Regional Development Poles and Self-Sustaining Development in Africa

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Introduction

Diversification and industrialization of African economies are necessary to establish integrated self-sustaining economies in the continent. Even if the service sector has become the largest in most developed economies, the tertiary sector is heavily dependent on the manufacturing sector. Capital goods manufacturing is the most dynamic sub-sector of industry. It has strong backward and forward linkages to the rest of the economy. It supplies inputs to various sub-sectors of industry as well as to agriculture and the service sectors. Given the small sizes of most African countries and the political difficulties of the separate small political entities pursuing a common development policy, African unity and regional integration have been the strategies suggested to achieve self-sustaining development in Africa. But success in regional and eventual continental integration has lagged. Hence, there is the need for additional strategies to initiate self-sustaining development in the continent.

The strategy of Regional Development Poles (RDPs) places emphasis on economic transformation of the few large African countries that can industrialize on their own, given their huge natural and human resources as well as their large domestic markets. From the RDPs, faster economic development will diffuse to the surrounding smaller African countries. The diffusion will be accelerated by establishing inter-African infrastructural networks.

The urge for heavy industrialization, anchored in Africa, arises from the fact that heavy manufacturing industry has profound impact on the rest of the economy through its strong backward and forward linkages. Manufacturing, especially of capital goods, is the most dynamic sub-sector of industry. It is capital-intensive, technologically dynamic and is characterized by economies of scale as many
indivisibilities and highly-skilled labour are involved in their construction and operations. The small fragmented markets of most individual African economies cannot support the establishment of capital goods industries. Unless established on a regional basis, such industries would be underutilized in most individual African countries. Effective regional integration would provide African countries with the opportunity to pool their markets and resources. In many cases, technologies designed for developed countries are not suited for African countries at their present stages of development. By establishing capital goods industries in Africa, major technological progress will be internalized in the continent; and in the long-run, such developments will introduce flexibility in the African industry as further technological progress will be internally generated. Consequently, future internally manufactured machinery and equipment designs will keep pace with the required changes in manufacturing consistent with changes in the pattern of demand as development in Africa advances.

Capital goods manufactured in developed countries have become increasingly sophisticated, automated and computerized, and labour-saving. What is still usable in Africa has to be discarded because of lack of spare parts whose production has been discontinued in the developed countries because of technological changes. Most needed consumer durables in Africa such as cars, televisions, videos, and others do not need some of the gadgets installed in them by manufacturers in the developed countries. Yet these expensive products have to be imported as manufactured due to the lack of domestic production in most parts of Africa. These types of products are not consistent with most needs of the African countries except for the demands of the few African elites whose incomes and consumption patterns are similar to those in industrialized countries. Had such goods been produced in Africa, their technological requirements would have progressed along with the changes in the pattern of demand in Africa. They would not be discarded for new ones or the domestic manufacture of the replacements would have generated more jobs in Africa, thus adding to the dynamism necessary for African development.

Industrialization Policy in Africa

Conscious industrialization policies in African countries, like in most underdeveloped countries, began in the post-World War II period. Since most of the developed countries were industrial while the underdeveloped countries were primary producers, economic development came to be identified with industrialization. The prices of industrial exports persistently increased relative to those of primary products. Export prices of primary products were unstable and tended to decline over time. The markets for primary products were stagnant, and primary products were easily substitutable with synthetics. Hence, primary-export-led growth was to be substituted with industrialization (Prebisch 1959; Singer 1950).

Having decided to industrialize, the underdeveloped countries planned to substitute their industrial imports with local production, as their imports were indicative of what could be manufactured domestically. This was the policy of import substitution industrialization. It was thought that underdeveloped economies would progress
from the simpler level of manufacturing consumer goods to intermediate goods and to an all-round manufacture of capital goods.

Import substitution was expected to improve the balance of payments as more manufactured imports would be produced domestically. Tariffs were imposed to protect the infant industries from foreign competition. But these tariffs became progressively higher with higher stages of processing. Foreign firms were encouraged to establish tariff factories to overcome the tariff walls. They employed capital-intensive technologies with limited employment opportunities. The capital-intensive industries required more imports of spare parts, raw materials, and replacement capital goods, thus requiring more foreign exchange to operate. Consequently, more resources were being devoted to the urban industries than to the agricultural sector. Rural-urban migration increased, but the capital-intensive industries had limited employment effect. Hence, urban unemployment increased, leading to very serious social and political problems, particularly as most of the unemployed migrants were politically-conscious secondary school leavers.

