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# Promoting Industrialisation in Mauritius, South Africa and Botswana: Lessons for the Future

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# Abstract

The industrialisation agenda is a topical issue in debates on Africa's development. Evidence shows that since the 1990s, Africa has experienced de-industrialisation and consequently, the continent has the lowest Manufacturing Value Added (MVA) compared to all other regions in the world. This article argues that industrialisation must be a top priority on the agenda of development planning and management in Africa. The article is futuristic in that it focuses on strategies to promote industrialisation. It reviews and analyses the experiences of three African countries, namely, Mauritius, South Africa and Botswana. They are selected not because they have achieved the ultimate goal of industrialisation, but rather because they have taken major steps that promise to yield success in the future. The article is based on a review of secondary information such as government policy and strategy documents, published journals and other peer-reviewed literature. The analysis highlights the important role played by a strong developmental state, formulation and implementation of long-term industrial strategic frameworks, creation of effective institutions, re-introduction of industrial policies and incentives, and foreign direct investment. While recognising the historical limitations of FDI, it still recommends intensification of such investments albeit within a new framework in which governments have to negotiate better terms of engagement in order to ensure technology and skills transfer. The article also emphasizes that there is no one-size-fits-all and so each country has to develop industrialisation strategies which are appropriate to its own environment and context.

## Résumé

L'agenda de l'industrialisation est une question d'actualité dans les débats sur le développement de l'Afrique. Il s'avère que depuis les années 1990, l'Afrique connait une désindustrialisation et, par conséquent, a la plus

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faible valeur ajoutée manufacturière (VAM) que toutes les autres régions du monde. Le présent article soutient que l'industrialisation doit être une priorité absolue dans l'agenda de la planification et de la gestion du développement en Afrique. L'article est futuriste dans la mesure où il met l'accent sur les stratégies visant à promouvoir l'industrialisation. Il examine et analyse les expériences de trois pays africains, à savoir l'île Maurice, l'Afrique du Sud et le Botswana. Le choix de ces pays est basé sur l'avenir prometteur suscité à travers les mesures importantes qu'ils ont prises et non pas parce qu'ils ont atteint le but ultime de l'industrialisation. Le présent article se fonde sur une revue d'informations secondaires telles que des documents de politique et de stratégie gouvernementaux, des revues publiées et d'autres publications revues par des pairs. L'analyse met l'accent sur le rôle important de l'État développementaliste fort, la formulation et la mise en œuvre de cadres stratégiques industriels à long terme, la création d'institutions efficaces, la réintroduction de politiques et d'incitations industrielles et l'investissement étranger direct (IED). Tout en reconnaissant les limites historiques de l'IED, l'article recommande toujours une intensification de ces investissements, mais dans un nouveau cadre où les gouvernements doivent négocier de meilleures conditions d'engagement afin d'assurer le transfert de technologies et de compétences. En outre, l'article souligne qu'il n'existe pas d'approche uniforme et que chaque pays doit élaborer des stratégies d'industrialisation adaptées à son environnement et à son contexte.

# Introduction

Evidence from studies by both the United Nations Industrial Development Organisation (UNIDO) and the United Nations Conference on Trade and Development (UNCTAD) show that over the past decade, Africa has had the lowest Manufacturing Value Added (MVA) performance in relation to the rest of the world. They also show that the continent is still dependent on production and export of commodities and heavily reliant on imports for most of its manufactured goods (AU Commission 2013).

At the 10th African Union (AU) General Assembly held in Addis Ababa, Ethiopia, in January 2008, an event which was devoted to Africa's industrialization, African heads of state and government affirmed that: 'No country or region in the world has achieved prosperity and a decent socioeconomic life for its citizens without the development of a robust industrial sector'. This Assembly culminated in the adoption of the Action Plan for Accelerated Industrial Development of Africa (AIDA).

The failure of most African countries to industrialise explains why they are still exporting primary commodities and importing manufactured goods. The global economic and financial crisis of 2009 adversely affected those

primary commodity producers and exporters as the fall in external demand led to declining export volumes, sales and revenues. Resource-dependent and primary-commodity exporters such as Namibia, Botswana, South Africa, Zambia, Congo DRC and Kenya, to name a few, are among those economies which were adversely affected by the crisis. The United Nations Economic and Social Council (UN ECOSOC), Economic Commission for Africa (ECA) and the African Union (AU) caution against the dependence on primary commodity production and exports because:

it 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 (UN ECOSOC, ECA and AU 2013:12).

The purpose of the article is to discuss innovative approaches to industrialisation in Africa within a futuristic framework. The article focuses on the experiences of Mauritius, South Africa and Botswana. They are considered here because they have made some significant progress with regard to industrialisation and diversification of their economies. It must be emphasized that their selection does not in any way suggest that they should be treated as 'role models' for the rest of Africa, particularly in view of the controversial nature of some of their strategic approaches. In addition, they themselves still have a long way to go in terms of implementing a comprehensive and diverse industrialisation agenda. However, their experiences may offer some useful lessons on innovations for industrialisation. The article argues that there are a number of factors behind the successes made by these countries in their industrialisation efforts. At the political level is the adoption of the developmental state as a guiding principle for economic transformation. This approach recognises that markets alone cannot deliver structural change for an economy and that, therefore, the state has an important role to play. The development and implementation of a longterm industrial development vision and framework has been key to the success. They have also established a strong institutional base to support industry. These include government ministries and agencies, private sector associations or networks, export promotion agencies, parastatals, development finance institutions and skills development and training institutions. The governments have invested significantly in infrastructure, trade logistics, and human resource development through a variety of skills development programmes. They have also taken measures to create an environment which attracts foreign direct investment to bring in the much needed technology and technical skills.

The article uses these experiences to reflect on a framework for a futuristic industrialisation agenda for Africa. Secondary data sources were used to present this qualitative piece of work.

