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Industrialization for an Emerging Africa

Issues paper

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Acronyms and abbreviations

AfDB	African Development Bank
AIDA	Action Plan for Accelerated Industrial Development for Africa
AU	African Union
AUC	African Union Commission
DFI	Development Finance Institutions
ECA	Economic Commission for Africa
FDI	Foreign direct investment
GDP	Gross domestic product
ISI	Import substitution industrialization
MIGA	Multilateral Investment Guarantee Agency
NEPAD	New Partnership for Africa's Development
NIE	Newly Industrializing Economies
ODA	Official Development Assistance
SAP	Structural Adjustment Programme
SME	Small and Medium Enterprise

Introduction

1. A consensus on the potential for Africa to become the new pole of global growth emerged at the 5th Joint Annual meetings of the AU Conference of Ministers of Economy and Finance and the ECA Conference of African Ministers of Finance, Planning and Economic Development. Indeed, over the last decade, especially prior to the 2008 global financial crisis, Africa experienced accelerated growth rates. Despite the negative influence of the global crisis, the performances of Africa's economies remain significant. In 2012, the growth rate in over 80 per cent of African countries was higher than the global growth rate of 2.7 per cent. In addition, 16 African countries were among the top 30 to be experiencing the highest growth rates in the world.

2. However, the growth performance, thus far, remains highly vulnerable to external shocks and has not translated into meaningful job creation for most countries. This is well exemplified by the impact of the recent global economic crisis on Africa's growth performance. Other factors include weather vagaries and global commodity price volatilities due to the continent's reliance on agriculture and primary commodities for its performance. Moreover, while the total unemployment rate across Africa marginally declined from 9.7 per cent in 2000 to 8.3 per cent in 2011, the share of vulnerable employment in total employment remains very high, at about 70 per cent in 2011. Africa is also the least diversified region in the world, both in terms of its production and export bases.

3. Africa thus needs to ensure that the current growth momentum is more resilient to external shocks, translates into desirable economic and social outcomes and does lead to development. Africa's economic emergence and transition from a continent of low-income into middle-income economies, requires changing the economic structure from predominantly agrarian to industrial and making the most of its large reservoir of natural and agricultural resources. This will significantly boost the economic performance of the countries as well as lift many Africans out of poverty through employment and wealth creation.

4. African leaders are determined to seize emerging opportunities to foster industrial development as an effective, socially responsible and sustainable means to economic transformation. This is evidenced by a series of proclamations, declarations and decisions made at major summits and meetings such as the 10th African Union (AU) Assembly held in Addis Ababa, Ethiopia, in January 2008, devoted to Africa's industrialization, at which African Heads of State and Government affirmed that "No country or region in the world has achieved prosperity and a decent socio-economic life for its citizens without the development of a robust industrial sector" and adopted the Action Plan for Accelerated Industrial Development of Africa (AIDA).

5. However, despite the adoption of AIDA and its implementation strategy, concrete actions are yet to be taken to transform it into reality. This is mainly due to challenges in planning and financing Africa's industrialization, which must be the central focus of economic, planning and financing experts on the continent.

6. In this regard, this issues paper identifies the major issues and questions to be considered by African ministers on the sustainability of Africa's economy through the development of industry. Following this introduction, Section I reviews Africa's experience with industrialization. Section II discusses the role of industrialization in Africa's emergence. Section III identifies key constraints to industrialization in Africa. Section IV focuses on emerging issues facing industrialization for Africa's economic emergence. Section V addresses the issue of planning and accelerating industrialization in Africa, identifying the main challenges impeding Africa's quest for industrial development. Lastly, Section VI discusses possible ways of financing industrialization in Africa.

I. Africa's experience with industrialization and structural transformation

7. Virtually all of today's successful nations actively supported and protected their industries through specific policies and institutions. Contrary to conventional wisdom that often attributes the successes of Western economies to laissez-faire and free-market policies, historical evidence shows that the use of industrial, trade and technology policies was the main ingredient in their successful structural transformations (Lin and Monga, 2010). Also, empirical evidence from developed, newly industrializing and emerging economies has shown that sustainable development cannot be achieved on a weak industrial base (Lall, 1999). In addition, economic literature shows a strong link between the level of industrialization, economic growth and development (Alfaro, 2003; Barrios and others, 2004).

8. Manufacturing is critical, and is probably the most important engine of long-term growth and development. As countries transform from primary agricultural-based economies to manufacturing and service-based ones, more sustainable revenue for growth is obtained. Sustained growth through manufacturing has contributed significantly to rapid economic transformation in many countries and regions; and the world's most developed countries and regions are achieving high levels of industrialization (Athukorala, 1996 and Lall, 1999).