Because of the limitations of import substitution industrialization, underdeveloped countries changed their industrialization strategy to manufacturing for export. The export of manufactures strategy was recommended particularly for small economies with limited domestic markets (Todaro and Smith 2009). At the early stages of manufacturing, most underdeveloped countries produced similar products, and could not absorb much of each other's products. Tariffs in the developed economies progressively increased with the degree of manufactured imports from the underdeveloped economies. Given the barriers to the export of manufactures, underdeveloped countries embarked on promoting regional integration so as to pool their markets. But while the cooperating and integrating countries could see the joint benefits of integration, they could not easily agree on equitable sharing of these potential benefits. The partner states were at different levels of industrialization, and each partner wanted to accelerate its own rate of industrialization and development. This outlook at integration has not changed much in the continent, hence the slow pace of integration in Africa.

Need for Large Political Units

The quest for collective self-reliance has been advanced by African leaders in various forms since the beginnings of the decolonization movements. There have been calls for African unity, regional cooperation and integration. These calls were premised on the understanding that the many small African countries cannot individually be viable political and economic entities in the international environment of the second half of the twentieth century. Hence, African unity or African integration is a strategy for African development. It is not to follow development but to precede it; or both integration and development should be pursued simultaneously. The argument that each country should solve its problem before integration occurs is spurious because lack of capacity is an integral part of the failure of development. If each small country could achieve its development on its own, there would be no need to
integrate. Lack of comprehension of this reality led African countries to fall back from the 1980s to recycling the same colonial economic policies.

The economic problems of the 1970s and 1980s led African countries to revert to the colonial economic policies of market fundamentalism, free trade, and the encouragement of foreign capital. But these were the fundamentals of the colonial economic policies which led Africa to where it was at independence. Hence, there is no wonder that since the institution of the structural adjustment policies in Africa, poverty has become widespread and deepened. The inappropriateness of the colonial-type policies was exhaustively discussed in the 1960s and 1970s, but because African governments desperately wanted foreign aid, they were willing to disregard the arguments against such policies so that they could qualify for foreign aid. The colonial economies were based on the export of primary products to the colonial metropolis. The surplus from the export earnings was not reinvested in the colonial economies, but channelled to the colonial powers. This pattern of trade still persists in most African countries. Sustainable industrialization of tiny economies is hardly possible, particularly in a world of long-established competitors in the world market. Hence, it was inevitable that the industrialization policies of the early post-independence era were not sustainable for most African countries.

The African colonial economies boomed with the production of export crops and minerals but left Africa unindustrialized. The performance of the export crops and hence of the African economies fluctuated with the business cycle in Europe, which was the dominant market for African exports. Most African economies have shown impressive growth records during the first decade of the twenty-first century as Africa has diversified its export markets. With increasing Asian, particularly Chinese and Indian, demand for African minerals, many African countries have been able to substantially withstand the negative repercussions of the Great Recession of 2007-2010. Africa should take advantage of the current surge in Asian demand for the continent’s raw materials to establish major capital goods industries in the continent. This will lead to self-sustaining development in the continent even after the demand for African raw materials subsides.

The increasing deterioration in the African economies, from the 1970s and the impact of the structural adjustment policies of the 1980s, led African countries to intensify their efforts towards regional integration. This led to the adoption of the Lagos Plan of Action by the African Heads of State and Government in 1980. This act culminated in the signing of the Abuja Treaty of 1991, promulgating the African Economic Community (AEC), which came into force in 1994.\(^2\)

The establishment of the AEC was to be phased in six stages. Stage one was to involve the creation of regional blocs or Regional Economic Communities (RECs) where such do not yet exist. This process was to be completed by 1999. The RECs were to be the building blocks of the African Economic Community (AEC). The second stage was the strengthening of intra-REC integration and inter-REC harmonization, which was to be completed in 2007. Stage three was to consist of the establishment of a free trade area and customs union in each regional bloc by
the end of 2017. The establishment of an Africa-wide customs union was the fourth stage and was to be achieved by the end of 2019. The fifth stage was to be the establishment of a continent-wide common market, the African Common Market (ACM) by 2023. The sixth stage was to be the establishment of a continent-wide economic and monetary union by the end of 2028. The transitional period, during which all these structures were to be set up, would end by 2034 at the latest (UNECA 2008).