## Theoretical Framework

Owusu and Samatar (1997:3) argue that the role of industrialization in development is very important, and the emergence of a dynamic manufacturing sector has typically marked a country's transition from low to intermediate income levels. A strong industrial sector also generates employment and enhances the development of backward and forward linkages in the wider economy. Naudé (2013:50) points out that manufacturing has a higher productivity impact compared to other sectors and it also contributes to economic diversity which is fundamental in reducing a country's vulnerability to negative external shocks. He also argues that industrialisation is key for structural change. Rodrik (2007:6) holds the view that 'development is fundamentally about structural change'. He explains structural change as a process which leads to an increase in the share of manufacturing in a country's Gross Domestic Product (GDP). A strong argument in favour of manufacturing is that it is able to generate positive externalities. Naudé (2013:49) emphasizes that the manufacturing sector generates 'Marshallian' externalities due to knowledge spill-overs within the industry (technology diffusion), linkages (backward and forward) with the rest of the economy, dynamic economies of scale, and labour pooling.

Szirmai (2009) argues that there are powerful empirical and theoretical arguments in favour of industrialisation as the main engine of growth in economic development. Their econometric analysis of 90 countries over the period 1950-2005 confirmed that there was an *empirical correlation* between the degree of industrialisation and per capita income in developing countries. They also established that productivity was higher in the industrial sector than in the agricultural sector.

Industrialisation is not just an economic issue. It is ideological and political. Ideological in that, as demonstrated by historical experience, capitalist accumulation during the colonial era was made possible through exploitation of Africa's natural and human resources. Based on the Ricardian notion of comparative advantage, African countries were made to specialise in the production and export of commodities (raw minerals, agriculture and forestry resources) and to depend on imports for their need for capital goods and other manufactured goods. The story is well-known and need not be repeated here. The unequal terms of trade which characterised this pattern of specialisation have always disadvantaged African countries and that too is on record. According to Hillbom (2012:193), neoclassical economists like Kuznets argued that in our time the end goal for any society is to reach 'modern economic growth' (MEG), thereby leaving the pre-modern growth process behind. This modernisation, which is the equivalent of development, is characterised by technological advances, high rates of growth, a rise in productivity, and structural transformation of the economy, society and ideology. Depending on its causes and characteristics, growth may be more or less likely to promote such processes of structural change, and societies can experience growth while staying pre-modern. Kuznets' analysis was in the context of capitalist accumulation. Hillbom (2012:193) argues that industrialisation should not be primarily for purposes of capital accumulation as an end game but rather, it should be a means to an end, enhancing value creation, reducing external dependency on primary commodities and therefore strengthening Africa's capacity to negotiate better terms.

That Africa remains largely unindustrialised is therefore not a coincidence but rather a reflection of the prevailing ideology which shapes the international division of labour and seeks to perpetuate the underdevelopment of the continent because that is an important pillar for capital accumulation for the more economically and politically powerful industrialised nations. Industrialising Africa therefore shall require a cadre of leadership who have vision and determination to reverse those ideological underpinnings which perpetuate Africa's position as a commodity producer and supplier and its continued dependence on the North for any manufactured goods. It calls for crafting of national visions and strategies for long-term development and structural transformation, and the commitment of human, financial, technological and other resources in order to systematically and effectively implement them.

Naseemullah and Arnold (nd), emphasize the importance of a developmental state because in their view, it is crucial for 'translating developmental state institutions into high value added industrial production. They give Korea and Taiwan as examples of states that played a key role in their industrialisation processes.

Naudé (2013:30-59) speaks of the entrepreneurial economy where skilled entrepreneurs, equipped with appropriate technology, create and offer new products and introduce new processes and makes some pertinent arguments regarding the importance of entrepreneurship and innovation in the quest for industrial development. He contends that because of the changing nature of the global manufacturing environment, no blueprint should be prescribed for any country's industrialisation path. He proposes that countries have to research into and discover new advantages which they can create and take advantage of in their explorations of global opportunities in order to build their technological capabilities and manufacturing base. The situation therefore calls for industrial policies that foster innovation and entrepreneurship.

Other authors emphasize the importance of a comprehensive and integrated approach to industrialisation because so many issues require attention in order for industry to thrive. Zalk argues that:

Successful industrialization is not simply a matter of deploying 'microeconomic' instruments such as tariffs and fiscal incentives, however well designed. It also requires considerably greater integration across a range of economy-wide policies. These include provision of public goods such as reasonably priced modern infrastructure and skills development institutions that are aligned to industry needs. Most important is the need to ensure that relative prices and profitability favour investment in value-adding productive sectors of the economy rather than shorter term debt-driven consumption and speculative activities (Zalk 2015:352).

## Literature Review

A review of the literature highlights key factors that are important for the success of industrialisation. Some of the major studies are summarised in this review.

Ville and Wicken (2012:1-14) present the experience of Australia and Norway who took the path of resource-based industrialisation. By inventing new technologies and also partnering with foreign companies, they were able to diversify into new resource products and industries. Their success relied heavily on innovation, particularly in the context of close ties between resource-based industries and knowledge-producing and disseminating sectors of society. They also argue that the dynamic growth of America as a resource-based economy was linked to the establishment of an efficient innovation system or the creation of a development block.

Its ability to create new knowledge (learning) and to involve many parts of the society and economy in the development and implementation of relevant and useful knowledge and technologies was an important factor for success. This example aptly explains what innovativeness means. To further illustrate their point, the authors argue that:

The mining industries built links to universities and geological expertise. They collaborated with engineering firms in developing machinery and technology for improving productivity in the mines. New knowledge and technological investments created opportunities for the profitable extraction of lower grade ore. New infrastructure for the transport and distribution of minerals

improved the efficiency of commodity markets. Finally, financial institutions supported the large scale investments necessary for such developments in resource-based industries (Ville and Wicken 2012).

They also give the example of Norway's resource-based industries which were highly innovative in that they capitalised on domestic sources of innovation, technology transfer from foreign sources and Norway's universities and research institutes. New resource-based sectors often emerge not because new natural resources are discovered, but because new technologies create the basis for commercial production and marketing of a known resource.