9. Since the mid 1970s and early 1980s, some countries, particularly in Asia, Latin America and Eastern Europe, have experienced rapid growth through the expansion of manufactured exports. This transformed them from "less economically developed countries" to emerging markets or emerging economies. Therefore, in those Newly Industrialized Economies (NIEs), the manufacturing sector has become one of the most important of the economy and a contributor to GDP, exports and employment.

10. In short, industrialization helps countries to achieve a high growth rate, diversify their economies and reduce exposure to external global shocks.

11. While industrialization has contributed to exports and employment in such countries as Malaysia and China (Athukorala, 1996) and turned Korea, a relatively small economy in 1999 into one of the largest producers of ships and microchips (ECA, 2011), Africa's experience with industrial policy and its outcomes since independence has been largely disappointing. Yet, the seeds of Africa's industrialization woes were sown during the colonial period, when the extractive nature of African colonialism left behind structures, institutions and infrastructure design to enhance extraction. This means that at independence, the structure of African economies was not geared toward transformation and value addition but rather commodity extraction and export (Nnadozie 2013).

12. There is also the issue of policy failure after independence, starting with import substitution policies, whereby African countries genuinely decided to industrialize; and then Structural Adjustment Programmes (SAPs), whereby African countries were forced to de-industrialize. Both of these policies were externally driven.

13. Following independence in the early 1960s, industrialization was seen as a central part of Africa's development agenda, which was expected to facilitate the transformation of the economic structure into modern industrial economies. To achieve this objective, most countries adopted the import substitution industrialization (ISI) model in the 1960s and 1970s. The key policy component of ISI was protection of domestic firms from foreign competition.

14. Several lessons can be drawn from Africa's weak industrial performance under the ISI. First, Governments did not have the necessary financial and managerial capacity to efficiently operate most of the public enterprises which were created to support industrialization. Second, by distorting factor prices and rates of return, policies such as subsidies on imported capital equipment and directed and cheap loans designed to direct investment toward industry had a negative impact on other sectors like agriculture, and in some cases, led to expansion of the consumer goods sector rather than production of intermediate goods.

15. Third, policies aimed at attracting Foreign Direct Investment (FDI) (monopoly restrictions like exclusive exploration rights, sole supplier contracts and domestic market exclusivity) had the negative effect of hindering the linkages between industry and the domestic economy. Fourth, many countries failed to emphasize the importance of competitive advantage in the choice of target industries. Indeed, African countries are still mainly characterized by the abundance of labour. Indeed, by targeting industries from countries many times richer, they generally implemented a capital-intensive, heavily industry-oriented development strategy. They could not therefore build firms capable of surviving in open, competitive markets because of their high capital needs and structurally high production costs (ECA and AUC, 2011). Lastly, political interference in the design and implementation of industrial policy - including the selection of sectors, location of industry and key private sector beneficiaries - led to inefficient industrial projects and outcomes.

16. From the early 1980s, most African countries adopted SAPs, which touted export-led growth strategies. This change in policy direction was a result of several economic events in the 1970s (including the breakdown of the Bretton Woods fixed exchange rate system in 1971 and two major oil shocks in 1973 and 1979) as well as Africa's own less impressive internal factors, which made the experience with ISI worse. Thus, the theoretical premise for SAPs was that markets were efficient in resource allocation while Government interventions were inefficient because they distorted market signals. As a result, all ISI strategies, including protection of domestic firms, tariffs and other import restrictions, price controls and credit ceilings were eliminated. SAPs were successful in liberalizing the trade and financial sector and privatizing public enterprises.

17. Two key lessons on industrialization can be drawn from the SAP period. First, while SAPs focused on creating macroeconomic stability and structural reforms to achieve a conducive environment, especially for foreign firms (e.g. protection of property rights and ensuring contract enforcement), there was little effort to address market failures and externalities that had historically constrained economic activity in Africa. Coherent strategies were also lacking. Second, the withdrawal of Government support even in the presence of pervasive market failures and the liberalization of trade without taking account of the capabilities of domestic firms, exposed African firms to foreign competition at a time when they were not mature enough.

18. Their efforts notwithstanding, most African countries have had to contend with the challenge of industrial development. Most of Africa's economies are still driven by commodity production and export of agricultural and mining products. Africa remains the least industrialized continent of the world. Indeed, the growth of manufacturing value added during the SAPs period was disappointing, with several countries actually suffering de-industrialization. From 1980 to 2009, the share of manufacturing value added to GDP marginally increased in North Africa, from 12.6 per cent to 13.6 per cent, while it fell from 16.6 per cent to 12.7 per cent in the rest of Africa. Over half a century after independence, while other regions have increased their share of manufactured exports, the continent still depends on the export of raw materials to the industrialized world. These raw materials are processed and sold back to Africa at much higher prices.

19. Also, Africa's export profile has not significantly moved away from the commodity dependence of the colonial times. For example, the continent's Export Concentration Index¹ actually increased from 0.24 in 1995 to 0.43 in 2011, which is significantly higher than in most developing regions (see table 1). Moreover, more than half of African countries are characterized by an export concentration index of 0.4 or higher. Similarly, Africa's export diversification index² remained above 0.5 from 1995 to 2011, with all countries having an index of 0.5 or higher.

