a). Whereas in 1995 only about 35 per cent of all Africans were urban dwellers as shown in Table 1, it is projected that by 2030 Africa may reach the milestone of having half of its population living in urban settlements and with a total population of 749 million people (UN-HABITAT, 2008b). Africa's urbanization is approaching a demographic inflection point as a result of the projected sharp rise in the urban population (Kessides, 2006: xiv).

Africa presents a particularly poignant example of the problems involved, as it has the fastest population and urban growth in the world as well as the lowest economic development and growth among the poorest countries, especially in Tropical Africa (Clarke, 1993:

260). The driving forces behind the rapid urbanization in Africa today are a combination of rural-urban migration and natural increase within towns and cities themselves. This is worsened in some regions by forced migrations precipitated by various stresses including ethnic conflicts, wars, droughts and famine (Potts, 1997). As a result of the profound impact of the effects of war or widespread civil strife, some analysts now talk in terms of 'destabilization-driven urbanization' (Swilling, 1994: 288; Woube and Sjöberg, 1999). Africa's urbanization has therefore been termed demographic urbanization rather than economic urbanization because it is not driven by radical transformations in agricultural productivity and industrialization (Escallier, 1988: 179; Clarke, 1993: 265; Gould 1998: 175; Songsore, 2003a: 2).

This overall trajectory of urban evolution in Africa would seem to be a valid paradigm underpinning the urbanization process in Ghana, as urbanization has generally occurred without development, that is, the transformation of the production structure through industrialization and agricultural modernization. This fundamental disconnect is the major difference between the urban experience in Africa and other regions in the North or the Newly Industrializing Countries.

Objectives of Study

This demonstrative country study on urbanization is part of a broader study of five major developing regions. The thrust of this study is to provide an understanding of the scale and nature of urban population change and the interconnections between urban development and demographic, economic, social and political processes and contributors to this change in Ghana. The study is aimed at helping clarify rural-urban linkages, evaluate policies, remove obstacles and biases, and clear the way for more proactive approaches towards upcoming urban growth. The case studies will serve as blueprints for the subsequent promotion of analogous studies in other developing countries, in a second stage that will be carried out under the auspices of UNFPA's country offices.

- First, it provides detailed statistics about the scale and nature of the urban population change and the demographic, social, economic, and political causes and contributors to this change;
- Second, it attempts to draw a link between urbanization and national or regional development historically and in the contemporary period of crisis and restructuring of the national space economy;
- Finally, by way of conclusion, it gives a highlight of some necessary conditions which ought to be addressed to promote a viable urban future and an all inclusive, balanced national development in Ghana.

The Urban Transition Process in Ghana

The Broad Picture of Demographic and Urban Change in Ghana

Consistent with observed trends in the rest of Africa, Ghana's population is becoming increasingly urbanized. The census or statistical definition of an urban centre in Ghana is any settlement with a population of 5,000 or more persons. Today, more than four out of every ten Ghanaians live in a city or town of more than 5,000 people. "If current trends continue, by the year 2020 more than half of all Ghanaians will live in urban areas" (Nabila, 1988: 1). Whereas only 9.4 per cent of the total population lived in urban settlements in 1931, this population shifted to 13 per cent in 1948, 23 per cent in 1960, 28.9 per cent in 1970, 31.3 per cent in 1984 and 43.9 per cent in 2000. To put it differently, by 1984, the number of urban settlements had increased nearly nine fold from 41 in 1948 to 364 in 2000, whilst the associated population increased nearly fifteen fold from 570,597 persons in 1948 to 8,278,636 persons in 2000 (Table 2).

Table 2. Growth in Number of Urban Settlements and Urban Population, 1948 to 2000

Year	No. of Settlements	Population
1948	41	570,597
1960	98	1,551,174
1970	135	2,472,456
1984	203	3,938,614
2000	364	8,278,636

Source: Ghana Statistical Service, April 1995, Vol. 2, p.20; 2001;2002.

This rising trend in urbanization has been driven by the following demographic processes:

- rural-urban migration;
- natural increase in towns and cities; and
- re-classification as villages grow into towns once they attain the threshold population of 5000 or more persons which is the census definition of an urban centre in Ghana.

The growth in the large number of urban places over the years would seem to suggest that re-classification is quite significant even though the two dominant elements driving the urbanization process have been rural-urban migration and natural increase within the towns and cities themselves. In the period 1948 to 1960, about 98% of the urban growth was caused by migration from rural areas. This is not surprising, as this period coincided with the post-war economic boom and the efforts by the new post-independence government from 1957 onwards to initiate a major urban industrial development and the provision of social infrastructure for the population using the urban places as the

growth nodes. This period also saw the mass influx of immigrants from other African countries into especially mining towns and the areas of cocoa production in Southern Ghana (Benneh et al,1990: 39).

The share of rural-urban migration to the growth of the urban population dropped to just over 54% in the period 1960 to 1970. Again, following the economic crisis of the late 1970s and early 1980s with its devastating effect on urban real incomes, net internal migration to the towns and cities shrank to a mere 18% of urban growth during 1970-1984 (Benneh et.al, 1990: 39). Similar conclusions have been drawn from the evidence of other African countries (Simon, 1997). The 'vanishing rural-urban gap' in living conditions between the urban and rural poor under severe economic collapse and structural adjustment and the mass emigration of Ghanaians or in some cases return migration to the rural areas explain this collapse in the share of rural-urban migration to urban growth (Jamal and Weeks, 1988; 1993: Potts, 1997).

This initial mass movement to the towns in Ghana did not result in an absolute decline in the rural population which has continued to increase in absolute terms. For example, the rural population increased from about 5 million in 1960 to about 6 million in 1970, reaching almost 8.4 million in 1984 out of a total population of about 12.3 million. Thus, whereas the rural population increased by about 15 per cent between 1960 and 1970, the intercensal increase between 1970 and 1984 was about 27 per cent reflecting an acceleration of rural population growth. The higher percentage increase between 1970 and 1984 could partly be attributed to return migration of the growing poor from the towns as living conditions deteriorated and the decline in level of migration to the cities as a result of the urban crisis. It should however be recognised that part of the difference is due to varying duration of the intercensal intervals. The rural population now stands at over 10.5 million in 2000 at the last census count reflecting a 25 per cent increase which is lower than that of the earlier period. It relates in part to the restoration of the urban economies after over 25 years of consistent positive GDP growth which has privileged the urban sector.

It is therefore valid to assert that natural increase has been a significant factor in the overall growth of population in both urban and rural areas, especially after independence when migration to the towns was becoming more long-term with wives accompanying husbands. Indeed, the average population growth rate in Ghana, for the period 1948-1960, was 4.2 per cent per annum. This, however, was affected by net immigration from other West African countries, notably Nigeria, Burkina Faso, Togo and Mali, given the economic boom the country experienced and Nkrumah's pan-Africanist dream which was generally supportive of these migratory waves. By contrast, between 1960 and 1970, the average growth rate declined to 2.4 per cent per annum, thereafter rising slightly to 2.6 per cent in the 1970 to1984 period (Ghana Statistical Service, 1995: 2).

It is important to emphasise that both the 1970 and 1984 population censuses do not seem to have given a correct picture of actual population dynamics because of the effects of emigration. For example, in 1960, between 10 and 12 per cent of the population in Ghana was foreign, largely from other West African countries. Following economic difficulties in the late 1960s, which partly explain the overthrow of the Nkrumah regime in 1966, the era of 'each one his brother's keeper' under Nkrumah gave way to a new policy doctrine of 'each one for himself and God for us all' in interstate relations. The successor civilian regime of Busia's Progress Party instituted an 'Aliens Compliance Order' just before the 1970 population census, leading to the mass expulsion of aliens from the West African sub-region, most of whom lacked valid residence permits. This must have influenced the rather sharp decline in growth rate in 1970.

This singular act continued to affect the electoral fortunes of successive offshoots of the then Progress Party in zongos or strangers' quarters within the most populous cities of Accra and Kumasi, notwithstanding the ECOWAS protocol which now allows free movement of West African citizens in the ECOWAS region. This handicap was rectified by the promotion of Nasara Clubs in these communities by the New Patriotic Party before the 2000 elections and this enhanced their electoral fortunes in these communities to the chagrin of the National Democratic Congress. The zongos are ethnic enclaves with a predominantly West African immigrant population, some of whom came to present-day Ghana in the pre-colonial era along Trans-Saharan Trade routes before the country's borders were defined in the colonial scramble for Africa.

Ghana suffered further economic stagnation and decline from mid-1970 to 1983. The new regional growth pole was Nigeria and to some extent Cote d'Ivoire. Following the oil boom in Nigeria in the 1970s, it had become the turn of Ghanaians to emigrate in mass waves to especially Nigeria and Cote d'Ivoire. Even though over one million illegal Ghanaians were later expelled from Nigeria following a recession in the economy just before the 1984 population census, it is believed many more Ghanaians still live and work outside Ghana. The population growth rates of 2.4 per cent per annum between 1960 and1970 and 2.6 per cent per annum between 1970 and1984 would seem to be on the lower side because of these international emigration waves, one forced and the other voluntary. For the above reasons, demographers have argued that the post 1984 population growth rate per annum lies around 3 per cent (Ghana Statistical Service, 1995: 2). The actual population growth rate between 1984 and 2000 is 2.6 per cent per annum.

As a result of this overall high population growth rate, urbanization, which is defined as the relative share of the total population is not proceeding as fast as one would expect because of the sheer weight of natural increase in especially the rural areas. The urban growth rate in 1984 was 3.3 per cent, 1 per cent higher than the rural growth rate of 2.3

per cent, because of net out-migration from the rural areas. At the growth rate of 2.3 per cent, the rural population will double itself in the next 30 years. Ghana is therefore a long way from the Western experience of rising urbanization going hand-in-hand with declines in the absolute numbers of people living in rural areas, raising a spectre of the implications of urban change for rural development and the transformation of peasant agriculture through mechanization and technical innovation.

Regional Trends in Total Urban Population

In terms of comparison by administrative region within Ghana, the greatest contrast is between the Greater Accra Region and the Ashanti Region, on the one hand, and the other regions, on the other. The Greater Accra region is the most urbanized with as much as 87.4 per cent of its total population living in urban centres – principally clustered within the Greater Accra Metropolitan Area where Accra and Tema provide the main nuclei within the metropolitan complex (Table 3). This is followed by Ashanti Region with 53.2 per cent of the population living in urban settlements dominated by Kumasi, the second largest metropolitan agglomeration after the Greater Accra Metropolitan Area. All other regions had urbanization levels that fell below the national average of 43.9 per cent. The table further shows that Brong Ahafo, Central, Western and Eastern regions are the next batch with between 34 per cent and 37 per cent of their populations living in urban areas. The least urbanized regions are the poorest regions in Ghana, namely the Upper West (17.5) and the Upper East (15.1) (see also Fig.1).

Table 3: Urban Population as a Percentage of Total Population by Region: 1960, 1970, 1984, 2000

Regions	1960	1970	1984	2000
All Regions	23.0	28.9	31.3	43.9
Western	24.7	27.6	22.8	34.9
Central	28.0	28.5	26.5	37.1
Greater Accra	78.8	85.3	83.5	87.4
Eastern	20.2	24.6	26.7	34.7
Volta	13.2	16.0	20.7	26.6
Ashanti	25.0	29.7	32.1	53.2
Brong Ahafo	15.6	22.1	26.6	37.4
Northern	13.0	21.2	24.7	27.0
Upper West	5.0	6.7	10.8	17.5
Upper East	3.9	5.8	8.5	15.1

Source: 1984 Population Census of Ghana, Preliminary Report, p. 58; 2000 Population & Housing Census, Ghana Statistical Service, Dec. 2001, Table 1.