Ville and Wicken (2012:10-16) also argue that the transformation of Norway's forestry industry from sawmill production to wood processing (pulp) involved close interaction with local engineering companies, in addition to foreign expertise. The emerging wood processing industry demanded water turbines and other sorts of machines. The manufacture of these products was a product of close interaction and collaboration with engineering firms, universities and other relevant bodies.

The ECA (2011:17) indicates that three features of the East Asian model made it successful. First, governments provided stable and predictable incentive frameworks that supported investments. Second, they had close and continuous, and, most importantly, 'strong' dialogue with the private sector. Indeed, as in all the other developing countries where they have been implemented, industrial policies in East Asian countries also created inefficient firms. However, different from what happened elsewhere, the State was able to withdraw support whenever a firm's performance was not satisfactory and imposed export-performance standards. Third, governments simultaneously used import substitution and export promotion policies, combining them in the most efficient way to serve the industrialization need.

Khaled (2007:5) explains that the key factors for the industrialisation success of the Republic of Korea (RoK) included proper planning which meant that government fixed a plan for deciding what, when, and how much to produce and what authority and support was granted to the *Chaebols* (large corporate groups). The RoK used successive five-year plans which were religiously implemented and industry development was always a central pillar of those plans. There was also a recognition of the shortcomings of a free market system and this led to a shift to government-driven capitalism (this was popularly referred to as 'guided capitalism'. The government prioritised and provided necessary policy and financial support for a self-supporting economy which placed its main focus on key industries, such as cement, fertilizer, steel, and oil refining. In later years, the government embarked on developing heavy industries: steel, nonferrous metal, shipbuilding, machinery, electronics and

chemicals. An important strategy was the massive expansion of vocational education, training of scientists, engineers, and other technologically skilled workers. There was also an export drive which boosted production. The downside of their strategy was the adoption of restrictive labour market policies which limited labour rights to strike or unionise.

There are different views with regard to path of specialisation which African economies should adopt. As explained in the literature review above, some scholars advocate Resource Based Industrialisation whereas others recommend the pursuit of specialisation based on competitive advantages. In other words, countries should seek to develop new comparative advantages which do not replicate historical patterns of commodity production. Through technological and skills development, it is possible for African economies to add value to their resources and therefore realise higher value from their resources. Based on a review of the literature, it appears that here is no blueprint as to what products to build an industry base on. Each country has to identify products in which it has competitive advantages.

Some examples illustrate the point. Under its Growth and Transformation Plan 2010-2015, Ethiopia selected agro-processing as one of its priorities for industrialisation. That is because 80 per cent of the population depend on agriculture. It is a also a strategy which is geared to raise living standards among the millions of the population who are dependent on agriculture. United Nations Economic Commission for Africa (UNECA 2016:101-102). In the case of South Africa, the Department of Trade and Industry (DTI) introduced the Industrial Policy Action Plan (IPAP), and under its 2014/2015-2016/17 Strategy, priority sectors for industrialisation were identified for government support. These include agro-processing, metal fabrication, wood and furniture, pharmaceuticals, clothing and textiles, leather and footwear, among others (UNECA 2016:72-104).

#### The Experiences of Mauritius, South Africa and Botswana

The experiences of Mauritius, South Africa and Botswana were reviewed in order to highlight the key strategies and policies that have contributed to industry development. Even through these economies are declining with respect to the share of industry in manufacturing added value, there are some lessons to be learned from some of the policies and strategies which they adopted in order to promote industrialisation. As outlined by the World Bank (2012), except for 2012, the GDP growth rates in all cases (and including the projections for 2015-2016) were below the Sub-Saharan average. In terms of the structure of output, although the value of Gross Domestic Product (GDP) has increased from 2000 to 2012, sectoral performance presents a different picture. The share of industry in GDP has decreased in all cases. While the share is constant at 6 per cent for Botswana, it declined for Mauritius and South Africa. The share of agriculture remained constant in the case of Botswana and South Africa whereas it declined for Mauritius. Only services improved in all countries over the period 2000 to 2012. This explains why in their diversification strategies, these countries are putting more emphasis on services (World Bank 2012).

Mauritius is selected because it has moved to the status of high human development (according to Human Development Report 2013-2014). It has also been quite successful in diversifying its economy and in improving manufacturing added value. South Africa is one of the most industrialised countries in Africa. Although GDP growth has been low and stagnant in the last four years, the government has made some concerted efforts to develop industrial policies and expand the manufacturing sector. South Africa also offers some useful lessons. Since 2007, through the Department of Trade and Industry (DTI), the country has introduced one of the most comprehensive industrial development strategies and policies on the continent and these are likely to improve manufacturing added value in future. In terms of the size of the industry sector, Botswana perhaps may not warrant inclusion in this study. However, the government's commitment towards diversification of its economy and also the specific adoption of certain measures warrant some attention in terms of understanding strategic interventions to promote industrialisation in the future.

# Mauritius

Mauritius is one of the few African countries which have achieved a measure of success in the industrialisation and diversification of their economy. Most of this success is attributed to the adoption of the East Asian model of industrialisation where the state took an active role in the process, using state resources to fund industry infrastructure and a range of incentives to attract domestic and foreign investments into the sector. It was an exportoriented and, to a large extent, market-driven model. While pursuit of such a model contributed to industrialisation in Mauritius, its sustainability was brought into question during the global economic and financial crisis of 2008-2010 when economic performance declined. It is argued that it was the innovativeness and creativity of the government which made it possible to weather the crisis and to achieve further diversification and growth of the economy. According to Greig *et al.* (2011:159), in 1968 at the dawn of its independence, Mauritius was a sugar-based monoculture, with a stagnating GDP per capita of barely US\$200. Most of its arable land was almost entirely devoted to sugar cultivation. Sugar refining was the only major secondary industry (Greig et al. op.cit). Agriculture made up 25 per cent of the gross domestic product (GDP), and sugar alone accounted for over 90 per cent of total exports. Unemployment was rampant, estimated at 20 per cent. Today, the contrast is striking: the economic landscape is completely transformed. GDP per capita is estimated at slightly above US\$8,000, and the country has a diversified economic structure oriented towards services, with numerous contributing pillars. Agriculture accounts for less than 4 per cent, of which sugar barely accounts for a third of the sector.