20. The dependence on primary commodity production and exports exposes the continent to external demand shocks and leads to pro-cyclical fiscal spending in many resource revenue-dependent countries. More importantly, the commodity-driven feature of Africa's economy poses serious questions about its long-term sustainability, as agriculture is subject to diminishing returns to scale due to land constraint while exploitation of non-renewable natural resources is limited by available reserves.

Table 1: Comparative trade indexes, by region (1995, 2011)

	Export Concentration Index		Export Diversification Index	
	1995	2011	1995	2011
Developing economies: Africa	0.24	0.43	0.55	0.55
Africa excluding South Africa	0.34	0.51	0.67	0.62
Developing economies: America	0.09	0.13	0.36	0.34
Developing economies: Asia	0.09	0.12	0.32	0.24
Least developed countries: Asia	0.24	0.23	0.75	0.69
Low-income developing economies	0.14	0.25	0.57	0.47
Major exporters of primary commodities excluding fuels: Developing America	0.14	0.18	0.61	0.64

Source: Economic Report on Africa, 2013.

21. This industrial stagnation is in sharp contrast to the success of the East Asian newly industrialized countries. As table 1 shows, while Africa's export diversification index remained the same at over 0.5 from 1995 to 2011, that of developing Asia significantly declined from 0.34 to 0.24. The success of the East Asian model is attributed to three factors from which African countries could learn. First, Governments provided stable and predictable incentive frameworks that supported investments. Second, Governments had close, continuous and strong dialogue with the private sector. The State was thus able to withdraw support whenever a firm's performance was not satisfactory and imposed export-performance standard. Lastly, Governments used import substitution and export promotion strategies simultaneously, combining them in the most efficient way to serve the industrialization objective (ECA, 2011).

¹ The Export Concentration Index measured the degree to which an economy depends on one product for its exports.

² The Export Diversification Index measures the extent to which the structure of trade of a particular country differs from the world average.

II. Role of industrialization in Africa's emergence

22. While sustained growth has contributed significantly to rapid economic transformation in other parts of the world, in Africa it has been observed that the relatively good growth performance has not been inclusive, as millions of Africans are still caught in the poverty trap, largely because failure to diversify sources of growth continued over-reliance on primary commodity exports. Africa's economic growth is currently largely driven by commodity exports, especially oil and metals. This is in sharp contrast to the growth pattern of other developing regions, especially Asia, where growth has been driven by a solid industrialization agenda, which places greater emphasis on manufacturing. The downsides to Africa's reliance on a commodity-driven growth path include risks to resource extraction, vulnerability to unfavourable terms of trade deterioration, risks of currency overvaluation as a result of Dutch disease, weak backward and forward linkages to the domestic economy, limited use of advanced technologies and, above all, weak employment creation. Furthermore, Africa's dependence on primary commodity exports exposes the continent to volatile global commodity prices and economic instability.

Structural transformation and value addition

23. Industrialization helps countries diversify their economies and reduces exposure to external global shocks. Africa's significant natural resources are being extracted and exported in their raw form and not as finished products. Hence no value is added to extractive commodity exports. This is a serious missed opportunity for more robust, diversified and sustainable economic development. Furthermore, some of these resources are an irreplaceable, non-renewable asset; and their exploitation generally has weak linkages to the rest of the economy and consequently lower contribution to GDP than could have been achieved.

24. Development in Africa requires economic transformation and industrialization, as has already been stated; this is the key to achieving sustained levels of growth. Africa's economic development thus needs to be accompanied by structural transformation from an agrarian base to an industrial one. The structural transformation in Africa will be a continuous process that should include an industrial catch-up period, as industry in many countries is either inexistent or in the very early stages. Equally important is an industrial upgrading period. However, Africa being resource rich, has potential to achieve rapid structural transformation by manufacturing its vast natural/raw materials (primary products) into finished products for export. It can also take advantage of leader countries and follower countries in Europe or Asia as well as the backward linkage between industrialization and the rest of the real economy.

Sustainable structural transformation

25. Industrialization and structural transformation lead to intensive use of natural resources at the expense of the environment. The challenge for Africa is not only to successfully transform its economies, but to do it in a sustainable way, using and adapting existing environmentally sound technologies to local conditions as well as indigenous technological innovation.

26. Implementing sustainable structural transformation in Africa will not be easy and there is no "one size fits all" approach. Each African country will have to design strategies and policies based on its own sectoral and resource priorities, environmental challenges, initial conditions and domestic capabilities. Among other areas, focus should be placed on efficient, sustainable resource use in energy, industry and agriculture. African countries that are well embarked on that path include Kenya, Mauritius and South Africa (UNCTAD, 2012). Progress made so far in Africa is very slow and international cooperation and significant support is needed, particularly in productive

sectors such as energy. Greater green technology transfer is also needed from developed and emerging countries.