One other striking feature is the slight de-urbanization which was experienced for some regions between 1970 and 1984, in contrast to the periods from 1960 to 1970 and 1984 to 2000 during which all regions experienced increased urbanization. The Western, Central and Greater Accra regions were those which suffered a drop in levels of urbanization as a result of economic decline in their urban areas, and in some cases return migration to rural areas from the urban centres (Benneh et. al. 1990, p.119; Gyamfi, 1989, p.20). For example, in the Western Region, Samreboi's population fell from 7,151 in 1970 to 4,514 in 1984 and Awaaso's fell from 5,449 in 1970 to 3,548 in 1984. Even the city of Sekondi-Takoradi lost population, declining from 160,868to 117,196 people between 1970 and 1984. Some urban settlements were therefore reclassified as rural settlements because they fell below the 5000 population threshold in 1984. For the Western Region, this was occurring at a time of positive net migration rate of 6.6 per cent with an intercensal population growth rate of 3 per cent per annum (Benneh et.al, 1990: 119). This suggests that a lot of the migration was rural-rural migration and in some cases urban-rural migration, especially to the pioneer cocoa frontier area of Wassa Amenfi and away from mining towns which were the most impacted by the economic decline.

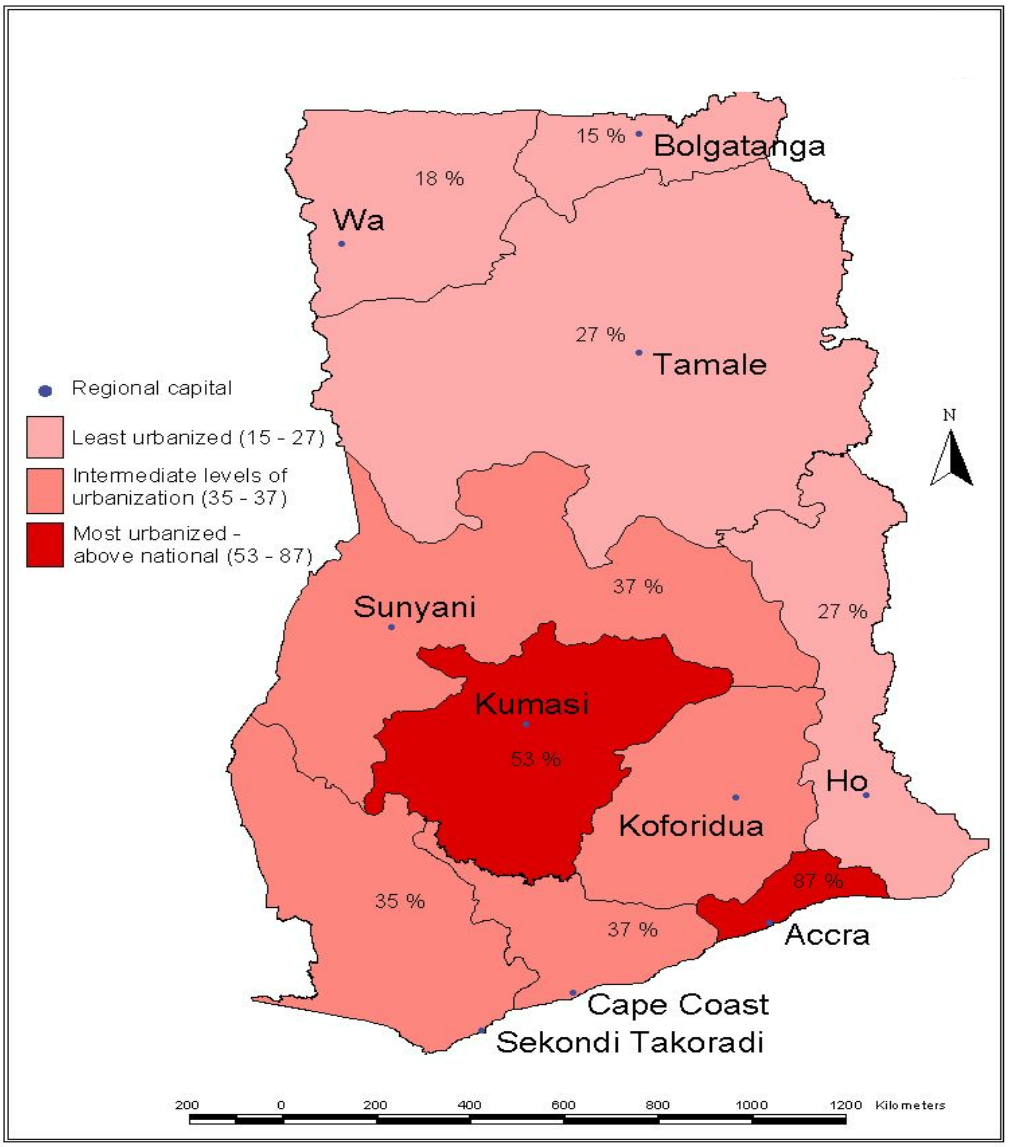

Fig 1. Urban Population as a Percentage of total Population

The slight drop for the Greater Accra Region could be explained by the declining perception of the metropolitan area as a destination for migrants and the outward flow of emigrants from the Greater Accra Metropolitan Area, the largest urban agglomeration in the region, to other West African countries, especially Nigeria, between 1973 and 1983. There was hardly any extended family in the metropolis that remained untouched by this outward flow to the high wage regional growth pole of oil rich Nigeria. Even so, the Greater Accra Metropolitan Area still stood as a high pole of attraction of internal migrants from

other regions in Ghana, with a net migration rate of 24.3% for the metropolis (Benneh et. al. 1990). Most of these simply used the metropolis as a staging post for emigration, as a passport for travel could only be processed in Accra. As a result, the rural population of the region must have increased faster than the urban population, in part also due to urban sprawl and suburbanization which was not captured within the old corporate boundary of the city.

Brong Ahafo and Northern regions experienced positive net migration rates of 13.7 per cent and 16.4 per cent respectively. This reflects the improved terms of trade for food producing regions during the crisis between 1970 and 1984 when the barter terms of trade moved in favour of food producers as against cash crops and urban minimum wage earners (Jamel and Weeks, 1993, p. 105). The two regions are the emerging food baskets in Ghana where new agricultural frontiers provide higher than average yields per hectare. The principal food crops produced in Brong Ahafo Region include plantain, cassava, maize, cocoyam and yam. For the Northern Region, the major food crops of national importance include yam, rice, groundnuts and sorghum. Both their rural and urban settlements would have gained from this net migration rate, as both regions experienced increases in their levels of urbanization. Apart from the Greater Accra, Northern, Brong Ahafo and Western regions, all others experienced negative net migration rates, with the most extreme cases being Volta (-15.8%), Central (-15.4%) and Eastern (-10.5%) regions (Benneh et.al. 1990: 119, Gyamfi, 1989: 20). Urbanization trends nevertheless remained positive for both the Volta and Eastern regions, suggesting that there was net loss from the rural areas.

One can argue that even though the regional trends in urbanization have shown some volatility during periods of economic crisis, the pattern overall has been dominated by the pre-eminence of Greater Accra and Ashanti regions, which over the period have experienced above average levels of urbanization for the country. For most other regions, it is valid to assert that Ghana is still a country of villagers, with the experience between 1970 and 1984 suggesting that for some regions, the urbanization process is not necessarily irreversible, especially under great external shocks to the urban economy that could trigger a retreat to the self-provisioning of the village. The recovery of the national economy from 1984 onwards has induced a recovery and an increase in levels of urbanization between 1984 and 2000 for all regions, as shown in Fig.2.

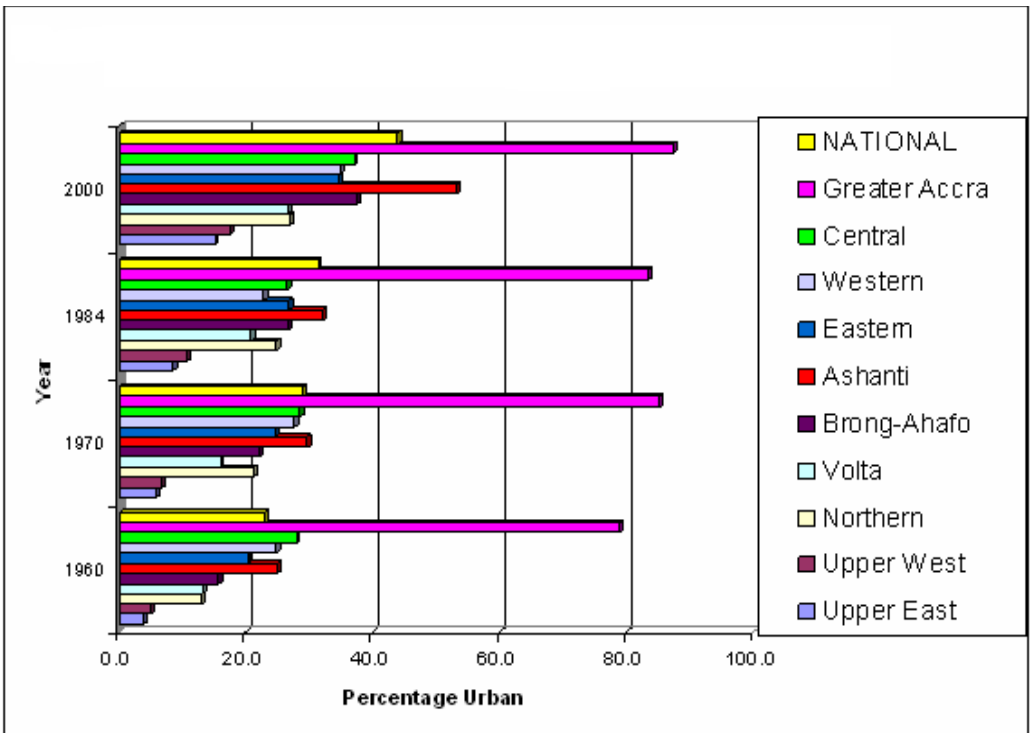

Fig 2 Regional Urbanization Trends (1960)

Growth Trends within the Hierarchy of Urban Settlements

Having articulated broad regional trends, it is also important to attempt an analysis of the evolving urban system in Ghana. It is often argued that the urban systems in the Third World are characterised by urban primacy in which there is a disproportion in size between the largest city or the first few large cities and the rest of the urban system (Jefferson, 1939; Shakks, 1972; Berry, 1971). This is often contrasted with a rank-size or lognormal distribution of cities which is considered more consistent with the well developed systems as found in most advanced industrialized societies (Zipf, 1941; 1949; Duncan, 1957). Of late, Vapnarsky has also associated primacy and lognormality with the degree of closure and interconnection within a national space-economy (Vapnarsky, 1969). The extraverted and poorly integrated economies of the Third World are characterised by primate distributions whilst the autocentric and internally integrated economies of central capitalism are characterized by lognormal distributions of their urban systems.

Table 4. Population Growth in 4 Largest Towns, 1960, 1970, 1980

				Annual Growth Rates	
Town	1960	1970	1984	1960-70	1970-84
Accra-Tema Metropolitan Area*	415,523	738,498	1,160,112	5.8	3.2
Kumasi City Council**	218,172	345,117	401,934	4.6	1.1
Sekondi-Takoradi City Council**	123,313	160,868	117,196	2.7	-2.3
Tamale	40,443	83,653	135,952	7.3	3.5

Source: Derived from 1960, 1970 Census Reports on Large Towns and 1984 Population Data

* Accra-Tema includes: Accra District and Tema District

** 1984 data for Kumasi and Sekondi-Takoradi not disaggregated with the possibility that different boundaries were used other than the 1960 and 1970 boundaries. Kumasi 1984 figures include old and new town – a settlement set apart from Kumasi in the census data.

Table 4 shows the population distribution of the top 4 urban centres in Ghana. The 1960 population of Accra-Tema Metropolitan Area was slightly less than double that of Kumasi. By 1984, Accra-Tema Metropolitan Area had almost three times the population of Kumasi, the second largest city. It therefore grew at a disproportionate rate in relation to Kumasi. Even so, Kumasi in turn is growing faster than Sekondi-Takoradi if one considers the population within their respective city council boundaries. Whilst Kumasi had less than twice the population of Sekondi-Takoradi in 1960, it had more than doubled the population of Sekondi-Takoradi in 1970 and had more than tripled it in 1984. Actually there was a –27.4 per cent decline in the population of Sekondi-Takoradi in 1984. Accra-Tema, Kumasi and Sekondi-Takoradi collectively define the industrial core region of Ghana.