The Common Market of Eastern and Southern Africa (COMESA), the East African Community (EAC), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Southern Africa Development Community (SADC), among others, are clear manifestations of the African leaders' recognition of the need for larger units in Africa to achieve viable development in the current world environment. However, to date, only the East African Community has progressed to having a common market, and few have attained even the effective stage of free trade areas. Hence, as much as African leaders seem to appreciate the importance of collective African self-reliance, their political rhetoric on African integration has so far not been accompanied by commensurate actions. Consequently, multiple regional groupings have been established in the continent, many of which have overlapping memberships. Trade between the member states is riddled with many restrictions, especially by non-trade barriers. Hence, the results of regional integration in Africa have been modest.

The member countries of the regional groupings have similar production structures. Most of them lack a strong industrial base to produce diversified manufactured products for trade within the groupings. Their multiple currencies are not convertible. The cost of doing intra- and inter-regional blocs business is high due to a host of non-tariff barriers such as poor infrastructure, duplicative border procedures and cumbersome paper requirements. The free movements of people and the right of establishment have progressed in some groupings, but not in many African sub-regions. Non-tariff barriers such as customs officials, police roadblocks, and constant harassment by immigration officials hamper free trade. Hence, the attainment of the goals of regional integration will take time. The processes of realizing the RECs and the AEC will be slow and long. In the meanwhile, major technological changes will not wait for Africa to integrate. Such a situation will perpetuate Africa's follower-status in the challenges of globalization.

To influence the direction of globalization and hence, the continent's destiny, Africa must internalize the processes of technological progress within a short period. The challenge of fast internalizing substantial technological changes within Africa should be focused on the large African countries that should muster the political leadership to turn their potentials into regional development poles in the continent. Development in the continental regional development poles will diffuse faster to the rest of the African countries given their proximities within the continent.
Regional Development Poles

The colonial economies of Africa were founded when the continent was parcelled into European estates. Unfortunately, after about 50 years of formal independence, the African elites have not transformed the inherited deformed economies. These economies have either persisted or collapsed, instead of being transformed. Most African economies can hardly be transformed within the existing domestic structures, although a few large ones can. The Democratic Republic of Congo (DR Congo), Ethiopia, Nigeria, and South Africa are among the few African countries with the human and natural resource capable of being transformed into self-sustaining economies (UNECA 2012). South Africa is already a self-sustaining industrial economy, and exports industrial products to virtually all African countries. If more large African countries industrialize, the integration of African economies within Africa will be enhanced and therefore lead to less dependence on external global factors. In this way African countries will have larger capacity to withstand external global shocks.

The African Union, the New Partnership for African Development (NEPAD), the Economic Commission for Africa, the African Development Bank, among others, and the elites of the respective countries, should lead in the establishment of viable development poles in the continent. Given that each country is different, with different endowment and initial conditions, the elites of each country are in a better position to identify the relevant policies for their country’s achievement of economic transformation and self-sustaining development. But regular joint brain-storming with other experts in these countries would allow for the exchange of relevant experiences and perspectives. Self-sustaining development to the rest of the countries in the continent will diffuse from the regional development poles faster than from outside the continent.

The establishment of diversified industrial economies, financial systems, and convertible currencies in the regional development poles will help strengthen the small neighbouring economies. For example, the small economies in southern Africa have benefited greatly from the de facto Common Currency Area (CCA) in the region anchored on the convertible South African Rand. This is because of the strong South African economy. Even if these southern African countries lacked foreign exchange, they would easily acquire the Rand and procure their industrial import requirements from South Africa. Moreover, migration for employment within the continent will be easier, cheaper and less risky.

The creation of development poles in Africa is to be based on the large physical sizes, resource bases and populations of the large countries. But this does not mean that the strategy of regional integration should be abandoned. The two strategies should be pursued simultaneously.