The government realised the vulnerability posed by monoculture and that is what led it to embark on a path of economic diversification and industrialisation. As a result of the economic policies pursued by successive governments, real GDP growth has averaged more than 5 per cent since 1970 and real annual growth in per capita income, likewise, has been strong. GDP per capita increased more than tenfold between 1970 and 2010, from less than \$500 to more than \$6,000. Efforts at economic diversification have been successful, allowing the country to move from sugar to textiles to a broader service economy. In spite of being a small island, with a population of 1.3 million people of diverse racial and ethnic origins, Mauritius has enjoyed a high GDP per capita of \$13,172 and a low unemployment rate of five per cent (Hwedi 2001:20). Between 1990 and 1994, its GDP grew by a yearly average of 5.3 per cent compared to 0.9 per cent for sub-Saharan Africa (Hwedi 2001:20). The pace of growth has slowed down though since the global financial and economic crisis.

A number of factors have contributed to the success of Mauritius in the industrialisation and diversification of its economy. Brautigam (2005:77) argues that the country's economic success offers strong evidence that intelligent planning, making use of the global ties and networks found in one's own society, and creating a shared vision can help achieve national economic goals. The country has also developed democratic systems of government over time which are anchored on the principles of accountability and responsiveness to electorates. This has compelled successive governments to select appropriate economic policies for efficient allocation and utilization of resources, and to provide sufficient incentives to foreign investors to propel development. Successive administrations committed to a national vision of transforming Mauritius from a poor, low-income economy to a middle-income country. Although it has had its share of corruption, generally Mauritius is widely highly rated in terms of economic governance. It was ranked first in the 2007, 2008 and 2009 Ibrahim Index of African Governance. Citing the World Bank's (2009) Doing Business Report, (Greig et al. 2011:166)

rank the island as sub-Saharan Africa's best entrepreneurial environment. Mauritius has implemented macroeconomic policies which created a stable environment which attracted both domestic and foreign investors. They also implemented industrial development strategies which at the time were deemed critical to industrialisation, the shift from ISI to a more open and exportoriented approach. Mauritius adopted the 'developmental state' approach where government took an active approach in using its fiscal, monetary, and financial leverage to develop industry infrastructure and offer incentives to support exporters and Small and Medium Scale Enterprises.

Mauritius modelled its development on the East Asian countries in terms of export-led growth based on manufacturing complemented by generous tax incentives. The government also developed strong partnerships and networks, especially with Asian investors. The government actively wooed foreign investors mainly from China, Taiwan, Malaysia, and Singapore. These arrangements were beneficial to the economy. Government leaders made numerous trips to Asia to court investors, and regulations were changed to facilitate investment. It is said that by 2000, Mauritius had concluded twelve treaties with Asian countries in order to avoid double taxation; among other sub-Saharan African countries, only South Africa came close to this total with five (Hwedi 2001:23), Between 1986 and 1993, three Asian countries joined the two former colonial powers, France and the UK, as the top five sources of foreign investment in Mauritius (Hwedi 2001:24). As argued by Brautigam (2005:66), while Asian business networks brought capital to Mauritius, they also brought ideas and transferred technology and know-how. In many cases local investors had been joint venture partners or had been employed by Asian firms located in the Mauritian EPZ. The knowledge they gained from close contact with experienced producers and from their marketing stood them in good stead when they launched their own firms, sometimes as subcontractors to their original employers. Mauritius benefited from trading and investment agreements which were instrumental in growth of its exports and other productive sectors. Examples include the American Growth Opportunity Act (AGoA) with the United States. The agreement provides free market access to Mauritian textile and clothing industry into US markets. In its early years of industrialisation, Mauritius benefited from preferential market access which was made possible under the Multi-Fibre Agreement (MFA) and the Lomé Convention This attracted clothing entrepreneurs from Hong Kong who had reached the limits of their MFA export quotas into Europe. After the failure of ISI, the government adopted an export-oriented strategy, starting with the establishment of the Export Processing Zone (EPZ) in 1970. The aim was to attract export-oriented foreign direct investors and to rely on the potential benefits of FDI through spill-over and linkage effects. The Government

subsidized export companies with tariff-free access for productive inputs, and with tax incentive subsidies and relaxed labour market regulations in the export sector. It established export processing zones (EPZs) to export key manufacturing goods, mostly apparel and textiles.

Mauritius was able to unify its population around a common national vision which has sustained consensus around its long-term development goals. For example, the 'Vision 2020: The National Long-Term Perspective Study', which was formulated by two successive administrations (1994-1997) through a broad consultative process, centred on moving away from low-wage, labour-intensive exports to more skilled, high-value-added, knowledge-based ones. It constitutes a holistic development framework. In line with this development vision, the Government's Development Strategy aims at transforming Mauritius into a globally competitive economy by promoting five sectors: sugar, tourism, export-oriented entities (EOE), financial services and ICT. The strategy is articulated in four pillars: (i) enhancing competitiveness; (ii) consolidating fiscal performance and improving public sector efficiency; (iii) improving the business climate; and (iv) widening the circle of opportunity through participation, social inclusion and sustainability (AfDB 2009a:11).

Questions have been raised around the sustainability of the export-oriented and FDI-driven model of industrialisation. EPZs were exempt from full compliance with labour laws and consequently a serious indictment against them were the low wages which they paid to workers. The global economic and financial crisis demonstrated the fragility of the model when growth performance declined since 2009.

Mauritius has demonstrated capacity to adapt though innovative approaches in response to the changing circumstances, and over the past decade successive governments have sought to realign national development by laying the foundations of a 'knowledge economy'. The aim is to become a 'hub' linking Africa and Asia for ICT services, financial services, transportation and fishing (Greig *et al.* 2011:164-165). The state accessed a line of credit from India to establish a 'cyber city' at Ebene, adjacent to the University of Mauritius at Le Reduit. The government of India extended some strategic assistance to government in the form of a US \$ 100 line of credit facility. Part of the grant was to fund a Cyber City which will boost the ICT sector development (Oolin, Ramgolam & Dorasami 2012).