The growth of Tamale in the poor, depressed northern savannah belt is a special case. The phenomenal growth of this regional service centre for the entire Northern Ghana meant that it ranked as the third largest centre in the country in 1984, outstripping the position held by Sekondi-Takoradi in 1970. Its growth was much faster in both intercensal periods than any other centre listed in Table 4. This growth was spurred on because of the large-scale rice cultivation in its catchment area which fed into its growth process because it served as a centre for agro-processing and provided vital services to the rice industry. This expansion in rice cultivation ended abruptly in the early 1980's with the onset of the 1981 ``revolution'' which saw the driving into exile of the emerging capitalist rice producers and the partial destruction of their agricultural equipment. Rice production in the catchment area further declined, especially after the removal of agricultural input

subsidies from 1983 with the adoption of the Structural Adjustment Programme imposed by the IMF. By 1990, all fertilizer subsidies were eliminated. This led to a rapid rise in prices of fertilizers and a consequent fall in consumption (Hutchful 1996). At the same time, liberalization of rice imports discouraged domestic production under structural adjustment (Songsore,1992a; Songsore and Denkabe,1995; Songsore et al, 2001).

The three industrial cities mentioned earlier, when considered as a functional unit – the national industrial core – accounted for 43.46 per cent of the total urban population in 1960, and this rose to 50.33 per cent in 1970, only to drop to 42.68 per cent in 1984 (Table 5). This trend of a rise and then a stagnation was slightly experienced in other regional administrative capitals taken as a group.

Overall, between 1984 and 2000, the growth rates of the metropolitan areas of the industrial core region have recovered, with annual growth rates of 4.6 per cent, 6.7 per cent, 7.1 per cent for Greater Accra Metropolitan Area, Kumasi Metropolitan Area and Sekondi-Takoradi Metropolitan Area, respectively. This has reflected in a recovery of the relative share of the total urban population located in the industrial core region to 51 per cent of the urban population. With this recovery, Sekondi-Takoradi had overtaken Tamale in size in the year 2000. This was the result of economic recovery in the large cities during the period.

Table 5: Urban Population Growth Trends 1960, 1970, 1984 for Different Size Clusters of Towns.

	1960		1970		1984	
Size Cluster	Total	%	Total	%	Total	%
Industrial Core*	674,138	43.46	1,244,483	50.33	1,679,242	42.68
Other Regional Capitals	105,628	6.81	248,416	10.05	397,080	10.09
Other Major Towns 10,000+	365,028	23.53	550,061	22.25	1,002,611	25.48
Small Centres 5,000 to 9,999	406,380	26.20	429,496	17.37	855,863	21.75
Total	1,551,174	100.00	2,472,456	100.00	3,934,796	100.00

*Industrial core – Accra-Tema, Sekondi-Takoradi, and Kumasi

The rapid industrialization of the '60s up to the '70s was largely concentrated in the industrial core, and within it the Accra-Tema Metropolitan Area had a clear advantage over Kumasi and Sekondi-Takoradi. Together, they accounted for over 80 per cent of the total number of industrial establishments and industrial labour force and over 90 per cent of the value added. Even so, Accra-Tema alone accounted for more than 50 per cent of the labour force and value added in industry (Berkoh, 1976; Dickson, 1974).

Accra-Tema, in addition to being the administrative capital of Ghana, is also the most important industrial centre since the opening of the modern industrial township of Tema in 1962. It is also the commercial, cultural and financial centre of the country (Berkoh 1975). Hence, functionally it also exhibits all the traits of a primate city (Berkoh, 1975: 88; Caldwell, 1969).

Although most migrants might initially have been attracted by the prospect of employment in the formal sector, it will be naive to presuppose that the limited absorptive capacity of labour in the modern sector of the urban economy could on its own explain these processes of urbanization. It is rather the involutionary potential of the indigenous, informal or petty-commodity sector which to a large extent explains the rapid population growth rates of the large towns (Sandbrook & Arn, 1977; Santos, 1979; Hart, 1973). The 2000 Census result shows that over 80 per cent of the country's employed labour force is concentrated in the private informal sector. Even for the highly urbanized Greater Accra Region, this amounts to 67 per cent.

Urban Sprawl in the Greater Accra Metropolitan Area (GAMA)

General Trends

In recognition of their size and complexity, Accra, Kumasi and Sekondi-Takoradi have from 1988 been designated as metropolitan areas. Tema, which is part of the Greater Accra Metropolitan Area, and Tamale have also been designated as metropolitan areas. For lack of up-to-date information, a more detailed discussion of intra-metropolitan growth dynamics will be restricted to Accra –the national capital where detailed studies have unravelled the nature of intra-urban change. Consistent with general trends mentioned above for the Greater Accra Region where the Greater Accra Metropolitan Area accounts for almost the entire urban population, "the contribution of net-migration was highest for the 1948-1960 and 1960-1970 periods, with figures of 97.7 per cent and 66.1 per cent respectively. The contributions of natural increase was however higher than net-migration for 1970-84; 82.6 per cent and 17.4 per cent for natural increase and net migration respectively" (Benneh et.al., 1990: 35).

Even though these trends are valid, part of the decline was due to the fact that by 1984 the metropolitan regions of Accra, Kumasi and Sekondi-Takoradi were under-bounded, thereby failing to capture segments of the metropolitan populations lying outside their corporate boundaries. In other words, the corporate boundaries of these cities were not consistent with the actual urbanized areas arising from urban sprawl. The population figures presented in Table 4 only refer to the population lying within the statutory boundaries as defined politically and for planning purposes. The persistent use of an under-bounded political boundary could lead to an under-estimation of the population

of a metropolitan region if urban sprawl and de-concentration of the population of the metropolis are both occurring (Gibbs, 1961: 107-114). This will be illustrated in detail in for the Accra Metropolitan Area the following section.

Intra-Metropolitan Growth Dynamics within GAMA

Currently, there are two definitions of the city of Accra in use:

The Accra Metropolitan Area (AMA), which consists of the city of Accra, lying within the 1963 municipal boundary of Accra. Historically, this political (municipal) boundary of the city has been revised only on three occasions after its initial delimitation in 1924. These periods are 1943, 1953 and 1963. These revisions always took place long after the city population had over-spilled its boundary. "This narrow definition, currently in use for most administrative and budgetary purposes, does not correspond to the actual boundaries of the urbanized area. This has negative implications for urban planning and development, as large areas of the city are effectively ignored" (Songsore & Goldstein, 1995: 108); and The Greater Accra Metropolitan Area (GAMA).

Whilst the boundary of Accra was largely established in 1953 before Ghana's political independence from British colonial rule, with some minor adjustments in 1963, much of the urban expansion occurred after independence. It is therefore not surprising that large parts of the urbanized region lie outside the jurisdiction of the Accra Metropolitan Area while economically, physically and functionally, Accra Metropolitan Area, Tema Municipal Area and Ga District have become one single, integrated metropolitan region. The Tema Municipal Area and Ga District have undergone further subdivisions without solving the problem of effective governance and coordination of the entire city region. Urban planners confronted with developing a strategic plan for the national capital now talk in terms of a wider urbanized metropolitan region consisting of two nuclei, i.e., Accra Metropolitan Area and Tema Municipal Area containing the industrial satellite township of Tema, together with Ga District which has received much of the urban sprawl occurring beyond the congested core area of Accra. The new urban reality is what is now termed the Greater Accra Metropolitan Area (GAMA) (Songsore & Goldstein, 1995).

Table 6 shows the absurd results that can occur by under-bounding the metropolitan area in terms of population growth trends. Although about 75% of the total population of GAMA is located in Accra Metropolitan Area, more rapid growth rates are occurring in the industrial area of Tema and the peri-urban area of Ga District (Benneh et.al 1993). As at the 1984 Census, over 327,000 persons were already living outside the Accra Metropolitan Area, out of the total population of 1,296,470 within GAMA.

Table 6. Population Trends within GAMA, 1960, 1970, 1984*

		Population Totals		Annual Growth Rate	
District	1960	1970	1984	1960-70	1970-84
Accra Metropolitan Area	388,396	636,067	969,195	5.0	3.0
Tema	27,127	102,431	190,917	13.4	4.4
Municipal Area Ga District	33,907	66,336	136,358	6.8	5.1
Total GAMA	449,430	804,834	1,296,470	5.9	3.4

*Minor error in the original table corrected. Data source: Benneh et.al, 1993, p. 7.

Given these growth trends, it is not surprising that out of a total population of 2,715,805 million in 2000 within GAMA, Accra Metropolitan Area's share dropped to 61.1% while that for Ga District shot up to 20.3%, therefore outstripping Tema Municipal Area which now accounts for the 18.6% of GAMA's population. It is anticipated that Tema Municipal Area and Ga District will together account for an increasing share of the total population of the greater metropolitan region. By the year 2010, when the estimated population will have reached the 4 million mark, Accra Metropolitan Area's share of the total population will have dropped even further (UNDP &HABITAT, 1992).

This wider metropolitan expansion and integration is particularly strong along the principal transportation arteries radiating from the centres of AMA and TMA. From AMA, developments are strong along the Accra-Winneba, Accra-Nsawam and Accra-Aburi roads. Between Accra Metropolitan Area and the industrial township of Tema, developments, as projected by Doxiadis and Associates, are strong on both sides of the Accra-Tema motorway and also along the coastal route from AMA to Tema linking Accra central, La, Teshie, and Nungua to TMA. Similar developments are occurring in Kumasi, Sekondi-Takoradi and Tamale, although at different intensities depending on the overall rates of growth. These trends need careful studies as they have implications for metropolitan planning and management.

Urbanization and National Development

Urbanization, Regional Development and Inequality

In Western thinking a town does not exist in a vacuum; it exists in mutual relationship with the countryside, depending on the latter for food supplies and additional population. In turn, the town stimulates economic growth in the tributary region, either through the supply of relevant capital and other goods which it may produce directly or obtain

through imports" (Dickson,1971: 5). This west-centred view of the role of cities in regional development and economic growth based on its own economic history has been presented as a model for the development of the newly urbanizing but underdeveloped societies of Africa, Asia and Latin America. As Reissman puts it, ``industrial urban development in the West and in the underdeveloped countries today is the same process although greatly separated in time and place" (Reissman, 1969: 167-168). This model of development, which is said to have been valid since the industrial revolution, has been questioned in the case of Sub-Saharan Africa, as some recent evidence has raised doubts about the links between urbanization, economic growth and social development (White, Mberu and Collinson, 2008: 307)

Counterpoised to this model is the dialectically opposite interpretation of the history of urbanization in the underdeveloped countries. According to one leading proponent: ``The colonial city developed…as a centre of commerce and administration, rather than industrial production. It originated as a means whereby the metropolitan rulers established a base for the administration of the countryside, and the exploitation of its resources, and consequently the transfer of the surplus extracted from the countryside to the metropolis. At the same time, the city itself engaged in parasitical extractions of a surplus from the countryside" (Gugler & Flanagan, 1978: 26).

It is therefore arguable that it is not just urbanization but a particular kind of urbanization that is related to national development and economic growth. Urban historians such as Hoselitz began describing cities as parasitic and others raised doubts about the relevance of urban development to the development process in general (Hoselitz, 1955; Armstrong & McGee, 1968; Sandbrook, 1982).``This was highlighted in the World Bank's World Development Report 1999/2000, which stated that African cities are not serving as the engines of growth that cities on other continents have been: 'Instead they are part of the cause and a major symptom of the economic and social crises that have enveloped the continent' (World Bank, 2000: 130). This statement has sparked the notion of 'exceptionalism' in relation to African urbanization: essentially, this suggests the possibility of an African departure from the usual pace, pattern and implications of urbanization" (White, Mberu and Collinson, 2008: 308).