To complement the regional development pole and regional integration strategies is the development of regional and trans-Africa infrastructure. For sustainable development to spread throughout the continent, the various parts of the continent
have to be linked with elaborate and efficient infrastructure. Africa’s infrastructural deficit is put at $93 billion annually until 2020 (AfDB Sept. 2010). Trans-African and regional highways, railways and electricity grids have been mapped since the 1970s and 1980s (UNECA 1986). It is time for serious implementation. Great hydroelectric potentials such as the Inga Falls in the Congo DR could be developed to supply large parts of the continent. Africa can also tap its solar and wind energy resources.

Currently, less than 40 per cent of the continent’s population has access to electricity; about a third of the rural population has access to roads; and only 5 per cent of agriculture is under irrigation. Only about 34 per cent of the population has access to improved sanitation and about 65 per cent to clean water (AfDB Sept. 2010).

The Information and Communications Technology (ICT) sub-sector is characterized by huge differences across specific services. Access to mobile phones averaged four out of ten in 2008, with penetration rates growing fastest in the world. However, internet access averaged 80 persons per 1,000. Fixed telephone figures are the lowest, reflecting the limited access to electricity.

In addition, Africa faces higher access costs relative to other underdeveloped countries. Africa’s freight is about four times more expensive, power costs 14 cents per kilowatt hour against 5-10 cents; and mobile telephony costs $12 per month compared with $8 elsewhere (AfDB Sept. 2010).

The statistics on Africa’s transportation system are poor and need to be urgently addressed, otherwise the quest for accelerated development in Africa is just a dream. The total road network in sub-Saharan Africa is put at only 204 km per 1,000 km² of land area of which only about 25 per cent is paved, compared with the world average of 944 km per 1,000 km² of land area. But there are huge intra-African disparities.

Rail transport is more efficient and costs less than road transport for bulky primary commodities such as the majority of Africa’s exports. Yet, rail networks are the least developed in the continent. The colonial links of economic enclaves to the ocean ports are still the only major links. Fourteen sub-Saharan African countries have no operational rail networks, while spatial density of operational rail ranges from 30 to 50 per million people with a few countries having network densities of more than 400.5

Africa also needs to improve its ports. Port capacities need to be expanded and the performance of existing facilities as well as handling costs improved. Connectivity to ports is poor. There is the need for pipelines to link African oil producers with importing countries in the continent. With expansion and improvement in regional and trans-African infrastructure, development in the regional poles will diffuse more easily to all countries in the continent.
Some Examples of Regional Development Poles

Nigeria has all it takes resource-wise to become one of the major world economies; but so far the leadership has failed to utilize that potential effectively. With its abundant natural resources, domestic market of over 160 million people, thousands of highly educated people in various fields, and oil export earnings of over $110 million per day, Nigeria could build a strong diversified economy in the western part of the continent with a profound impact on western and equatorial Africa, and even beyond. Moreover, as the Gulf of Guinea becomes major oil producer and exporter, Nigeria could coordinate the development of a large petroleum-products manufacturing industries in the region, including the islands (Ghazvinian 2007).

African oil exporting countries have to channel their petro-funds into restructuring their economies. However, with tiny domestic markets and other resources, most of them cannot transform their economies individually. Instead of corrupt elites squandering these resources abroad, some regional hegemonies should coordinate their use for the transformation of the regional economy.

Before the oil industry came to dominate the Nigerian economy, the country produced its own food supplies and exported large quantities of cocoa, cotton, cattle, hides and skins, groundnuts, palm oil and palm kernels. Renewed emphasis on the agricultural sector would expand the domestic market and further enhance the country’s efforts in building a huge self-sustaining industrial economy.

DR Congo, located in the centre of Africa, probably has the greatest potential for building a viable economy if it can realize its potential. It could learn from Brazil as there is hardly much difference between the Congo and Brazil in terms of natural resource endowment. Congo has agricultural, mineral, forestry, fisheries, hydroelectric potentials, population and central location.