## South Africa

Although South Africa is the most industrialised country in Sub-Saharan Africa, its manufacturing value-added (MVA) growth has been slower than

in peer middle-income developing and transition economies. Growth in average real MVA in local currency terms has been very modest at 2.7 per cent compound annual growth (CAGR) between 1994 and 2011. There have been net employment losses in formal manufacturing employment with a CAGR of "1.3 per cent over the same period (Zalk 2015:346). Globalization has meant a collapse of the tariff barriers that protected manufacturing, and the influx of cheap manufactured goods has led to the decline of local industries. The local shoe and clothing manufacturing industry, for instance, has been dramatically reduced as a result of imports from Asia. The decline of manufacturing has increased structural unemployment (AfDB 2013:8).

Like Mauritius, South Africa has adopted a developmental state approach where, although recognising the important role which private markets can play in the economy, it has prioritised government participation in industry. Since 1994 when the country achieved democracy, the government has integrated industrial development into its national development planning processes. In 2012, the Cabinet approved the National Development Plan, which is South Africa's Vision 2030. The Plan has identified poverty, inequality and unemployment as the major problems facing the economy and has developed a number of strategies to address them. Thus, industrial development is viewed as a tool to solve the triple challenges indicated above. The Plan spells out specific strategies to promote the development of industry.

Since 2007, the Department of Trade and Industry (DTI) has played a key role in the development of a comprehensive industrial policy framework in order to actively support various industry sectors. It introduced the National Industrial Development Framework which articulates government's thinking on industry development. In order to operationalise the framework, March 2010, it launched the R100 billion Industrial Policy Action Plan (IPAP I and II), which aims to boost manufacturing capacity and to create jobs. The plans, which are being implemented by the DTI, are expected to run from 2012 to 2015 (Movo 2013:38). These plans are significant because of their more comprehensive and integrated approach towards supporting industry. The aim of the government is to build South Africa's industrial base in critical sectors of production and value-added manufacturing. It is also expected that they would contribute to the reduction of chronic unemployment. Priority sectors under IPAP II are the automobile and component manufacturing industry, agro-processing industry, wood and furniture, pharmaceuticals, mineral beneficiation and metals and metal fabrication. Implementation of IPAP II has already been integrated into the Government's Medium Term Expenditure Framework (Moyo 2013:38). According to Zalk (2015:327), the government adopted a more active approach to industry development by developing a range of industrial policies and sectoral strategies. These were aimed to reduce the many structural constraints and bottlenecks affecting industry. Zalk (2015:335) argues that there was no formal industrial *policy* until 2007 when the Cabinet approved the National Industrial Policy Framework (NIPF) in January 2007 and its first implementation blueprint, the Industrial Policy Action Plan (IPAP) later that year. The government's industrial policy framework seeks to promote a labour-intensive and more inclusive industrialisation agenda. That is because in previous dispensations, industry largely excluded the majority black population. It also aims to increase employment creation and to increase the participation of historically disadvantaged people (mostly blacks).

Some of the key factors contributing to improvement in industry development are:

a. Stable macroeconomic environment

Since achieving democratic change in 1994, South Africa has used monetary and fiscal policies to create one of the most stable macroeconomic environments in Africa, with inflation rates of below 5 per cent over most of the period 1994-2013. Economic growth in the first 10 years since democratic transition averaged between 4 and 5 per cent. However, since the global financial and economic crisis, GDP growth has declined and in 2013, it fell below 3 per cent (Statistics South Africa 2013).

b. Strong institutions

South Africa has developed strong institutions which function well and largely in the context of democratic values and principles. The constitution is one of the most comprehensive and democratic, upholding the rule of law and upholding protection of property rights. The legal system provides effective protection of property and contract rights; both are respected and enforced. The country ranks 20th and 27th out of 144 countries on intellectual property protection and property rights, respectively, (AfDB 2013a:124). Private ownership of property is guaranteed in the constitution. Both foreign and domestic investors are allowed to participate in all sectors without any discrimination. South Africa ranks first in the Southern Africa region in protecting investors (e.g. ease of shareholding, extent of direct liability. The country also has a vibrant and independent judiciary system ranking 27th in global competitiveness (AfDB 2013a:124). South Africa also performs relatively well on contract enforcement, ranking 81st out of 183 countries surveyed by Doing Business. In 2010, South Africa scored 73 out of 100 in law enforcement, particularly in conflicts of interest, safeguards and professionalism of the legal system *which is also considered to be* very efficient in settling disputes (AfDB 2013a:125). Another strength is its very stable financial system because of an efficient regulatory infrastructure, well-developed financial markets and sound financial institutions.

c. Participation in Global Value Chains (GVCs)

South Africa's automobile and components manufacturing industries is one of the most developed on the continent. This is an industry which was established in the period before 1994 when the government of the time invested heavily in infrastructure development and attracted massive amounts of foreign investments. An attractive investment climate led to the establishment of production plants by subsidiaries of multi-national automobile companies such as Ford (United States), Chrysler and Mercedes Benz (Germany), Toyota (Japan), among others. These subsidiaries import car parts from the parent companies abroad and assemble vehicles for both the domestic as well as regional and global markets. The automobile sector is one of South Africa's largest industries which employs thousands of employees. However, a major issue is the dominance of multinational companies in the automobile assembly. The few local players tend to be in component manufacturing - an industry which is still small compared to automobile assembly. Since attainment of democracy in 1994, the government has introduced comprehensive measures in order to promote the growth of the automobile assembly sector. The policies are highlighted in the next section.

d. Industrial policies to support specific sectors

The Manufacturing Competitiveness Enhancement Programme (MCEP) has been created with an additional budget allocation of R5.7 billion (\$0.71 billion) over three years. Three groups of sectors received effective industrial policy support between 1994 and 2007, albeit in the absence of a formal industrial policy: automotives; clothing and textiles; and a range of upstream sectors, particularly steel, petrochemicals and aluminium (Zalk 2015:347). The automotive sector was promoted through the Motor Industry Development Programme (MIDP) starting in 1995. Under the terms of the MIDP, exporters of automotive vehicles and components earned import rebate credits that could be used to offset import duties on components and vehicles not produced in South Africa. Vehicle tariffs declined from 80 per cent in 1999 to 30 per cent by 2007. This drove automotive original equipment manufacturers (OEMs) to rationalize platforms

and increase economies of scale. Vehicle production increased from 388,442 units in 1995 to 534,490 units in 2007, with exports increasing tenfold over the same period. Challenges remain, however. Imports of both vehicles and components remain substantial.