At the level of cross-cultural comparison, the position of the first school of thought appears seductive, as there would seem to be a strong association between the level of urbanization and the level of economic development at different levels of spatial resolution – global, continental and national. On a global scale, it is the most advanced industrialised regions of the world such as North America, Western Europe and Russia which are also the most urbanized. Africa, the least developed of all continents, also has some of the lowest levels of urbanization. Within each continent it is the most urbanized regions that also have the highest levels of development. Africa is no exception to this general rule, as South Africa and the North African group of countries which are more

urbanized also have the most advanced development of productive forces (Mabogunje, 1969; Roberts, 1978).

In Ghana, the overall association between urbanization and the level of economic development is underlined if one uses value added per capita. In 1960, the Greater Accra Region which was already highly urbanized had a gross value added per capita of 176 Ghana pounds, which was more than double the figure for the second highest score of 68 Ghana pounds, a position held by Ashanti and Western Regions which were also the next most urbanized regions. Western Region here includes Central Region at the time. The lowest per capita value added of 30 Ghana pounds occurred in the least urbanized region of Northern Ghana (Songsore, 2003a). The physical quality of life index for Ghana shows great regional and rural-urban disparities within regions (Table 7). The Northern sector, consisting of Northern and Upper Regions, stands out as the poorest in both the urban and rural areas. The Greater Accra Region, dominated by the capital district of Accra, had the highest quality of life for its urban population, followed by the Ashanti and Western Regions which contain the other two industrial growth nodes of Kumasi and Sekondi-Takoradi. Overall, for each region, the quality of life was poorer for the rural than for the corresponding urban population.

More recent data from Ghana Living Standards Surveys do reinforce the same structural patterns, as the incidence of poverty in urban Ghana was only 11.6% for the lower poverty line of 2,884,700 cedis per adult per year in 1998/99, declining further to 5.7 in 2005/06. Poverty incidence for urban Ghana for the higher poverty line of 3,708,900 cedis was 19.4% in 1998/99, declining further to10.8% in 2005/06 per adult per year. The corresponding figures for the lower and higher poverty lines for rural Ghana are 34.6% and 49.5%, respectively, in 1998/99. The rural areas also experienced reductions in poverty, trending down to 25.6 and 39.2 for the lower and upper poverty lines, respectively (GSS 2007: 9). Using the higher poverty line stated above per adult per year, the incidence of poverty nationally was 40%, whilst it was 69%, 84% and 88% for Northern, Upper West and Upper East Regions, respectively, in 1998/99. This implies that poverty is largely a rural problem. These regions experienced a marginal decline to 52.2%, 70.4% and 87.9%, respectively, in 2005/06 (GSS, 2007: 41). According to an earlier survey, about 6 out of every 10 poorest people are concentrated in the least urbanized regions of Northern, Upper East and Upper West regions (Boateng et al, 1988: 15).

Table 7: Ghana-Physical Quality of Life Index, 1969-70 (% scores)

Regions	Urban	Rural
All Regions	58.6	37.3
Greater Accra	76.6	52.4
Eastern	53.2	46.8
Central	50.5	36.3
Western	62.6	40.8
Volta	53.6	49.3
Ashanti	62.0	45.2
Brong Ahafo	50.1	35.2
Northern	42.7	13.0
Upper	45.3	13.9

Source: Ghana Adjustment Policies and Programmes to Protect Children and Other Vulnerable Groups. UNICEF-ACCRA, 1986

The incidence of poverty for Accra (GAMA), the national capital, was 1.9% for the lower poverty line and 4.4 % for the upper poverty line for 1998/99. Accra, however, did experience rising poverty levels in 2005/06, as the incidence of poverty increased to 5.4% for the lower poverty line and 10.6% for the higher poverty line (GSS, 2007: 9). Accra, with just over 10% of the total population, has the most diversified economy in the country and contributes between 15 and 20% of GDP (Benneh et al, 1993: .8). As a result of specialisation and division of labour, together with the economies of scale and agglomeration and the proximity of labour, capital, markets and technology, larger cities tend to be engines of economic development even when they have poor linkages with their regions and rural areas (Songsore,1977a; 1977b).

The question then is, have cities and towns played a major role in promoting economic development in general for different historical periods in Ghana? Is the relationship between urbanization and development merely conjunctural or a result of conferred privileges on the urban population by its power elite? To what extent can one talk of a dynamic integration between town and country? Is an extraverted urban system that mediates in the dependent integration of peasants into an international market capable of generating self-realisation of the vast majority of the national population? An attempt is made in the next section to trace the possible links between urbanization and regional development for different historical periods (Songsore 2003a). There are various mechanisms through which towns interact with their wider region, which can either

generate development in the wider region or induce negative impacts on development. These include labour migration, flows of capital, diffusion of entrepreneurial and consumer innovations, commodity flows or rural-urban terms of trade, and the regional ecological footprint of towns and cities. As no urban experience is entirely negative or positive, we are here indicating the net balance between extractive and distributive forces of urbanism (Songsore, 1987; 1978; 1979a,b; 1982; 1983a; 1983b; 1985; 1992b; 2000b).

Periodisation of Urban and Regional Growth in Ghana.

It is possible to identify three major periods in the evolution of urban and regional development in Ghana. These are the pre-colonial, colonial and post-colonial periods when significant restructuring of the space-economy had important implications for the regional economic role of towns in Ghana. There is nevertheless one unifying element throughout these periods, namely that most urban centres have emerged as centres of trade, administration and consumption rather than as centres of production and industrial manufacturing (Songsore, 2003a). This has ominous implications for the long-term success of the urban revolution.

Pre-Colonial Urbanism

It is now generally accepted that urban life is of respectable antiquity in West Africa. In the pre-colonial period, trade and commerce were the bedrock of state formation, whilst state formation in turn stimulated commerce and the rise of commercial centres. This is valid whether one is considering trade with Western Sudan in the period between the 11th and 16th Centuries AD or European coastal trade from 16th century AD to about the 1850s. Examples of important administrative centres or state capitals in the interior are Gambaga, Nalerigu, Yendi and Wa. These were associated with the Mamprusi, Dagomba and Wala states which developed in response to the trade with Western Sudan. Purely commercial centres which developed in the same period included Walewale, Savelugu, Lawra and Larabanga. These centres were to be found in the north-western and north-eastern parts of Northern Ghana. Others further south include Begho, Salaga and Kumasi. North-western and north-eastern parts of Northern Ghana lay along major trade routes between the Sudan belt to the north and the forest area to the south where most of the commodities which fed into the northern trade were to be found, including especially gold, kola nuts and ivory which were derived from the countryside (Dickson, 1970; 1971).

The change in fortunes between the Sudan belt of West Africa on the one hand and the forest and coastal areas began to occur in the 15th century with the appearance for the first time of Europeans on the coast. With their search for similar trade goods that once fed

the northerly trade of the Sudan belt, notably gold, and the disintegration of the Western Sudanic Empires in the 16th century, present-day Ghana and West Africa as a whole did a round-about turn (Songsore, 1979b, p.3). "The Atlantic Ocean, which had always been a barrier, now became a starting place, a beginning: new foci of economic and political change emerged in the coastlands and forest regions" (Garret, 1976). With a new centre crystallizing on the coast associated with European activities, there was a restructuring of the space-economy to fit the new order in which the coast and the forest areas emerged as the most successful in the adjustment process within present-day Ghana. An urban system emerged within the spatial system from European coastal trade. Along the coast were a string of towns associated with European forts, the most important being Elmina, Cape Coast and Accra. A complex set of middleman towns emerged connecting fort towns to raw material sources in the interior. The source areas also had a set of towns. One of the most significant was the Asante capital Kumasi, which in turn was a terminal point for the northern trade through Northern Ghana to Western Sudan which was in decline (Dickson, 1970; Songsore, 1979b).

During this phase, the trade, initially in gold and ivory, was quickly converted into trade in slaves as a new demand for cheap human labour developed in the West Indies. Reduced to the role of supplier of slave labour for the plantations of America, Africa as a whole lost its autonomy. It began to be shaped according to foreign requirements, those of mercantilism (Amin, 1972, p.108). Whether there were wars or peace, the end products were commercially profitable as wars produced slaves while gold could be worked in peace-times. ''By the end of the 17th century available Dutch and English records alone indicated that each on average exported between 5,000 and 6,000 slaves annually''(Songsore, 2003b: 41). The organized banditry of certain state armies drawn from their major towns in the era of the Atlantic Slave Trade, notably the Asante, had a particularly debilitating effect on both the urban and rural areas of weaker states. The states which suffered most from this debacle were the Gonja in Northern Ghana, lying astride the Middle Belt, and the Sefwi of south-western Ghana. These two states were laid waste by Asante raids. By contrast, the wealth that was generated was highly concentrated among the chiefly elements of the various states and a few merchant elements involved in the trade who were located in the emerging urban centres. It marked the first retrograde step in the development of Black Africa as a whole.

This period of European mercantile penetration was to mark the first phase in the dependent integration of the economy into the international capitalist system. It is therefore clear that before the onset of direct colonialism, the coast and forest areas had become conditioned for more urban development because of its better integration with European trade (Dickson, 1970: 46). The urban system played an intermediary role in this extraverted trade and can be said to have facilitated a development which was not internally integrated, as it resulted in the destruction of large swathes of the countryside

and towns of especially weaker states. Africa's agricultural and industrial technologies remained undeveloped, as tools such as the plough and animal traction which were common in Eurasia were absent in much of Africa, and as a result the generation of a surplus to maintain a state class and specialist group from agriculture was limited (Songsore 2003b, Goody, 1980: 25-26). ``In one sense, a superior military technology was the production system of the ruling strata, since it led to the acquisition of slaves, other booty, and taxes on trade. But productivity in the military field clearly differed from productivity in agricultural and industrial sphere, since such activities resulted in the impoverishment of others'' (Goody, 1980: 43, Songsore 2003b: 44). This phase was superseded by the period of direct colonialism.

Colonialism and Urban Change

Development within the emerging colonial economy was uneven. The sectors of the economy and the regions which were integrated as capitalist enclaves – engaged in production for the world markets or more specifically for the metropolitan economy of Britain—were qualitatively different from the pre-capitalist peasant sectors and regions which were the 'labour reserves' of the export enclaves. A simple centre-periphery structure emerged over the colonial space-economy (Songsore, 1983a: 18). The centre consisted of the forest belt where cocoa, timber, gold, diamond and manganese production was concentrated. Overlaying the pre-colonial system of urban centres, some of which declined in importance, were numerous commercial towns serving as marketing centres or mining towns in this generalized growth region. Kumasi, the old Asante capital, lay at the centre of this system. Another type of growth region consisted of the coastal port towns which played a crucial role in import-export activities. Sekondi-Takoradi and Accra were emerging as the most important centres of import-export activity. Accra, Kumasi and Sekondi-Takoradi therefore monopolized much of the modern social infrastructure in the country (Songsore, 1979b: 9; Songsore, 1989).

The generalized periphery consisted of areas outside the forest belt and coastal port towns with neither the relevant potentials for cocoa, timber and mineral production nor the ability of functioning as centres for the articulation of the outward-directed national space-economy as port towns. This consisted of the large land area of Northern Ghana which was not viewed in terms of its agricultural potential but rather as a labour reserve for the growth region. It is therefore not surprising that the three administrative regions constituting Northern Ghana are among the least urbanized even today. ''The culmination of the colonial trade was balkanization, in which the `recipient' micro-regions had no `interest' in `sharing' the crumbs of the colonial cake with their labour reserves" (Amin,1972,p.117). The pattern of uneven regional development has been the direct result of the uneven regional penetration of capital. Pre-capitalist production relations in the North were to a large extent conserved and subordinated to the interests of capital in

the cocoa and mining industry which produced for the world market (Songsore, 1983b; see also Songsore and Denkabe, 1995).