Issues for discussion

(a) What are the classification criteria for emergent economies or what are the criteria of emergence?

(b) What are the contributions of industry to African economies: is this enough or not? What is the contribution of industry in current emergent economies?

(c) Can Africa become an emergent continent without a deep contribution of industry? At which level of industrialization should Africa be in order to be classified as emergent?

(d) The road to emergence: country approach versus regional approach.

(e) Role of the African private sector for an emerging Africa.

III. Addressing the key constraints to industrial development

27. Many factors explain the low levels of industrialization on the continent. Some of the factors are specific to the type of industrial policy adopted (discussed above), while others are systemic and need to be solved in spite of the type of policy designed or implemented.

28. The creation of a competitive industrial sector has been hindered by poor infrastructure (energy, transport, communications, etc.), resulting in higher production and transaction costs. Investing massively in infrastructure, including energy, will create an enabling environment for industrialization to take place on the continent. This calls for efforts to create a dynamic response to infrastructure and alternative energy needs and guarantee their efficient management and maintenance. The continent needs to make use of its comparative advantage, using its natural resources as the cornerstone of industrial development. The development of infrastructure, therefore, has to be made a priority at the national, regional and continental levels.

29. Development of the human capacity is necessary for industrial development. Large gaps in labour productivity are a fundamental determinant of existing gaps between industrialized and developing countries. Given the high skill level required for industrialization, African countries need to develop their human capital, which is a key contributor to the continent's lagging industrial development. Education, health and skills acquisition are thus essential for improving the productive capacities of countries. This is clearly identified in cluster 4 of the implementation strategy of AIDA. The strategy emphasizes that "to achieve resource-based industrialization... the current skills shortage in Africa needs to be addressed through key actions that lead to deliverable outcomes" (AU, 2008).

30. Another issue is the need to develop standards that meet international standards. The building of capacity to improve, certify and assure the quality and standards of industrial products is important for taking advantage of access to the global market and sustaining the process of industrialization. The inability of some African countries to meet technical standards set by the developed countries has been a barrier to taking advantage of the benefits of market access for processed and manufactured goods.

31. Access to finance remains one of the key constraints experienced by African countries in their quest for industrialization, both at the public and private sector levels. African countries need to mobilize sufficient resources to finance public investments that are crucial to industrial development, including investments in infrastructure, education, and technology. In the private sector, African firms, many of which are small and medium enterprises (SMEs) face demand- and supply-side difficulties in access to finance. On the supply side, the main problem is the lack of depth of the financial systems. Indeed, the formal financial systems, characterized by very few operators, tend to focus their services on large-scale firms and Governments. The formal banking systems are reluctant to lend to SMEs as they perceive them as high risk and administratively costly. However, whether for public or private purposes, financing industrial development from domestic sources instills local ownership of the processes and outcomes, and therefore has a better chance of making policy interventions successful.

32. High uncertainty and investment risks. The growth potential for Africa's manufacturing industries is critically constrained by high uncertainty and risks (perceived or real), which reduce a firm's propensity to undertake capital investment (Bigsten and Soderbom, 2006). These risks and uncertainties mostly arise from unstable political and policy environments and macroeconomic instabilities such as high and volatile inflation. While political instability and civil conflicts have been on the decline since the early 1990s, recent socio-political developments in North Africa raise concerns about the reversal of the gains made in this area over the past two decades.

33. Limited technological capabilities for innovation and developing new industries are also a critical challenge for most African industries. Often, the technologies used in the production process in Africa are not adequate. This technology gap has reduced the competitiveness of many African industries (UNCTAD, 2003). Notably, Africa has, in recent years, given education and technology development high priority through such policies as the Science and Technology Consolidated Action Plan approved by the AU and NEPAD in 2005. Unfortunately, technology information services established by several Governments to help local firms, especially SMEs, to locate and acquire foreign technologies have not performed well.

34. Some countries are however making noticeable efforts to implement measures that foster innovation and technology accumulation by firms. Countries that have created institutions for promoting science and technology include Ghana, Tanzania and Kenya. Countries have used a combination of different policies for: technology innovation; measures to attract FDI; finance to access to industrial technology, equipment and machinery and industrial research and technology diffusion (ECA, 2011).

Issues for discussion

(a) What role should Governments and other non-State actors play in addressing the constraints to industrial development?

(b) What lessons can Africa draw from previous experience with industrial policy, to design, implement and monitor its new industrial strategies?

(c) What lessons can be drawn from the East Asian industrial experience to inform Africa's industrialization drive, especially in addressing the key challenges to industrialization for economic emergence?

(d) How can African countries reinvigorate the role of development finance institutions to promote industrial financing while drawing lessons from their previous failures?