The exploitation of the Inga hydro-electric potential alone can earn the Congo billions of dollars from exports to other parts of Africa, while enhancing power supply in many parts of the continent. The foreign exchange can be used to develop a diversified economy (Fall 2010; World Bank 2009). Meanwhile, Congo’s mineral and other natural resources can generate tremendous earnings for the country’s own national, provincial and local development. The combination of DR Congo’s tremendous energy and mineral potentials could produce a major industrial giant on the world level. Metallurgical and chemical industries could be developed from local resources. These industries would make it possible to establish large machine tools and engineering industries. A range of spare parts could be produced from the large machine tools industry (Alemayehu 2000). Given DR Congo’s central location in the continent, its access to various countries for market would be cost effective, especially with the establishment of regional and trans-African infrastructure.

Moreover, given its huge forest and the environmental impact of poverty in the country, the development and electrification of DR Congo would deter major region-wide climatic changes. Raising the living standards of the Congolese considerably will lessen dependence on the natural environment for food, fuel and building
materials; and hence avert catastrophic climatic changes resulting from environmental degradation. The damaging impact of the Cold War on the Congo has delayed but not destroyed the country's potential to become one of the world's major economies. Developing this potential will have wide positive consequences in Africa.

South Africa has already established a strong manufacturing economy. South Africa is the world's largest producer of chrome, manganese, platinum, vanadium, and vermiculite; the second largest producer of gold and other minerals. It is also the world's third largest exporter of coal. Its mineral wealth, and its strong manufacturing and financial sectors, have made South Africa the strongest economy in the continent. It is already having an important impact on development in Africa, especially in southern, eastern and central Africa. South Africa is also a net exporter of farm products.

However, the continuation of the apartheid era pattern of land ownership needs a major reform so that many South Africans can benefit from the prosperity of the country. The reforms instituted so far have made insignificant impact on the lives of the landless and the many unemployed. Without addressing the land issue and the problems of unemployment and inequalities, the South African society faces the risk of polarizing the races which could lead to social upheavals. For a viable and sustainable development to prevail, the bulk of the population must benefit from it.

A dynamic industrial South Africa has reduced dependence of many countries in the sub-region on long-distance imports of development inputs, and this has helped accelerate development in the region. South African manufactured goods and telecommunications products are exported to many other African countries. In 2011, South Africa joined the BRICS, a club of emerging industrial economies consisting of Brazil (B), Russia (R), India (I), China (C), and South Africa (S). South Africa is addressing its problem of shortages of energy by importing electricity from DR Congo.

Although Ethiopia has a huge area of arid land, it has many large rivers such as the Blue Nile (Abay), Awash, Barro, Omo and Wabe Shebelle. It can irrigate large areas and generate large amounts of hydro-electric power, some of which can be exported. Moreover, its mineral potential has not yet been tapped. Its recent policy step of expanding graduate programmes in its universities greatly will soon enhance the capabilities of its human resources tremendously. With its fast-growing population and large arid lands, industrialization becomes imperative as an industrial economy has greater capacity to sustain a large population.

In addition to focusing on the development of its human resources, Ethiopia is also targeting its huge hydro-electric potential of 45,000 megawatts that ranks it the second to DR Congo in Africa. The country has for a decade now been implementing an ambitious programme of hydro-electric development. It plans to increase electricity access to about 75 per cent of its population by July 2015 (Block and Strzepek 2012). Ethiopia's largest hydro electric dams include Fincha (1973), Gilgel Gibe (2004), Tekeze (2009), Beles (2010), Gilgel Gibe II (2011) and Gilgel Gibe III (2013). The latest and largest dam planned is the Millennium Dam on the Blue Nile, near the Sudan border. More dams are planned.
Since May 2011, Ethiopia has been exporting electricity to Djibouti. A transmission line to export power to Sudan is under construction. Ethiopia also plans to export power to Kenya. The Ethiopian-Kenyan transmission line will be linked through Tanzania to southern Africa through a power pool project for eastern and southern Africa.

Ethiopia’s power development programme is not limited to hydro electricity. It is also developing its potential in solar, wind and geothermal energy. It is even experimenting with energy production from crops such as castor seeds and jatropha (Bayissa 2008). Ethiopia, Kenya and South Sudan are to develop a large seaport at Lamu on the Kenyan coast. Ethiopia will be linked to the Lamu port by road and railway. By all indications, Ethiopia is embarking on a major economic transformation using its comparative advantage in energy resources. It seems to be succeeding, as its gross domestic product grew at an annual average rate of eight to ten per cent during the first decade of the twenty-first century (IMF 2011).