The focus of the next phase of automotive policy – as the MIDP gives way to the Automotive Production Development Programme (APDP) from 2013 through 2020 – is to address such issues as further increases in economies of scale (Zalk 2015:347).

The government also introduced the Clothing Textiles Competitiveness Programme (CTCP), which allows manufacturers to earn a value-added-based production incentive in the form of credits that can be redeemed only through investments in specific areas. The CTCP managed to stabilize employment levels in the sector by late 2011.

e. Industrial financing arrangements

The government also supports industrial development through the Industrial Development Corporation (IDC). The IDC has begun to respond to this challenge by re-prioritizing within its commercially funded balance sheet and making the important shift from acting as a private investment bank to a much greater emphasis on its development bank mandate. To this end it has identified lendable funds of around R102 billion (\$12.75 billion) over five years directed towards priority sectors, depending on economic conditions (Zalk 2015:343).

#### Botswana

a. Robinson in ECA (2011:31) argues that the economic success of Botswana can be explained by the historical development of its political institutions. The peculiar historical evolution of the country created the conditions for a more stable and accountable government than elsewhere in Africa and the adoption of exceptionally good economic policies. The country has a well-functioning democracy that respects political rights and guarantees civil liberty and economic freedom (AfDB 2009b:1). The government has exhibited a consistent pattern of commitment to national development. Over the years, it has crafted development plans which it has implemented using its diamond revenues. The government has developed Vision 2016 to guide the long-term development of the country. A series of National Development Plans (NDP) have been implemented in order to promote broad-based national development. The NDPs prioritise diversification of the economy because for a long time Botswana has been a monocultural economy dependent on raw diamond production and exports. In view of the limitations resulting

from heavy reliance on diamonds for both export earnings and revenue, the government has embarked on strategies to diversify the production base of the economy. Some of the strategies taken by the government to promote industrialisation include, but are not limited to, the following:Good governance

b. Botswana has one of the lowest corruption scores in Africa – and registered improvements in standings over the 2006-2009 period (World Bank 2012:36); according to the WBG Enterprise Survey data, the percentage of firms that expect to make informal payments to public officials to get things done is twice as high in South Africa as Botswana (15% and 7.3% respectively) (World Bank 2012:36). Role of development planning and industry diversification strategies

At independence, Botswana was one of the poorest countries in Africa, ranking amongst the least developed countries of the world, with a per capita GDP of about USD 70. Thirty years later, Botswana had transformed itself into an upper-middle-income country. Mineral (diamond) discoveries and effective use of its revenues contributed to the country's status as one of the fastest growing economies in the world, with an average annual growth rate of about 9 per cent between 1966 and 1999 (AfDB 2013b:34). More impressive has been the investment of diamond revenues in social and infrastructural services with rapid expansion of education, health facilities, housing and roads in both rural and urban areas (Hillbom 2012).

A major innovation towards its industrialisation effort is the establishment of a diamond processing and jewellery manufacturing industry. After expert projections which showed that Botswana's diamond reserves will be depleted by 2020, transformation of the industry from being a commodity producer and exporter became a top priority. The decline in diamond exports as a result of the global crisis led government to embark on promoting manufacturing activities around the mineral. Diamond polishing and jewellery manufacturing companies have been established and these involve local entrepreneurs. The government has actively supported them through the provision of loans and infrastructure as well as skills training. The Botswana government jointly owns Debswana on a 50:50 basis with De Beers Pvt Ltd, a multinational company which has mined diamonds in Botswana, South Africa and Namibia for many years. De Beers' mining licence was coming to an end and the government used its position to demand new conditions for renewal of the licence. One of them was the insistence that the company should assist the government to establish a local diamond polishing and jewellery manufacturing industry where many nationals (known as the 'Batswana') were employed. In 2005, in addition to the four companies cutting diamonds, the Government has created other companies to polish diamonds in Botswana. It is estimated that this will result in the creation of about 3,000 jobs in the next five years. The biggest challenge is competition from India. In Botswana the cost of polishing 1 carat of diamonds is USD 30 while in India it is only USD12 (AfDB 2009b, Annex 7:x).

c. Institutional development

The Botswana government has established some institutions to support industry development (AfDB, OECD and UNDP 2014:75). Botswana Development Corporation (BDC) was established in 1971 to provide business support services such as provision of advisory services, identification of business opportunities, conduct of feasibility studies, building factory shells, provision of venture capital and facilitating linkages among investors. It also assists local businesses to enter into joint venture arrangements with foreign companies. The Botswana Export Development and Investment Authority (BEDIA) was established in 1997 as an autonomous private sector led organisation which is 'mandated to encourage, promote and facilitate the establishment of export oriented enterprises and selected services which will result in economic diversification, rapid economic growth and creation of sustained employment opportunities' (Zizhou 2009). Since its establishment, it has actively supported the growth of exportoriented enterprises. Botswana Textile and Small Business Owners Association (BOTSBOA) is the voice of small and micro citizen enterprises. It was established to promote the creation of business linkages among SMEs and large scale enterprises and to enhance their growth. The Botswana Confederation of Commerce Industry and Manpower (BOCCIM) is the recognised representative of commerce and industry. It represents the private sector during sessions of the High Level Consultative Council (HLCC), where the private sector discusses matters of mutual interest with government.