(e) What strategies and instruments can be used to enhance domestic financing of industrial projects?

IV. Industrializing for Africa's economic emergence: emerging global issues

35. Africa's economic emergence requires economic transformation and industrialization, the key to achieving sustained levels of growth, as was the case in the NIEs. The continent's economic emergence should therefore be accompanied by transformation of its economies from being predominantly agrarian to industrial. The structural transformation in Africa will be a continuous process that should include both an industrial catch-up period and an industrial upgrading period. However, Africa, being resource rich, has the potential to achieve rapid structural transformation through value addition and developing backward and forward linkages to the commodity sector.

36. The problem is that Africa today faces a very different global and regional environment from that faced by earlier developing country entrants into industrial development. Among the factors that have shaped the new global environment are globalization and the changing international economic order; the rise of (East) Asian countries; and climate change and its implications for latecomers into the industrial development process.

37. Globalization: Africa did not benefit from the massive globalization that began in the early 1980s and which was characterized by several changes in the world economic order. First, it coincided with the period of SAPs in Africa, which meant that, as Governments were liberalizing their trade and financial sectors and eliminating the import substitution industrialization strategies, multinational corporations were able to expand their markets to Africa. SAPs brought in the growing dependence on (mostly consumer) imports, which eroded the weak industrial base of most African economies (Ogbu and others, 1995). On the other hand, East Asian, and to a lesser extent, Latin American economies were able to take advantage of globalization and be part of the global value chains, partly because their Governments still used industrial policies (including providing finance and developing strong commercial public sector enterprises) to seize those opportunities.

38. Globalization has also changed the pattern and rules of international trade in two critical ways. First, current international trade and division of labour are organized along value chains, and multinational companies play a dominant role in creating and controlling these value chains. Without being integrated into these value chains, it will be difficult for African countries to access larger external markets. Yet on the other hand, there is the risk that they may be further pinned down at the lower end of the global value chains as their industrial base is weak and their negotiation capacity with multinationals may be low. African countries must thus strategize on how to position themselves in the global value chains and steadily promote value addition towards the higher end of these value chains.

39. Second, with globalization came new global trade rules that have reduced the space of industrial policy in Africa. Traditionally, trade policies have been critical tools for industrial policy. However, various regional and international agreements over the past two decades have changed the rules of world trade significantly, affecting domestic trade policies as well as opening new markets for trade. Indeed, Africa must overcome the burden of having opened up to international trade before domestic industries had a chance to become competitive. Domestic firms must therefore first be able to compete with high-quality and low-cost goods that have penetrated local markets.

40. Rising labour costs in East Asia: The growing middle class in Asia and the development of most Asian countries into middle income economies have led to a rise in the cost of labour - the very characteristic that attracted most multinational corporations to invest their production

processes in the region. This implies that as labour costs increase, the multinational corporations will start looking elsewhere for labour services to maintain or lower their production costs. The challenge for African countries is that the cost of manufactured products is steadily falling, meaning that competing on low labour costs is no longer an attractive option.

41. The growing significance of South-South Cooperation: The economic emergence of the South is likely to continue to be the major feature of the global development landscape in coming decades. The leading Southern economies have already become the global hub for low-tech and labour-intensive manufacturing and are quickly moving up along the global value chains towards more technology- and capital-intensive sectors. To obtain access to larger external markets and become integrated into global industrial value chains, Africa must form a proactive strategy to engage the southern partners to effectively enhance its own industrialization process. This entails having a long-term view about the position of Africa in global value chains, investment in fundamental factors such as human capital, infrastructure and technology to improve international competitiveness, enhanced capacity to improve skills transfer in South-South cooperation and close public-private partnership to support domestic enterprises in international competition.

42. Trade relations between Africa and emerging countries should be put into perspective: Africa's trade with these countries is characterized by exports of raw materials and imports of manufactured goods. In particular, China is becoming an important trading partner with Africa. However, China's exports to Africa compete with the domestic manufacturing sector, with adverse implications for the employment of low- skilled workers. Moreover, China's pursuit of an undervalued exchange rate has negative impacts on Africa's efforts to promote economic diversification particularly through manufacturing and moving up the value-added chain.

43. Climate change, sustainability and green growth: The global concern about climate change provides Africa with both challenges and opportunities. In practice, it means that Africa may need to take an industrialization path that may need harmonizing industrial development with environmental sustainability, as opposed to the "pollute-first-clean-up-later" approach that most industrialized nations took. There are two key climate change challenges to Africa's industrialization efforts. First, under the United Nations Framework Convention on Climate Change, current and future international obligations on climate change mitigation and adaptation could impose constraints on how Africa should industrialize. Second, as the international community accelerates plans for cutting greenhouse emissions, industries may be compelled to comply with certain national and international environmental standards and laws, such as reporting on their emission cuts (UNCTAD, 2011). However, climate change could also provide opportunities for Africa to take a "green" path to industrial development, based on low-energy intensity, low-carbon and clean technologies.