Concluding Remarks

Diversification and industrialization of the African economies are essential for integrated, self-sustaining economic development in Africa. Industrialization in the continent, with the manufacture of capital goods occupying a significant place, will lead to internalization of significant technological progress since technology is embodied in capital goods. Major technological developments within the continent will lead to self-sustaining economic growth and the development in the regional development poles with considerable spread effects in the region. Hence, industrialization of the African economies must be accorded high priority.

Many African leaders had the correct instincts at independence but could not sustain the focus. As economic problems mounted, they shifted to attending to immediate short-term crises, especially from the 1980s. However, given the small sizes of most African countries, each one of them cannot individually establish a dynamic capital goods manufacturing sub-sector. Consequently, most of the manufacturing in all African countries consists of consumer goods industries and the processing of primary products.

Aware of the limitations of their countries’ abilities to industrialize individually, African leaders advocated African unity, or at least regional integration, as the appropriate solutions to overcoming the problem of size. So far, however, their legal and political conceptions of sovereignty have superseded their vision of economic necessity for larger political units. If African leaders persist with their view of narrow sovereignty, the continent will continue to be subservient in the increasingly globalizing international economy as the goal of regional and eventual continental integration will be hard to achieve. Consequently, the establishment of viable self-sustaining economies in Africa will be a distant dream.

While African countries should continue with the efforts at collective action, those large enough to go it on their own should spearhead the processes of diversification and industrialization through their own national efforts so as to speed
up industrial and technological development in the continent. The diffusion of industrialization from these African regional development poles to the rest of Africa will be faster than from outside the continent as it happens in contagious economies in other parts of the world. Not all African countries are disadvantaged due to balkanization. But for the regional development poles to have major region-wide effects, the scale of development must be substantial. The regional impacts of the development of small economies that have attained middle-income status have been negligible. Even the impact of prosperity within the small African middle-income countries is limited to the elites and few areas of the countries where mining and/or manufacturing take place. There is not much distinction in the living conditions of the rural and informal urban sector in the small middle-income and the low-income countries. For development to be meaningful to the country and the region, its benefits should spread to the bulk of the population. This is only possible through a dynamic integrated industrial economy with the production of capital goods featuring prominently in the industrial structure.

Notes

1. The nineteenth-century conditions that enabled small European countries to develop do not exist today. Consequently, small African countries cannot hope to develop as small European countries once did. Although small countries can industrialize, they cannot drive their own destiny for very long. The twenty-first century is being billed as the ‘Chinese Century’ just as the twentieth century was labelled the ‘American Century’. Hong Kong, Japan, Singapore, South Korea and Taiwan could not claim the twentieth century, even though their economies underwent major transformations, because none of these economies were as dominant as that of the United States. China’s transformation is being determined by the Chinese themselves, enabled by the country’s huge resources and large domestic market. Instead of telling China what to do, large foreign companies do what China asks them to do. Hence, they readily make their technology available to China, overlook China’s piracy of their patents, and willingly undertake research and development in China.

2. The Treaty of June 1991 established the African Economic Community (AEC). This was a realization of the Lagos Plan of Action of 1980 adopted by the then Organization of African Unity (OAU), now the African Union (AU).

3. As at mid-2011, thirteen sub-Saharan African countries had populations of about 20 million and above as follows (in millions): Nigeria (162.5), Ethiopia (84.7), DR Congo (67.8), South Africa (50.5), Tanzania (46.2), Kenya (41.6), Uganda (34.5), Ghana (25.0), Mozambique (23.9), Madagascar (21.3), Cote d’Ivoire (20.2), Cameroon (20.0), and Angola (19.6).

4. Many African migrants have perished while crossing the Sahara Desert and the Mediterranean Sea for jobs in Europe.

5. Europe’s densities range from 200 to 1,000.

6. The figures in brackets are the dates of completion of the projects. Also see http://www.ethio-energy-development.blogspot.com
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