The Local Enterprise Authority (LEA) was set up in 2006 following the passing of the Small Business Act (2004) to spearhead the development and growth of small, medium and micro-enterprises (SMMEs) in agriculture, tourism and services (AfDB/OECD 2008:159).

d. Introduction and application of industrial policy

Industrial policy refers to the array of subsidies, tax expenditures, and other policies that constitute the incentives for private firms to engage in new productive activities. The major incentives in Botswana are subsidies to parastatals, to agriculture, and to investment promotion. Botswana spends three per cent of its GDP on such policies. This amounts to about 7.5 per cent of government spending (World Bank 2012:8).

Industrial policy also includes fiscal measures such as the manufacturing tax concessions. A lower company tax regime (15%) for manufacturing enterprises is a way of diversifying productive activities away from the dominant diamond industry. These have been criticized by the World Bank on grounds that there has not been a noticeable impact on the growth of the manufacturing sector, whose share in GDP has fallen from 5 per cent in the mid-1990s to under 4 per cent (World Bank 2012:9). However, this should not be interpreted to mean that tax concessions are not effective. There could be other constraints such as infrastructure problems that limit the effectiveness of incentives. Botswana has an average effective tax rate of about 11 per cent of profits, lower than South Africa's 25 per cent and Namibia's 16 per cent, to say nothing of Chile's 19 per cent and China's 18 per cent (World Bank 2012:36).

Industrial policy also addresses specific sectoral issues. For example, the government has used sectoral policies to promote growth of particular industries. For example, Botswana has identified the motor industry subsector as a priority sector for economic diversification. Automobile assemblers benefit from a number of schemes such as low taxation rates and SACU's Motor Industry Development Programme (MIDP). The MIDP aims to improve regional competitiveness by encouraging export activities in the light vehicle and medium and heavy motor vehicle sub-sectors. Incentives are given in the form of concessional duties and rebates of customs duties.

The government also introduced a Reserved Sectors policy in 1982 to protect local entrepreneurs from competition from external investors in what are considered easy investment areas (such as small-scale mining, brick making, bread baking, and manufacturing of school furniture, uniforms and protective clothing, burglar bars and sorghum milling). The policy has now been relaxed to allow joint ventures between foreign investors and Botswana local businesses to be eligible. The data on impact of the policy was not available.

e. Local Procurement Programme

This utilises government procurement activities to foster local manufacturing and promote entrepreneurship. The main purpose of the programme is to reserve 30 per cent of Central Government purchases for local manufacturing companies. To qualify for the programme, companies must satisfy requirements relating to their size (annual turnover and productive machinery) as well as employment capacity (no more than 200 employees). f. Trade agreements and partnerships

The Government has also used trade agreements to promote industry development. For example, Botswana's exports enjoy favourable access to the European Union (EU) by virtue of the Cotonou Agreement and since 1 January 2008, by virtue of the interim Economic Partnership Agreement (EPA) which has enhanced market access abroad. In addition, Botswana has preferential access to the United States' market under the African Growth and Opportunity Act (AGOA). Botswana benefits under AGOA provisions for textiles and clothing which seem to have spurred exports in the sector (clothing is currently the third largest export sector).

Within SACU, Botswana has introduced a number of restrictions on trade to protect specific industries (such as poultry and UHT milk). Import restrictions have been in place for 31 years and have supported the emergence of a domestic poultry industry that has made the country largely self-sufficient, and has created about 4,500 jobs (World Bank 2012:9). Although such protectionism has been criticized by the Bank because of the higher prices that local consumers have to pay as a result, from a longer-term perspective the policy may still be useful if the poultry and milk industries grow and are well established to the level where they can also compete with other producers (local and external). In that case, prices should begin to come down.

g. Skills acquisition

The Botswana Training Authority (BOTA) was established in 2000 to oversee vocational training in Botswana. This organisation provides quality assurance, accreditation, policy advice, monitoring and evaluation within the National Vocational Qualifications Framework.

The Botswana Technology Centre (BOTEC) is a government-funded institution which promotes technology development and learning. In addition, the government has a policy for human capital development and for the diffusion of technology and innovation. The Botswana Bureau of Standards (BBS) was set up to enhance the quality and standards of domestic industries. The government also established an Auto Trades Technical College. The college was established in 1982 in order to support the growth of the automotive industry through the supply of skilled labour. It offers apprenticeship training in a variety of trades leading to national certificates. The School also runs the Entrepreneurship Development Programme in order to develop entrepreneurial skills particularly among SMES.

The Structured work-based learning (SWBL), the vocational training system being developed and implemented in Botswana, represents a new

concept of skills, knowledge and attitude acquisition for this country. This system has been benchmarked against the best in the world and includes quality assurance as a cornerstone. SWBL is vocational training that is based on requirements in the workplace and uses the workplace as a learning context. In this context, industry determines what learners and prospective employees need to know in order to be suitable for the working world. This involves various pathways employing mixes of on-the job and off-job learning and assessment (AfDB/OECD 2008:161).

h. Improvement of company registration processes The introduction of an Industrial Development Bill, which was approved by Parliament in 2006, aims to improve efficiency in the registration of companies and issue of licences.

# **Conclusion and Recommendations**

Industrialisation is an important agenda for the African continent. A review of theoretical perspectives on the importance of industrialisation revealed that there is consensus on the need for achieving that goal especially because of the vulnerability of most economies which depend on commodity production and exports. The experiences of the few countries in the developed world which were cited also underscores the economic and developmental importance for countries to use their natural resources to produce high-value-added manufacturing goods and services. The experiences of Mauritius, South Africa and Botswana were reviewed in order to identify some key strategies that some African countries are using to promote industrialisation. They show that although markets are important in an economy, they alone cannot ensure the shift from commodity production to high-value manufacturing. In all these cases, the state played an important leading role in six critical areas. Firstly, in crafting comprehensive long-term development plans in which the development of industry was one of the key priorities. Secondly, in establishing relevant institutions to support industrial sector development. Thirdly, by formulating and implementing regulatory macroeconomic policies in order to create a stable environment in which business could thrive. Fourthly, by developing industrial policies which included incentives to support industrial development. These incentive schemes appear to be most comprehensive in the case of South Africa where they played a key role in the growth of the automobile and components manufacturing industry, in textiles and clothing, agro-processing and pharmaceutical industries. Tax concessions and a wide range of trade policies in the form of tariff protection for infant industries were also part of the incentives that were used. Fifth was the important role played by foreign direct investment. Finally, trade agreements and partnerships also contributed to the success, for instance, in the case of South Africa and Botswana, their membership in SACU and SADC, and with respect to South Africa, the membership of the Economic Partnership Agreement (EPA) with the European Union.