44. Africa's significant natural resources are being extracted and exported in their raw form and not as processed or finished products. This is a serious missed opportunity for more robust, diversified and sustainable economic development. Furthermore, some of these resources represent an irreplaceable, non-renewable asset, and their exploitation generally has weak linkages to the rest of the economy and consequently lower contribution to GDP than could have been achieved.

Issues for discussion

(a) With rising labour costs in East Asia, labour-intensive production processes are likely to start relocating from the region. How should African countries, prepare to seize this opportunity to spur their industrial development?

(b) How can African countries harness the growing cooperation with their Southern partners like Brazil, China, India and others, to promote industrial development?

(c) How best can Africa deal with the opportunities and challenges presented by globalization? In particular, how should policymakers design industrial policies in the face of various trade and regional integration commitments?

(d) How should African countries address the issues of climate change in their efforts to industrialize?

V. Planning and accelerating Africa's industrialization

45. Implementing sustainable structural transformation in Africa will not be easy, and there is no "one size fits all" approach. Each African country will have to design strategies and policies based on its own sectoral and resource priorities, environmental challenges, initial conditions and domestic capabilities. Among other areas, focus should be placed on efficient, sustainable resource use in energy, industry and agriculture. African countries that are well embarked on that path include Kenya, Mauritius and South Africa (UNCTAD, 2012).

46. The planning and industrial acceleration process in Africa needs to define strong industrialization strategies, identify priority sectors to focus on the short term, as well as strategies for the medium and long terms, and identify the key enablers to kick-start and sustain industrial development. This raises five key issues for massive industrialization in Africa: leadership, strategy and policy, investments, business environment and policy implementation and coordination.

Leadership for prioritizing and accelerating Africa's industrialization

47. Developing the right strategy and industrial policy for massive industrialization.

Making critical investments to unleash industrial potential.

Creating a business environment that is conducive to industrial development.

Ensuring that policies are implemented and better coordinated.

48. The priority sectors are bound to vary from country to country in Africa. However, agro-processing is a priority in most countries, as are value addition to the extractive sectors and modernization of agriculture. As indicated in the *Economic Report for Africa 2007*, most African countries are still in the very early stages of industrial development and should strive for diversification in higher-valued products, capitalizing on their mineral and agricultural wealth. In addition, Africa needs to increase its participation in a broad range of global value chains, starting with natural resource extraction and agro-industry and later moving into other manufacturing global value chains to create wealth and employment.

49. An overwhelming majority of the poor in Africa live in rural areas and potentially depend on agriculture for their livelihood. A modernized agriculture sector, which is labour-intensive and creates jobs and generates value added in agro-processing activities would lift many Africans out of poverty. A modernized agriculture sector also entails significant forward and backward linkages to the domestic economy, which do not exist to the same extent in the extractive industries. Indeed, an agribusiness-led development strategy involving higher value added and stronger productivity growth throughout the entire value chain system of the economy offers a strong potential and promise for rapid and broad-based economic growth and wealth creation in Africa and poverty alleviation for Africa's rural dwellers.

50. Asian NIEs used a variety of strategies, including incentives, to promote local industry such as lowered costs of entry into different manufacturing activities. They started their industrialization process in situations similar to current African ones, especially Malaysia, which relied on exports of primary products before embarking on rapid industrial development through a series of policies (Athukorala, 1996). They identified their priority development areas and used different policies and strategies to achieve their respective objectives.

51. The natural resource wealth of the continent should provide a foundation for its accelerated industrialization. Policies and measures have to be introduced and implemented to maximize revenue derivable from the exploitation of natural resources to enhance the investment that is required for industrial development, and to increase local processing and value addition of natural resources.

52. Africa can thus capitalize on its resource endowments and the commodity price boom to develop its industrial base. Previous policy advice on industrialization in Africa encouraged African countries to diversify away from the natural resource sector in pursuit of industrialization. A key reason for industrializing away from natural resources was that commodity sectors offered limited opportunities for backward or forward linkages and had weak positive externalities; and that investors would not match Africa's factor endowments, such as abundant unskilled labour and high capital requirements for such an industry. Moreover, resource-based industries encounter the same obstacles as any other industry.

53. However, the historical experience of many resource-rich countries is that commodity sectors do foster productivity, growth, technological innovation and forward and backward linkages, provided good institutions exist and investment is made in human capital and knowledge (de Ferranti et al, 2002). Examples of countries that have developed their industry using their natural resources include Sweden, Finland and the United States. African countries endowed with natural resources can take advantage of the recent commodity market boom, expected to remain for the medium term, to promote industrialization and knowledge intensification processes around backward and forward linkages to the commodity sectors.