The skeletal structure of the spatial system consisted of a north-south dendritic transport system along which lay the dominant growth nodes of Kumasi, Accra and Sekondi-Takoradi within the urban system. This structure provided the framework for the systematic process surplus extraction out of the Ghanaian space economy due to the imposition of unequal exchange and the penetration of foreign capital (Songsore, 1979b: 10). The changing fortunes of towns were related to their location in the changing mode of production that came with colonialism, but the functional connection between administration and commerce and urban development remained unchanged. The towns never emerged as centres of industry revolutionising a stagnant extensive agriculture, but rather vegetated on or lived off the surpluses coming from within a super-exploited peasantry at a low technical level of production.

Functionally, the importance of colonial towns arose out of their roles as political, military, economic, religious and intellectual entrepôts between the colonizer and the colonized. ``At the same time, the general lack of dynamic industrial development beyond the production of basic and perishable commodities in the colonial cities, even of considerable size, was no accident. The development of significant local industrial capacity would have created competition with metropolitan industry for locally produced raw materials while also undermining the colonies' other role as captive markets for the products of European or American factories" (Simon,1992: 22-23, Songsore 2003b). This is what is termed dependent or backwash urbanization (Mabogunje ,1986).

Post-Colonial Change

Between 1945 and 1957, before formal independence was granted to the colony, the open colonial economy underwent substantial modifications, the chief of which centred on the expansion of the public sector and the gradual transfer of political if not economic power to Africans and the beginnings of modern industry (Hopkins, 1973: 288). The initial advantage of an early successful response within the cocoa-growing and mining areas to external demand was to create forces leading to the further concentration of growth within that region. The infrastructure was already available in the large towns of Accra, Secondi-Takoradi and Kumasi within this region, capable of supporting modern industry, and the markets were similarly concentrated in the cash crop area. "It is, therefore, no surprise that the basic development process after independence led to further spatial concentration of activity within these main urban areas which themselves had their raison d'etre in the role they played in the functional organization of the colonial economy" (Songsore, 1979b: 11).

The import substitution strategy of industrialization that was vigorously pursued after formal independence created an industrial cluster focused on the 'big three', Accra-Tema, Kumasi and Sekondi-Takoradi which monopolised industrial activity and were each acquiring a metropolitan status in the process (Songsore, 1989). Accra-Tema alone accounted for 49 per-cent and 50 per-cent of the total number of people employed and the value added, respectively, in the manufacturing sector. According to the 1969 directory of industrial enterprises, Accra-Tema alone accounted for 59.5 per-cent of all industrial establishments. Kumasi had 16.5 per-cent and Sekondi-Takoradi 10.2 per-cent. These towns together accounted for over 86 per-cent of all registered industrial enterprises in the country (Songsore, 1979b). The simple north-south centre-periphery spatial model became an oversimplification because of the increasing dominance of the urban-industrial core and the creation of its new periphery – the export cash crop, timber and mineral sector which nevertheless still super-ordinates the old periphery, i.e. the non-export food crop sector and areas of Northern Ghana which remained the least urbanized (Songsore, 1979b: 13).

Post colonial import-substitution industrialization within the major growth nodes merely legitimized colonial trade by seeking to manufacture (assemble) the same products locally. Such assembly functions had no potential for deepening the manufacturing process or establishing vital linkages with agriculture. Indeed, the cocoa interests were simply subordinated to the state, transnational capital and the nascent, industrial class located in the industrial cluster. Although wage rates were higher in capitalist production within towns as opposed to the pre-capitalist economy of the village, this, unlike the historical experience of the West, bore very little positive relationship with the wider indigenous economy, although through this co-existence and articulation the indigenous economy lost its dynamism and autonomy. Hence, despite the substantial growth of secondary industry in Ghana within this period, it is questionable, in view of the ownership and type of industry, whether the growth has had any substantial generative effect on the wider economy, and more specifically, rural agricultural transformation.

The cumulative process of growth which was initiated within the forest ecosystem by its incorporation into the international exchange economy together with added industrialization, resulted in an intensified process of labour out-migration from the depressed rural regions into the more favoured regions. Unlike the colonial era when labour migration was induced initially through coercion, the interregional labour flows could now be explained in terms of largely economic factors— the strong desire for cash and material well-being. Urbanization was more advanced, as towns grew better, where the regional economy was integrated with international markets and the urban centres helped mediate in the process of external trade, but at no point have they developed viable production systems to serve as vehicles for national development in the Western

sense. Herein lies the so-called exceptionalism of African urban development. It does not rest with their form but rather with their deformed economic structure and lack of technology-driven transformation of the rural economy.

Crisis, Adjustment and Informalization of the Urban Economy

Process of Restructuring

Import substitution industrialization which profited the urban industrial growth poles eventually created a perpetual balance of payments crisis as capital goods, raw materials and even foodstuffs for the industrial working class were being increasingly imported under conditions of heightening adverse terms of trade for the raw material exports vis-a-vis capital equipment imports at the international level of exchange. Nor could the export cash crop sector expand further as the expansion of import substitution industrialization was at the expense of export expansion, with the extraction of surplus from this sector providing the basis for industrialization. Agriculture remained static, as a capital goods sector was not developed in the urban-industrial sector to dynamise agricultural production. The input-output table for Ghana shows very little inter-sectoral industrial flows within the national economy (Songsore, 1979b: 15-16). The level of peasant exploitation and rent-seeking by the urban elite was so severe that by the late 1970s peasant protest movements were characterised by a silent withdrawal from commodity production for export or the local urban market into subsistence production and the parallel economy, which resulted in national economic collapse. This was a serious challenge to the viability of the neo-colonial state itself.

As a consequence, during the 1970s and early 1980s, Ghana's Gross Domestic Product persistently declined. Overall, the GDP grew by a mere 0.6% between 1976 and1980 and declined by –0.9% between 1981 and 1983, with both agriculture and industry registering negative growth in 1981-1983 and services showing a marginal growth of 1.6%. For industry, the decline was as high as -5.8% between 1976 and1980 (Ghana, 1985: 22). Consequently, the data on the sectoral contribution to the GNP indicated a declining share of industry to GDP. While industry accounted for 21% of GDP in 1975, it fell to 15% in 1980 and to a mere 11% in 1984 (Ghana, 1985: 22). In 1983, Ghana initiated an Economic Recovery/Structural Adjustment Programme (ERP/SAP), with the object of arresting the decline in the economic and social conditions in Ghana. Table 8 shows the extent of recovery in GDP with an average annual growth rate of 6%. Industry grew fastest at 12%, followed by services at 8% and agriculture at a mere 3%. Since there is a high concentration of industry and service activities in urban settlements, these figures would seem to suggest that recovery of economic activities in towns has been strong.

Table 8. Growth of Ghana's GDP by kind of economic activity in constant 1975 prices (% per annum).

	1980	1981	1982	1983	1984	1985	1986	1987
Agriculture	2.17	-2.56	-3.25	-9.11	9.71	0.65	3.31	0.04
Industry	-1.85	-14.46	-16.67	-6.77	11.94	17.60	7.56	11.34
Services	-2.79	2.73	-4.65	-4.54	6.63	7.52	6.50	9.38
Total GDP	-0.23	-3.18	-5.85	-4.34	8.96	5.09	5.20	4.80

Data source: Jebuni et al., 1991, p.8, cited from Benneh et.al, 1993, p. 9

This growth in services appears to have been led by retail and wholesale activities. "It is estimated that in 1989 the wholesale and retail trade and restaurants and hotels component made up 31.6% of the GDP of the services sector in constant 1975 prices. By 1993 this share had risen to 34.3%" (UNDP, 1997, p.12). Between 1990 and 2000 the GDP growth was less than 5% per annum recorded for the earlier period. More recently, the growth rate has averaged 6% per annum. It is not surprising that the informal bazaar economy has become a vent for employment and survival, given the experience of jobless growth since 1983. "Recorded formal sector employment, which essentially only covers establishments with ten or more workers, has experienced a drastic decline from 464,300 in 1985 to 186,300 in 1992. Within this, public sector employment shrank from 397,100 in 1985 to 119,000 in 1992, whilst the drop in the private sector was more than 50%. Though the decline was steeper in the private than in the public sector, the impact of the latter was the more significant, since the public sector accounted for 90% of formal employment" (UNDP, 1997: 42).

In 1980, the ratio of workers in the informal sectors of the Ghanaian economy to workers in the formal sector was 2:1. By 1990, the ratio was 5:1 (ISSER, 1995), and it has apparently grown since 1990 (Accra Study Team, 1998), along with growing poverty in the informal sector, notwithstanding the rather rosy picture painted about the incidence of poverty in urban areas, especially the large metropolitan areas, with rather contrived poverty lines (Maxwell, 1999). Indeed, if one were to use US$4.0 per day as the poverty line as stipulated by the International Labour Organisation, over 90% of the population of Ghana will fall below the poverty line. This is not peculiar to Ghana. For the Africa region as a whole, the informal economy has been the driver behind urban economic growth and has been estimated to account for 78% of nonagricultural employment, 93% of all new jobs created and 61% of urban employment (Kessides, 2006: 12).

Concentration of Affluence and Poverty in Urban Areas

On the whole, one can observe the growing problems of urban areas characterised by growing inequalities, dualism and informalization, with cities also divided against themselves like the contradiction between town and country (Emmerij,1997: 105). Poverty and marginality within the city are becoming structural, with a growing number of the youth who have nothing to offer to these globalizing and liberalized economies except to add to the growing problem of street children, child prostitution, child labour, urban violence and the drug/criminal economy.

As Ghana becomes increasingly urbanized, the hallmark of the new millennium will be the geographic concentration of affluence and poverty within urban areas (Massey, 1996). This has been amply demonstrated from the extensive work we have undertaken on intra-urban differentials in wealth, environmental conditions and the associated disease burdens in Ghana (see Songsore and McGranahan, 1993; Benneh et al.,1993; McGranahan and Songsore,1994; Songsore and Goldstein, 1995; McGranahan, Songsore and Kjellen, 1996; Songsore and McGranahan, 1996; 1998; Atkinson, Songsore and Werna, 1996; Songsore et.al.,1998; Songsore 2004; McGranahan et. al., 2001; Songsore and McGranahan, 2007). It is important to emphasize, however, that poverty is still overwhelmingly a rural problem with about 84% of the poor residing in rural areas where their absolute numbers are also on the increase (Ghana Statistical Service, 2000: 8).

More recent evidence suggests that the urban poverty situation has grown from bad to worse with the springing up of informal and squatter settlements in almost every major city along water courses and lagoon outlets and in almost every undesirable available space. These informal settlements are both sites of production and residence and are the physical manifestations of the failed attempt at industrial transition which is best described as de-industrialization under globalization and `free trade'. They represent the built environments for informal economic activities that have taken over the economic landscape of African cities. The proliferation of informal settlements is not unique to Ghana as it is a typical situation in almost all African cities including the most industrialized ones in South Africa with its legacy of apartheid which led to the social exclusion of the black population from the circuit of accumulation and shared growth.

Current Urbanization Trends

As Simon puts it, trying to 'read off' current or future urbanization trends from economic data is a risky undertaking, partly because of the 'vanishing rural-urban gap' in quality of life for the urban and rural poor and limitations of hard data on the basis of which to make these projections (Simon, 1997). The conjecture of future growth trends being undertaken is more like crystal-gazing into the future, a situation made more difficult

because of unstable economic trends in dependent low-income countries such as Ghana since adverse economic fortunes tend to impact on individual decisions on migration and population dynamics. An additional factor is the paucity of data. A number of current developments are however likely to shape the overall evolution of the urban system and national development.