54. Understanding the key factors that influence linkage development is critical to promoting resource-based industrialization. In order for industrial policy to be effective in building competitive resource-based domestic firms, both the policymakers and participating firms need to develop a clear understanding of the backward and forward linkages in the sector. These linkages relate to the technical characteristics of the product's global value chains. These include factor intensity in production processes, lead production times and stages of production; industry structure such as market concentration and level of competition (regional and global); strategies of the lead firms in the products' global value chains; geographical location; and existing trade barriers such as tariff escalation.

Key enablers for Africa's industrialization

55. Successful industrialization requires leadership and Government commitment to industrial development that will set the right tone at the top and make industrial development a top priority. It is crucial that Governments translate the strong political will for industrialization into action and provide leadership at various levels to support certain strategic sectors in the overall long-term development. First, Governments need to set up the right policies and use the right policy mix to facilitate industrial development and secondly, the private sector should be confident about its political commitment to industrialization. In terms of choosing the right strategy, based on internal and external realities, Governments should also emphasize the critical role that industry plays in national development and must unequivocally and fully support industry and the private sector through demonstrable commitment to private sector development and by providing the visionary and effective leadership needed to carry it through.

56. The success of any industrialization programme will require the creation of an enabling business climate that enhances domestic capacity and capability, particularly in respect of physical and social infrastructure, human capital, financial systems, technology and governance. In addition, Governments should put in place regulatory frameworks for tackling market failures and also address coordination failures within Government as well as between Government and other actors. Within Government, coordination will entail making the right policies in terms of industrial, trade and macroeconomic policy levels. It will also entail commitment to implementing the policies, based on sound technical decisions, and with minimal political and/or special interest capture. The creation of such an enabling environment will make for realizing the full potential of both domestic and foreign private investors.

57. Productivity matters for the success of Africa's industrialization. Africa is the least productive region in the world, based on gross domestic product (GDP) per hour worked. For each hour worked, Africa generates less value from the efforts of its workers. As a result, income growth is driven more by capital investments and terms of trade than by productivity. This productivity gap is a prosperity gap for an organization pursuing the objective of a prosperous continent. Improving productivity means producing more from available resources such as labour, natural and mineral wealth, capital and equipment, management capacities and finances. Higher productivity allows a nation to afford its citizen's well-being, which encompasses quality healthcare and education, quality infrastructure and environmental sustainability, through green growth and industrial green productivity. The current recessionary environment urgently calls for improving industrial productivity. In so doing, there must be a shift from natural resource demand-fuelled growth, which carries risks for long-term manufacturing-based competitiveness, in an attempt to grow domestic industrialization.

58. To tackle the various challenges, such as low productivity and competitiveness in a globalized economy, poverty and climate change confronting member States of the Union, Africa must endeavour to pursue industrialization that is rooted in the quest for high productivity performance and innovation-led productivity growth. For the African industrialization venture to succeed, it is vital to ensure orderly implementation of the AU Productivity Agenda for Africa.

59. Operating in a democratic environment, where people's rights, in particular workers' rights, are of prime importance, the mechanism for building a shared vision on industrial development is also vital. This points to the importance of social dialogue as a means for consensus that leads to sustainable and productive partnership. Effective social dialogue is needed at the national level, as are other supportive labour market institutions, to construct a peaceful and attractive environment for industrial development in Africa.

60. The international community can also contribute to Africa's industrialization. In particular, it should deliver on its commitments to Africa in the three critical areas of official development assistance (ODA), debt and trade. So far, the experience of Africa has been one of considerable gap between commitments and implementation.

AIDA, regional framework for Africa's industrialization

61. To be successful, industrial policy and development will have to be tailored to the local country context and coordinated at the regional level.

62. However, while the responsibility for industrial development rests primarily with national Governments, regional integration has an important role to play in lifting the various binding constraints to industrialization. For instance, regional cooperation in the development of infrastructure would lower transaction costs, enhance the development of regional markets and make manufacturing production and exports more competitive. Regional integration can also contribute to reducing the regulatory burden facing African firms by, for example, harmonizing policies and serving as an external agency of restraint on domestic policies (UNCTAD, 2011). Regional integration will also boost intra-African trade, and hence accelerate industrialization in Africa. In this respect, AIDA and its accompanying implementation strategy provide practical options for accelerating industrial development at regional and continental levels.

63. Several decisions were taken, especially under AIDA, by African Heads of State to industrialize the continent. A series of 16 programmes and 49 projects to be undertaken within the seven clusters of the AIDA "implementation strategies" were identified. These clusters are: creating industrial policy and institutional direction; upgrading production and trade capacities; promoting infrastructure and energy for industrial development; human resource development for industry; industrial innovation systems, research and development and technology development; financing and resource mobilization and sustainable development (African Union AIDA document).

Issues for discussion

(a) How can African countries ensure full implementation of AIDA to promote value addition and economic transformation and reduce dependence on the production and export of unprocessed raw materials?

(b) What are the key policy and technical regional integration issues that should be addressed to support industrialization in Africa?

(c) What is hindering human capital development and sustainability, innovation, science and technology, as critical elements of successful industrialization in Africa?

(d) How can African countries unleash the potential of agro-industry as a locomotive of industrialization in Africa?

(e) What steps can be taken for women's empowerment in Africa's industrialization?

(f) What kind of measures can Governments take to demonstrate that they are fully committed to industrial development?

(g) How can the AU Productivity Agenda be used to support the industrialization of the continent?

VI. Financing Africa's industrialization

Domestic mobilization and allocation of resources

64. The financial sector is central to private sector development, especially in terms of efficient and well functioning capital and financial markets and the banking system. Capital is a critical issue in enterprise and private sector growth, in addition to the appropriate institutional and macroeconomic environment. However, in almost all African countries, long-term growth prospects are being retarded by the lack of investment. Thus, although there are investment opportunities, there is inadequate access to finance, in particular risk capital. This underlies the urgent need to encourage domestic and foreign investment and accelerate the development of local capital markets in Africa.

65. In many African countries, the financial sector needs to be reformed to make it more responsive to industrial development. The banking system should also be developed by reviewing the national banking legal and regulatory frameworks, opening up the banking sector for competition, supporting capacity development in African banks, facilitating training of bankers and promoting establishment of alternative financing mechanisms (AU, 2008).

66. Growth of Africa's stock market has been encouraging, has albeit with low capitalization. This sector has the potential to finance industrialization and should be promoted by: developing and providing incentives for companies to list on the local stock exchange; developing efficient securities trading and settlement systems; and encouraging African companies to list on international stock exchanges to attract foreign capital.

67. Various development finance institutions (DFIs) have been established in Africa at the national, regional and continental levels. They include the Industrial Development Corporation, the Development Bank of Southern Africa, the PTA Bank, the African Development Bank (AfDB) and the Islamic bank. These DFIs should be tailored to support financing industrialization in Africa.

68. In the past, most resource-rich African countries accumulated vast revenues following the primary commodity boom. These revenues have to be used, among other things, to develop the manufacturing sector and services that capacitate SMEs on the continent. Ministers of industry and finance are to play a vital role in this as they are the ones to formulate policies and set up funds.

Continental industrial development fund and regional investment fund

69. There is a need to consolidate the AU plan for an Africa-wide fund to finance industrial and productive capacity development and infrastructure projects. The proposed fund, under the guidance of NEPAD or AfDB and working closely with multilateral development finance institutions such as the Multilateral Investment Guarantee Agency and the International Bank for Reconstruction and Development, would speed up the process of raising capital from local and internal capital markets, harnessing African Government contributions and channeling ODA.

70. Regional investment funds should facilitate the development of projects that are guaranteed to bring profits. Even though private sector-led projects are to be a priority for the fund, infrastructure development projects that have a direct impact on stimulating industry growth will also be a priority.

Investment promotion, monitoring and subcontracting mechanism

71. As has been learnt from the Asian NIEs, FDI has played a very important role in facilitating industrial development. Studies have shown that FDI to Africa has increased in the past years, albeit marginally, compared to the rest of the world. Another problem with FDI increase in Africa is that it is mostly directed towards natural resource exploitation. Competitive growth through investment is the key to achieving some of the continent's development challenges. Therefore, Africa needs to work on improving the quality of investment flows into productive sectors and also on creating an attractive investment environment.

72. Linked to investment is the Subcontracting and Partnership Exchange programme to help local enterprises become suppliers or subcontractors of large firms, State-owned enterprises and transnational corporations. In this way, suppliers are helped to achieve the international competitiveness required to penetrate the supply chains of main contractors (AU, 2008).

Leveraging African remittances for industrialization

73. Africa's diaspora plays a vital role in assisting the reduction of poverty in their home countries. Remittances have recently become a very important source of external financing. They provide much needed finance for ensuring household security and alleviating poverty. Remittances afford families the finances needed to start up businesses and finance projects.

74. African Governments and the AU are in a process of engaging the diaspora, but there is no public policy to engage these underutilized resources, while the relationship between home countries and the diaspora are weak and in some cases non-existent. Given the need for policy to harness diaspora resources, various countries in Africa and the AfDB, have been prompted to put in place mechanisms to facilitate African diaspora investment efforts. The objective is to have a mechanism to leverage diaspora resources, including finance for investment in the industrial sector. African countries need to harness the knowledge, finance and entrepreneurial capacity of the diaspora to enhance investment in the industrial sector or supporting sectors (AU, 2008).

Issues for discussion

(a) What strategies could be adopted to improve the mobilization of domestic resources and ensure that the domestic private sector actively participates in financing industrialization at the national, regional and continental levels?

(b) What steps could be taken to accelerate the establishment of regional financial institutions such as the African Investment Bank that can provide financing for industrial development?

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