The more significant processes include: the active promotion of the Greater Accra Metropolitan Area as a West Africa regional growth pole under the 'gateway' concept; the decentralisation programme and the creation of new growth nodes at lower levels of the settlement system; tourism promotion around former coastal slave forts; and the prospects for sustaining the recovery of the mining sector and associated towns. These are apparently contradictory processes, the first leading to further polarisation of urban development and the latter processes leading to a more rank- size distribution and a shift away from urban primacy. It would seem to me that it is possible for urban primacy at the level of the capital city to co-exist with more rank-size distribution for the rest of the urban system (Vapnarsky, 1969).The process of urbanization has shown some acceleration between the 1984 and the 2000 Censuses, even though the broad regional trends and structure have remained fairly stable, and this is likely to continue well into the future. The northern periphery, notably Upper West and Upper East Regions, is likely to remain the least urbanized as most of the currents of growth and new investment flows have by-passed them. Northern Region within this northern periphery is more urbanized than the other two regions, although its urbanization trend has tended to slow down because of the effects of ethnic conflict which stimulated some out-migrations from both urban and rural settlements in the conflict areas.

The towns of Salaga, Yendi, Bimbila and Kpandai suffered greatly from one such debacle in which over 150 villages were also destroyed and over 1,000 people killed during fighting between Konkombas on the one hand and Gonjas, Nanumbas and Dagombas on the other hand (Akwetey, 1996: 102). Up till today, long after the cessation of open hostilities, a number of civil servants including teachers and nurses are refusing posting to settlements in the former theatre of conflict in the eastern parts of Northern Region. The long-term trend in this region is therefore difficult to predict even though it has enormous potential for agricultural development and urban growth, as happened during the short-lived revolution in the rice economy.

Box 1. Greater Accra Metropolitan Area and the ECOWAS city-regional corridor

One trend is certain: the Greater Accra Metropolitan Area's dominance over the rest of the urban system will increase both in terms of population shifts and concentration of dynamic activities in the industrial, banking, commercial, business and service sectors, in line with its growing influence as a national and a regional growth pole in West Africa linked increasingly to a globalised capitalist world economy. The Greater

Accra Region, which is dominated by the metropolis, was the location of almost 80% of all investment projects that were attracted to Ghana between 1994 and 1999 through the Ghana Investment Promotion Centre. The Ashanti Region attracted 8% of these investments, with much of the remainder concentrated in Southern Ghana. Just about 1% of all projects went to the three regions in Northern Ghana. The total value of these investments was 1.5 billion US dollars (GIPC,1999).

It has often been argued that a network of cities well-connected within a country or across borders is an important ingredient in the growth of interregional trading groups. ''A factor that may be slowing the impacts of current efforts to create regional trading arrangements in Africa is the relative absence of city-regional corridors, reflecting the lack of large-scale industrial investors and of inter-city transport linkages'' (Kessides,2006,p. xxiv-xxv). Within the ECOWAS region the emergence of the Greater Ibadan-Lagos-Accra urban corridor provides a development pathway incorporating key cities in four West African countries starting from Ibadan and Lagos in Nigeria, Cotonou in Benin, and Lome in Togo, to Accra in Ghana. ``Of these four West African coastal nations, Nigeria and Ghana with a combined GDP of US$127,592,000 are among the largest national economies in the Economic Community of West African States

The recent discovery o oil in commercial quantities in the Western Region (ECOWAS)''(UN-HABITAT, 2008b,p.94). is sure to add more vitality to the growth of Sekondi-Takoradi with the prospect

At the intra-national level, weak linkages between the urban industrial core region of GAMA and the poorly connected remaining urban settlements do not bode well for the diffusion of entrepren of the murial outside innovations the Grethater promote Accra and growth Ashantial though regions current have developments almost similar are linking GAMA levels toof the urbanization(see global system of Bcorex 1)cities. of under other globalization settlements. Fast becoming urban of Since economic recovery has been stronger in the southern cocoa-mineral-timber exporting zone than in the northern periphery, it is to be expected that this sector will maintain its position and continue to show a better performance, although the regional shifts will be difficult to predict, given that most them outside the Greater Accra and Ashanti regions have almost similar levels of urbanization (see Box 1 for trends in GAMA). For example, well over 3 billion US dollars has gone into investments in the mining sector alone (Akabzaa and Darimani, 2001: 8) whilst the cocoa sector also within this zone has had very generous investments to help the export sector recover and lead the growth process. In terms of mining investments, the Western Region which already holds a significant share of mining-led economic investment and regeneration of urban development has been given an additional boost with the discovery of oil and gas in commercial quantities. This will give an additional boost to the growth of Sekondi-Takoradi and to a lesser extent stimulate the growth of

other coastal towns and settlements in the region close to the site of offshore oil drilling and extraction.

Whilst at the national level, the degree of urbanization is likely to continue to increase, the rural population is sure to increase in absolute numbers, resulting in land fragmentation and shared poverty with the majority of the urban population who are being driven into the petty commodity sector where they survive through a great diversity of coping strategies. As Hans Singer so eloquently puts it "the wage earning class has practically disappeared as a distinct entity and there has been an astonishing 'informalisation' of the urban labour markets" (Singer, 1993: xiii). The level of living gap between the tiny urban minority linked to the global system and the urban poor is likely to continue to widen as current policies are likely to be sustained.

It is quite clear that the more recent impetus to the urbanization process within the country has derived from inflows of finance capital largely from multilateral financial institutions and private capital flows although it has not brought about any sustainable development process within the urban or rural-regional economy. The debt overhang was so great that if donors were to insist on their pound of flesh, economic conditions in both town and country would be much worse than those inherited during the crisis years of the 1980s. The debt relief granted through the HIPC initiative has sustained a much higher growth level averaging 6 percent for the Ghanaian economy which has impacted positively on urban development, but it is now doubtful if this is sustainable given the current global recession which is widespread among the G-8 countries.

The transformation of economy and society consequent on the urban revolution in the societies of central capitalism has therefore failed to materialise because of the lack of dynamic interconnections between industry and agriculture or town and country. Relying on financial flows from outside into their services sector of interest to globalised capital, the large metropolitan centres are developing increasingly autarchic tendencies. Mining as a `robber economy' will eventually get exhausted without generating spin-off effects in either host communities or the larger economy, whilst other raw material exports such as cocoa and other non-traditional exports are a losing bet in today's knowledge-based global economy. Rural food producing regions are also unable to feed themselves, let alone provide surpluses to feed the urban population. It does not require any imagination to predict that we are living on borrowed time. This is the underlying reason for the HIPC (Heavily Indebted Poor Country) initiative by the NPP government which led to the granting of debt relief even though the structure of the economy which generates this economic instability has not been effectively tackled. Apart from the economic driver of urban quality of life, the environmental challenges of cities do also affect human wellbeing in many ways.

Cities and Sustainability Issues

Concept of Urban Environmental Transition

A useful framework for understanding urban environmental problems that integrates human needs of a healthy environment and adequate livelihoods on the one hand and sustainability concerns on the other is the Urban Environmental Transition Model (McGranahan et al, 2001). As a general rule, the environmental problems that lie in the realm of public health are those found in poor homes, neighbourhoods and workplaces of cities in Africa and other developing countries. These include inadequate water supplies and sanitary facilities, poor and crowded housing, smoky kitchens, insect infestation, contaminated food, piles of uncollected garbage and bad drainage (McGranahan and Songsore, 1994).

As the above problems recede in importance with development, with the transition from low- to middle-income cities, one is confronted with the most extreme problems of urban metabolism, such as ambient air pollution, polluted rivers and aquifers or the excess consumption of groundwater resources. At the opposite pole, the wealthiest cities of the northern hemisphere have taken measures to reduce the home, neighbourhood and city-wide level pollution problems. However, through excess consumption, the wealthiest cities of the most developed and industrialized countries draw more heavily on the global resource base and generate a disproportionate share of worldwide pollution, accounting for a larger share of global warming, acid rain and depletion of the ozone layer. These impacts have a delayed effect on human health. ''The logic behind the transition is that the wealthy use more resources and create more waste, but also use part of their wealth to avoid personal exposure to unpleasant and hazardous pollutants''(Kjellen and McGranahan, 1998: 67-68; Songsore, 2004: 4-5).

Environment, Wealth and Health Inequalities in Urban Areas

Promoting human development, economic growth and sustainable development depends to a large extent on the quality of the living environment. A congenial living environment is more likely to produce productive and healthy individuals. The environmental problems of human settlements including cities, towns and rural settlements are creeping up the political agenda of most governments and many international agencies. This has been encouraged in the South "by the increasingly detailed documentation of environmental problems and their impacts on the health and livelihoods of people and on the eco-systems within which the settlements are located" (UNCHS (Habitat), 1996:130).

Although all constituents of the environment of our planet ultimately exert some influence on human health and well-being, "the environment which exerts the greatest and most immediate influence on the lives of people, their health and well-being, is the

intimate environment of their home and neighbourhood. A health-promoting home and urban environment embody the fundamental aspirations of the majority of people, where the quality of their lives depends on having a clean, decent, safe home in which to live and raise a family" (Novick, 1990: xv). A good home and neighbourhood environment however remains an unmet need for the urban poor who constitute the majority of urban households in Ghana. This section presents a selective overview of the more pertinent environmental problems of urban settlements in Ghana.

Access to Water Supply

An adequate supply of easily accessible, potable water is a necessary condition for households to attain a good quality of life. Many improvements in hygiene and sanitation are contingent on water availability (Lindskog and Lundqvist, 1989: 20-21). Nationally, about 74.2% of all households have access to improved water supply, which includes 41% with access to pipe-borne water (including public outdoor pipes and water piped into dwellings), 26.3% with access to borehole water and 6.9% relying on protected wells. About 25.8% depend on other sources. Sharp contrasts can be found between rural settlements which are deprived in terms of access to potable water and urban settlements. The Accra Metropolitan Area, as far back as 1995, was said to enjoy 100% "coverage" in terms of access to pipe-borne water (GSS, 1995: 51). This is a marked improvement over data from the recent past, implying that we have made progress in providing water for our population in especially urban settlements.

Official national statistics are very often at variance with the results of detailed local or city level studies of the proportion of the population with effective access to housing related services such as potable water, sanitation, garbage disposal facilities etc. Governments often stipulate their own definitions of `access' which in most cases do not consider relevant aspects such as crowding at the service point, efficiency in the operation of the service, affordability, travel time, seasonality etc. which may act as barriers to access. A detailed sample survey in Accra shows that whereas 98% of the people in high income areas have access to indoor piping, only 25.7% of those in low income areas were served with the facility (Benneh et.al, 1993: 12).

In these poor areas, secondary contamination of potable water often occurs from illegal connections to the main water lines lying in cesspools and drains at leaking joints, especially when water pressure is low. The absence of indoor piping often leads to the storage of water in a variety of containers, with communal dip-cups used to fetch water also leading to in-house bacterial contamination and possible cross-contamination among family members (Republic of Ghana, 1995: 73). Thus the description of Accra as enjoying "near-total coverage" requires qualification to reflect the situation on the ground. Diarrhoeal diseases are therefore prevalent among children in these areas. The diarrhoeal prevalence is very high for users of communal standpipes, in part due to

crowding at the service points and the location outside of these standpipes which also promotes cross-contamination (Table 8).

Table 8: Relationship between Drinking Water Source and Prevalence of Diarrhoea in Children under Six in Accra.

Water Source	Number of Households with children <6yrs	% two-week prevalence of Diarrhoea
Indoor Piping	162	6.8
Private Standpipe	139	14.0
Water Vendor	165	10.0
Communal Standpipe	50	42.0
Others	21	14.0
Total	537	13.8

Source: Benneh et al, 1993, p.20.

In especially deprived rural settlements and urban low income communities and peri-urban areas, it is not unusual for women and children to spend 20 minutes or more per trip to obtain water from source. Water collection is usually undertaken during the early hours of the day or the evenings (ROG/UNICEF, 1990, p.105). This has negative implications for educational outcomes of poor children in deprived communities, most especially the females who are mostly responsible for fetching water, as they go late to school, often already exhausted, or may skip school if they think they will be punished for being late.

Deprived low income households in most large urban settlements buy water by the bucket from vendors. The cost of purchasing water from vendors could easily come to 10% of the monthly income of a low income household. This almost certainly serves as a constraint on water use (Benneh et.al. 1993). This was "more than 50% above the highest rate for a metered household before February, 1992. And they must carry it home" (Songsore & McGranahan, 2000). The cost of water from vendors in the peri-urban zones with poor access has grown from bad to worse as a result of inadequate or non-existent service coverage. Although it most impacts the poor, it affects both the wealthy and the poor as water access is related to failures in governance and poor utility performance, whether as a public or public-private utility. Water privatization has indeed not brought any tangible gains to most urban residents. The use of unsafe water or the inadequate supply of potable water, coupled with poor sanitation, contributes to diarrhoea, a major childhood killer disease, as well as hookworms, yaws and scabies. Insect vector diseases which are common in poorly drained neighbourhoods with standing water include malaria, an important cause of infant death, and yellow fever. For cholera, typhoid and infectious hepatitis, water acts as a passive medium for the infecting agent, particularly in rural areas and urban slums (ROG/UNICEF, 1990: 107).

Access to Sanitation Facilities

It is now well-established that the health problems resulting from the lack of sanitation facilities are greater among the urban poor living in overcrowded, informal settlements and deprived rural communities than they are in wealthy areas of towns and cities. Improved sanitation, apart from its health benefits, additionally improves the quality of the home and neighbourhood environment, and hence the quality of life. The desire for privacy when defecating is also important, especially for women (Sinnatamby, 1990). It is however sad to say that access to toilet facilities is still very limited in Ghana.

At the national level, almost 50% of households in Ghana have no access to safe sanitation facilities including flush toilet, covered pit latrine and Kumasi/Ventilated Improved Pit Latrines (VIP/KVIP). As usual, sharp disparities exist between rural and urban low-income areas and wealthy urban neighbourhoods in terms of access to toilet facilities. The most popular toilet facilities such as the pit latrine, bucket and KVIP are often unhygienic, as they are designed for communal use by entire settlements or neighbourhoods, and in the case of bucket latrines, by all residents in multi-habited compound houses in the large metropolitan areas. The use of bucket latrines is now prohibited and is gradually being phased out.

Box 2: Environment and Health in GAMA

One detailed study of the prevalence of diarrhoeal and acute respiratory infection among children under six and of cough symptoms of adult women showed intra-urban differentials by socio-ecological area of GAMA and also by wealth or class. The study also showed that disease prevalence was above all related to the number of environmental risk factors faced by the household.

Table 9 also shows the approximate relative risk of the environmental risk factors monitored for diarrhoea, ARI among children and cough symptoms in adult women. The approximate relative risk or odds ratio is the odds of having the symptoms if the factor is present, divided by the odds of having the symptoms if the factor is absent.

A companion study on mortality in AMA also showed that households living in poorer areas of the city face the double penalty in terms of being most at risk of death from both communicable diseases and chronic diseases such as circulatory diseases (Stephens et.al, 1994, p.47) BOX 1 CONTINUED

TABLE 9: Approximate relative risk of environmental factors in Accra

Table 9a Risk factors with respect to diarrhoea among children under age six

Environmental factor	Approximate relative risk
Pot used for storing water	4.3
Water interruptions occur regularly	3.1
Toilet shared with more than 5 households	2.7
Prepared food purchased from vendor	2.6
Water stored in open container	2.2
Neighbourhood children defecate outdoors	2.1
Many flies in kitchen during interview	2.1
Hands not always washed before food is prepared	2.0

Table 9b: Risk factors with respect to symptoms of acute respiratory problems among children under age six

Environmental factor	Approximate relative risk
Children often present during cooking	2.6
Many flies in kitchen during interview	2.4
Less than 4 square meters per person in most crowded sleeping room	2.3
Water supply interruptions occur regularly	2.2
Mosquito coils used	1.8
Cooking never done outdoors	1.8
Roof leaks during rains	1.7

Table 9c: risk factors with respect to symptoms of respiratory problems among principal women of the households[a]

Environmental factor	Approximate relative risk
Pump-spray insecticide used	3.5
Water supply interruptions occur regularly	1.6
Roof leaks during rains	1.5
Cooking never done outdoors	1.4
Cigarettes smoked per day[b]	1.1

[a]Data for only one woman per household are included. That is the woman who was interviewed and for whom more detailed information is available, on morbidity and education, for example.

[b]The relative risk factor for this environmental factor is determined per cigarette.

Note: All of these factors were statistically significant (greater than 95-percent confidence) in a logistic regression. Control variables (for example, wealth, age of principal women, number of children under age six) were included but are not presented. The approximate relative risk, or odds ratio, is the odds of having the symptoms if the factor is present divided by the odds of having the symptoms in the factor is absent. SOURCE: G. Benneh et al., 1993, McGranahan & Songsore, 1994, p.40).

Even though AMA is the best serviced in terms of access to sanitary facilities, the evidence on the ground suggests that low income communities either remain unserviced or are poorly serviced, and the inequalities in service provision correspond to those of water supply. Box 2 shows the impact of environment on health of children and adult women with respect to monitored health conditions in one survey. A case history of the episodic illness of a 10 month old child at Korle Bu Hospital also proves the point about the link between a mother's economic and educational circumstances and child health. The child was regularly taken ill after treatment, suffering from a slightly raised temperature, cough, inflamed eyes, running nose, diarrhoea and sometimes passing roundworms. Following a domicilliary visit to the child's home:

"The findings were that the 27 year old illiterate mother has been divorced for about 1 year. She lived with her mother of about 55 years. The child had a brother 4 years old and sister 2 years, and they all five lived in one room in the recess area of a crowded house in Amaamo (Amamomo). The indoor sanitation was very poor. There were at the time of the first domiciliary visit, two scruffy cats and a mangy dog around, with about six chickens foraging for scraps, with their droppings all over the damp uncemented ground swept on Sundays and Saturdays. There was no toilet in the house, but there was a public toilet about a quarter of a mile away. There was an unroofed bath house separated off with rusty iron sheets, and there was a covered chamber pot near it, containing a child's intestinal waste" (Otoo, 1993: 71). As the mother worked at a chopbar for very long hours far away from home for a very low wage, the children were often left to fend for themselves. This has been corroborated in more recent works in Accra (Maxwell et. al., 1998). From the foregoing analysis, it is obvious that the burden of disease falls more heavily on the rural and urban poor and tends to afflict especially children who are the most vulnerable in society.

Access to Solid Waste and Sullage Disposal Services

Whilst the capacity to handle household and municipal wastes is unsatisfactory in urban areas, such facilities hardly exist at all in rural Ghana. It is apparent that dumping either at official collection points or unofficial sites is the predominant mode of garbage disposal in the country as a whole. About 70% of urban households and 52% of rural households

dump their rubbish. A mere 12% of waste in urban areas is collected. Waste collection systems hardly exist in rural areas. The wastes are mainly organic, with vegetables/ putrescible matter forming between 70%-90% of the total refuse produced (Boateng et.al, 1988). The poor performance of the waste disposal sector is due to poor infrastructure and funding. For example, on one occasion, it required mass action by Nima residents which is a low-income settlement in Accra to have piles of refuse abandoned for two months in their community evacuated. In other areas, sanitary sites have been encroached upon, with the result that garbage gets dumped at unauthorized sites in urban areas. One study of low income communities in Accra suggests that 16 out of the 17 studied were grossly under serviced with refuse skips considering the volume of refuse generated (Bidex Counsult, 1992, p.51).

Problems associated with inadequate solid waste disposal include unsightly conditions of neighbourhood environments, odour nuisance and prevalence of diseases such as cholera, diarrhoea, dysentery, worm diseases, tetanus, etc., as already discussed in connection with the water-sanitation complex. Sullage or grey water is the liquid waste water discharged from domestic premises, and consists of effluents from kitchens, bathrooms and laundries. It accounts for the largest share of household water demand in the country (Tahal, 1981). Although great in volume, sullage is a much weaker pollutant than faecal-bearing sewage. In high and medium-income planned residential areas in the towns and cities, concrete channels and pipes drain grey water into roadside ditches that convey the sullage to water courses. For rural settlements and low income residential areas in the towns and cities, sullage normally flows through holes in walls of houses onto the ground outside and is then channeled to a roadside ditch or forms its own channel to a ditch. Poor sullage disposal gives rise to waterlogged soils and stagnant pools that provide breeding grounds for pests such as mosquitoes (Songsore, 1992c).

City-Wide Pollution

Air Pollution Hazards

Air pollution can negatively affect humans, animals and plants, and also contaminates soils and surface waters including marine environments. The most common atmospheric pollutants with the greatest environmental impact include sulphur dioxide, oxides of nitrogen and particulates such as dust, grit, tar and aerosols. While the availability of adequate potable water, sanitation services and solid waste disposal are of critical concern to the central government and metropolitan, municipal and district assemblies, the same cannot be said of air pollution. This is in part due to the low level of industrial development. There is the virtual absence of chemical and heavy industries which are the major polluters, hence air pollution poses a much smaller health risk. Air pollution

monitoring in the country has not been systematic and dates only to 1979, when the quality of the air over the industrial, commercial and residential areas of Accra and Tema were monitored. The study concluded that dust levels in the industrial and residential areas were below the WHO guideline (Amuzu and Leitmann, 1991). Although with increasing industrialisation and motorisation air pollution in urban areas may become a hazard, currently it is not a major health problem (Republic of Ghana, 1995: 69). In anticipation of this trend, the EPA has proposed Ambient Air Quality Guidelines for selected pollutants in Ghana (EPA, June 1995).

Even if ambient air pollution in human settlements in Ghana falls within generally acceptable limits, the same cannot be said of indoor air pollution at the household level. "Indoor air pollution can be particularly hazardous to health because it is released in close proximity to people. The most prominent source of indoor air pollution in developing countries is household use of biomass and coal for heating and cooking, usually involving open fires or stoves without proper chimneys" (WHO/EHG/97.12, 1997: 15). Women and children who stay by their mothers whilst cooking is being done are most at risk. Findings from personal air pollution monitoring undertaken in GAMA indicate that the highest exposure to respirable particulates arises from wood use, followed by charcoal, and finally kerosene, bottled gas and electricity. Wood users were exposed to a mean concentration of respirable particulates of 587.1 μg/m3, charcoal users to 341.2μ g/m3, and kerosene, LPG and electricity users together to 195.2 μg/m3. The maximum permissible level of total suspended particulates (TSP) in residential areas in Ghana is 150μg/m3 (averaged over 24 hours). In view of these figures, the levels measured are disturbingly high. For carbon monoxide (CO), charcoal users were the group most exposed to the highest level of CO as compared to the other fuel users who were exposed to a much lower level. About 6% of the charcoal users were exposed to an average CO concentration greater than 25 ppm, the UNEP-WHO guideline for 1 hour of exposure (Benneh, et. al. 1993: 65-71).

Noise Pollution Hazard

Noise is a nuisance to a growing number of residents in especially large towns. It normally derives from traffic, industrial operations, aircraft and construction activities. In the case of Ghana, churches, mosques and micro-enterprises located in residential areas are yet other important sources of noise. Possible adverse effects include sleep disturbance, poorer work output and increased anxiety. "High noise levels and repeated exposure can lead to hearing loss; high noise levels are also known to be one of the critical stress factors which influence mental disorders and social pathologies. The most intense, continuous and frequent exposure to high noise levels is generally within particular jobs in particular industries" (UNCHS – Habitat, 1996: 147). Citizen pressures for government to address high noise levels in residential areas is a recent and growing activity in Ghana. In response

to this, the EPA has issued ambient noise level guidelines for residential and industrial areas in Ghana (EPA September, 1995).

Pollution of Surface Water by Raw Sewage and Solid Waste and Flood Hazards

Most metropolitan areas and coastal towns such as GAMA and Sekondi-Takoradi lie barely above sea level, with large areas lying along major natural water courses and lagoon outlets, and are therefore subject to perennial flooding. Most wetlands are encroached and built up and there is often no comprehensive flood control policy to deal with the concentrated and often spasmodic nature of the tropical rains, especially in the major rainy season between May and August.

The major causes of flooding and flood hazard include:

- Sudden torrents of rainwater with high surface run-off because of the built environment of the city,
- The general low lying nature of much of the coastal cities, with the flood prone areas of GAMA having a height of under 20 metres above mean sea level,
- The lack of a system of secondary drainage works to channel water to the sea outlets,
- The clogging of the few built drainage channels and natural water courses with garbage and silt which is not regularly removed. This often includes chemical pollutants from industries and micro-enterprises, and faecal material, and,
- Above all, the unplanned developments of built areas along water courses obstructing natural water flow and the lack of any comprehensive land use planning and flood control policy (Songsore,1992c: 10-11).

The UK Department for International Development (DFID) has assisted the Government of Ghana (GOG) to address the problems of urban liquid and solid waste disposal with an Aid and Trade Project known as the Accra Waste Project (AWP). The AWP was designed to bring about sustained reductions in environmental hazards and nuisance in Accra as a result of inappropriate disposal of liquid and solid waste, which included the provision of a modern sewage treatment plant, identification and development of a new solid waste landfill site and more efficient collection of market waste and night soil. The sewage plant is located at the mouth of the Korle Lagoon. This was going on hand in hand with another project designed to dredge and clean the Korle Lagoon and the Odaw River system under the Korle Lagoon Restoration Project (KLERP). Although these

two projects have mitigated flooding along the Korle Lagoon, they are far from being successful, as the Korle Lagoon is soon becoming chocked with garbage again while the Central Treatment Plant has broken down. Thus far, the new solid waste landfill site development at Kwabenya has stalled because of citizenship pressure about its location and has almost been abandoned. It is quite obvious that interventions thus far initiated to address the above problems have been far from successful (Songsore and Stephens, 2008).

City Region and Sustainability Issues

Studies of greenhouse gases undertaken by the Environmental Protection Agency (EPA) indicate that Ghana on the whole is a net greenhouse gas sink, implying that Ghana absorbs more greenhouse gases than it emits. According to a more recent EPA report, "available data in 1996 show that Ghana emits 3, 801Gg of CO2 and removal by sinks was 19,426Gg. This shows a net removal rate of -15,624Gg" (EPA, 2005: 1).

"The effects of excessive global emissions by the affluent North are, however, already being felt in terms of local climate change" (Songsore, 2003b, p.244).Temperatures are already on the increase globally through the emission of Green House Gases such as carbon dioxide, carbon monoxide, oxides of nitrogen and sulphur oxide which is likely to affect rise in sea level because of melting of polar ice (EPA, 2005). Low lying coastal cities such as the Greater Accra Metropolitan Area are therefore in danger of being negatively affected by flooding while the impact of any storm surges will be more drastic as a result for coastal settlements which lie along the earthquake prone belt in Ghana. Rising temperatures and decreasing and variable rainfall at the local level are also likely to have a negative impact on agricultural production and food security. These changes will invariably affect the distribution and concentration of disease vectors which might affect disease patterns locally (Songsore et al 2009).

The Way Forward: An Integrated Urban Development Strategy for Ghana

It is obvious that given the conditions of poverty at the level of the urban population, the Central and Local Governments and the weaknesses of Civil Society Organizations, it is not enough to simply make recommendations on more effective urban governance without situating it in the objective material prerequisites that will make this economically feasible. As a result, any meaningful long term solutions have to be anchored on the economic and technological underpinnings that promote urban development on a sustainable basis.

Promoting Harmonious Rural-Urban Linkages through Industrialization and Agricultural Modernisation

The positive correlation that has been observed in the above analysis between urbanization and economic development is intriguing, although the direction of causality is far from clear in Ghana and Africa in general (Becker, Hamer and Morrison,1994: 6). The urbanization process of the West, painful as it initially was, led to industrialization and rising productivity of both rural and urban societies. The growth of cities led to a consolidation of agricultural holdings, increased capitalization of agriculture and greater efficiency and productivity of agriculture arising from the harnessing of improved industrial processes to agriculture.

There is however some a-synchronism between the urbanization process and societal transformation in Ghana, as the urbanization process is more demographic than economic and social, as the paper has sought to demonstrate. Not only have we failed to industrialize but we have also made a transition from agriculture to a service economy characterised by petty trade based on imported manufactured products that are made available through external loans and grants which are keeping the economy artificially afloat. At the same time, the rural population continues to increase whilst the technology of production is still based on extensive agriculture, which depends on the natural fertility of the land under the land rotation system, with the hoe, cutlass and dibble stick as principal tools. This cannot provide a basis for sustainable urbanization and development.

In order to mitigate or reverse this ominous trend, there should be a renewed emphasis on smallholder agricultural development, especially in the staple food sub-sector to reduce rural poverty, increase incomes and thereby increase the demand for manufactured products in the urban areas. At the same time, the urban centres should be the focal centres for machine tool production and the transformation of agricultural raw materials into processed goods. This positive feedback will create the basis for sustainable urbanization and development. For development to be meaningful it has to be visible in the overall quality of life of the vast majority of the population; in other words, it must include, not exclude the majority, and should be based on the creation of a domestic market for goods and services produced locally.

Promoting ECOWAS Regional Markets for Goods and Services

Given the small size of our economy and market, the current structure of production and external orientation, it is obvious that this strategy can only be pursued within the context of regional integration at the level of the Economic Community of West African States (ECOWAS) and the African Union. It is only at this level that we can begin to ward off the backwash effects of globalization whilst maximizing its beneficial effects since the

strategy we espouse here does not mean autarchy (Songsore, 2003a),

This vision, although initially espoused by Nkrumah, who for that reason was called a megalomaniac, has been adopted by the stronger economies and nations, as seen in the unfolding events in Europe, Asia, North America and Latin America where we see the emergence of strong regional blocks with common interests that negotiate with one another (Amoako,1999: 20). ``However, there is a fundamental obstacle to the implementation of strategies of self-reliance: the interests and values of the majority of Africa's political elites and their networks of patronage…. It is precisely this selective articulation of elites and valuable assets, together with the social exclusion of most people and the economic devaluation of most natural resources, that is specific to the newest expression of Africa's tragedy" (Castells,1999: 128). The future of hope lies in the emerging civil society movements all over Africa and the cries for their determination of the conditions for their own development.

Investing in People through a People-Oriented Development Strategy

Self-Reliance

This is also a call for a people-oriented development strategy. Contrary to the rhetoric of globalization, "fundamental to this is the need to promote, strengthen and develop national self-reliance and self-sufficiency, particularly in economic management as well as in production" (NDPC,1991: 27). The long term objective is the creation of an integrated national economy and society with its own internal dynamic for autonomous development within the new global order. Since there are winners and losers under globalization, we can only be among the winners if we develop a strong local base of value-added production in manufacturing industry and the new knowledge economy based on communication and information technology, and biotechnology.

Making Human Settlements Fit for People through Environmental Care

The National Environmental Sanitation Policy which is aimed at developing and maintaining a clean, safe and pleasant physical environment in all human settlements to promote the social, economic and physical well-being of all sections of the population anticipates the concerns raised in our analysis. The principal elements of this document include:

- Collection and sanitary disposal of wastes including solid wastes, liquid wastes, excreta, industrial wastes, clinical and other hazardous wastes;
- Storm water drainage;
- Cleansing of thoroughfares, markets and other public spaces;

- Control of pests and vectors of disease;
- Food hygiene;
- Environmental sanitation education;
- Inspection and enforcement of sanitary regulations;
- Disposal of the dead;
- Control of rearing and straying of animals; and
- Monitoring the observance of environmental standards.

In line with the above policy thrust, there is an urgent need to update existing legislation to better address current environmental concerns. There is also the urgent need to build the capacities of the District, Municipal and Metropolitan Assemblies to better address these concerns and for expanded public investment in the supply of services. Overall, since infectious and communicable diseases are still dominant in both rural and urban settlements, there is the need to strengthen primary environmental health care in the rural areas and also promote the development of urban primary health care as a way of reducing the preventable fraction of these environmental health burdens. This should improve the general quality of life of citizens, promote labour productivity and reduce foreign exchange costs in recurrent drug imports and help us achieve some of the millennium development goals.

Creating a Balanced Hierarchy of Human Settlements

In order to promote the diffusion of entrepreneurial and consumer innovations that bring growth and development down the settlement hierarchy, it is important to nurture the development of small and mediun-sized urban settlements with the requisite human resources to operate as viable economic nodes and service centres, for their own growth and development and that of their catchment areas. This will promote the growth of diversified and stable urban economies which are also healthy in terms of housing and service delivery. In order to make this happen, efforts should be made to encourage the effective coordination of all relevant agencies in planning, developing and managing human settlements (Songsore 2003b: 322).

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Tribute to Professor Paul William Kojo Yankson

By Prof. Martin Oteng-Ababio
Head, Department of Geography & Resource Development,
University of Ghana, Legon

In the Department of Geography and Resource Development, University of Ghana, when any faculty member mentions "Kojo Kum", he or she is most likely referring to our senior colleague, Professor Paul William Kojo Yankson. With 40 years of continuous service with the University and the Department, and after supervising a string of students, including 15 PhDs and 41 Masters students; and conducting over 36 major international research projects with students and faculty, there is no question as to why Prof Yankson was seen as a good teacher, an accomplished scholar, an insightful researcher and a visionary administrator, who had great affection for the department.

Educated in St Peter's and Mfantsipim Secondary Schools (1962-1969), Prof Yankson graduated with first class honours (B.A. Hons Geography) from the University of Ghana in 1973, MPhil (Urban Planning) from McGill University, Montreal, Canada in 1976 and PhD (Regional Planning) from the University of Nottingham, UK, in 1980. Prof took up a lectureship position at his alma mater, the University of Ghana, in September 1981 and served in the Department of Geography and Resource Development until his retirement in 2009. Prof Yankson was promoted to Senior Lecturer in April 1987, Associate Professor in February 1994 and Professor in June 2000. Prof served as the Head of Department from October 2001 to July 2005. After retiring in August 2009, Prof Yankson continued to play an active role by taking up a post-retirement contract. Indeed, he was the Department's backbone till he took his last breath on February 7, 2021 to join his maker.

Over the years, students and colleague staff have benefitted from Prof Yankson's kindness, mentorship and gift for good-humoured storytelling. Prof had a significant influence on the lives of many, whether it be the lessons he has taught us or just the pure acts of love and kindness he demonstrated. Prof Yankson could be relied on and never expected anything in return whenever he helped others. His generosity had no bounds and he demonstrated unequivocally that silence can be truly meaningful. He was usually one of the quietest during staff meetings, but his inputs were always spot-on. He brought in a number of research grants to support graduate work and faculty development in the Department.

Both professionally and personally, Prof Yankson was peaceful, full of strength and tremendously loyal. Even when increasingly impeded by old age, Prof. kept working, and continuously maintained "I am retired but not tired". He made a point of attending the annual Ghana Geography Association meetings and retained great affection and commitment for the Department and his research partners, including Prof Kathrine Gough of Loughborough University, UK, and Prof Lasse Møller-Jensen of the University of Copenhagen, Denmark.

Outside the Department, Prof. Yankson played important roles in the University and the College of Humanities. He was a member of a number of College and University level committees and served at different times as a Senior Tutor of Mensah Sarbah Hall. He also served as the Chairman of the College of Humanities Academic Quality Assurance Committee.

As Head of Department, I remember the last few moments I shared with Prof. Yankson in my office before his untimely demise; we sat in silence, pondering over departmental and project issues. In those few moments, I now look back to reflect on the most important lessons he taught us and how much was said without words, lessons that have helped us become better listeners. And when you think about persons like Prof. Paul William

Kojo Yankson, who has inspired many lives in major ways, maybe you can look back on the silent moments with them and think about what was communicated without words. Even though Prof Yankson is no longer with us physically today, we still carry with us his peaceful silence and can hear him in our hearts.

Until we meet again; Prof pa da yie!

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