It is also important to note that in these countries, the government made some efforts to ensure that industrialisation was inclusive. For instance, in South Africa, the Department of Trade and Industry has incentives for Small to Medium Enterprises in addition to those for large-scale businesses. In Botswana, the government established some agencies specifically to support SMME sector development.

Some of the measures used are not without controversy: for example, the export-processing zones which were so central to the industrialisation strategy of Mauritius. While those zones contributed to the country's success in export promotion, they were notorious for their exploitation of labour, mostly women who worked in those zones. Any future industrialisation strategy in Africa has to ensure that the establishment of industrial zones complies with international labour standards in terms of decent work and fair wages.

It is also important to point out that although FDI is important in terms of investment flows, technology and skills transfer, African countries have to avoid the pitfalls of the past where multinational companies were attracted through very generous investment conditions but did not transfer the technology and skills largely because of the failure of governments to negotiate agreement terms which were in the best interest of the continent. This implies that in developing policies to attract foreign investments into industry, governments have to avoid the adoption of the traditional approach to FDI policies and instead, negotiate terms and conditions that ensure technology and skills transfer to locals and also the promotion of joint venture arrangements.

As the evidence showed, although these countries have made efforts to design and implement some of the industrial policies used in the successful industrialisers in Asia, it is worth noting that actually their economic performance in general and the added value in manufacturing has been on the decline. That means that they need to intensify efforts to industrialise. South Africa for example, has experienced low GDP growth over the last few years but has developed some of the most comprehensive development and industry development policies on the continent. It will be important to facilitate their implementation in order to achieve more significant increases in value addition across all industry sectors. The same also applies to Botswana which has had a number of successive development plans and industry-specific interventions. It will also be critical to increase investment in knowledge-based economies and in fostering partnerships with foreign investors in order to access the necessary technology and skills. African countries need to explore the opportunities which exist in the context of South-South Cooperation (for example, forging partnerships with the BRICS (Brazil, Russia, China and South Africa) which add value to each country's industrialisation agenda.

A major recommendation is that any futuristic industrialisation strategy for Africa must be driven by governments who should engage industry players in order to determine how best to expand that sector. Because the pace of industrialisation has been slow in many parts of the continent (despite the existence of many action plans both at continental as well as domestic levels), innovativeness implies that there should be a serious're-think' on why past and existing strategies have had a limited impact. As argued in the literature review, the lack of requisite skills and knowledge as well as the technology required to build industry calls for a more radical approach to human resource development. A major challenge in most African countries is the lack of access to the technology and know-how for establishing and operating a sustainable industry. It therefore has to be admitted that Foreign Direct Investment (FDI) will have to play a major role in the industrialisation agenda of the African continent. That is not to say FDI at all costs. A selective approach based on more mutually beneficial terms and conditions than in the past should be the pillar of innovative FDI partnerships where African countries can enter into contractual arrangements with multinational companies in order to access the much needed technology and skills. Botswana's diamond polishing and jewellery manufacturing industry in partnership with De Beers demonstrates the possibilities of a different role for MNCs. The experiences of Japan and the Republic of Korea, while they should not be treated as role models, could provide very useful lessons for Africa in terms of the urgency, rapidity and sheer scale of implementation of their industrialisation agenda.

This could be the basis for crafting more innovative approaches for an inclusive, comprehensive and sustainable futuristic industrialisation strategy.

# References

African Development Bank (AfDB)/OECD. 2008. Botswana. African Economic Outlook. http://www.afdb.org/ Accessed on 07/11/2016.

AfDB, 2009a, Mauritius: 2009-2013 Country Strategy Paper, Tunis.

AfDB, 2009b, Botswana. 2009-2013 Country Strategy Paper, Tunis.

AfDB, 2013a, *Republic of South Africa Country Strategy Paper* 2013-2017, Southern Africa Resource Centre (SARC).

- AfDB, 2013b, *African Economic outlook*, Southern Africa, Tunis: African Development Bank.
- AfDB, OECD and UNDP, 2014, African Economic Outlook 2014 Special Theme: Global Value Chains and Africa's Industrialisation African Economic Outlook 20. Botswana Country Note 01 July 2014. http://www.afribiz.info/ Accessed on 9/07/2014.
- AU Commission, UN Economic and Social Council Economic Commission for Africa, 2013, *Industrialization for an Emerging Africa*. Briefing paper, 7 March, p. 3.
- Brautigam, D.A., 2005, Strategic Engagement: Markets, Transnational Networks, and Globalization In Mauritius, *Yale Journal of International Affairs*, Summer/Fall.
- ECA, 2011, Industrial *Policies for the Structural Transformation of African Economies:* Options and Best Practices, Policy Research Report No. 2, Addis Ababa.
- Greig, T., Mark, A. and D'Arcy, P., 2011, The Fragility of Success: Repositioning Mauritian Development in the Twenty-First Century. *Island Studies Journal*, Vol. 6, No. 2, 2011, pp. 157-178.
- Hillbom, E. Diamonds or development. A structural assessment of Botswana's forty years of Success. Journal of Modern African Studies, 46, 2 (2008), pp. 191-214.
- Hillbom, E. Botswana: A Development-Oriented Gate-Keeping State A Reply to Ian Taylor. African Affairs, 2012. 111/444, 477-482.
- Hwedi, O., 2001, The State and Development in Southern Africa: A Comparative Analysis of Botswana and Mauritius with Angola, Malawi and Zambia, *African Studies Quarterly* Volume 5, Issue 1, Winter.
- Hausmann, R., J. Hwang and D. Rodrik. 2007. What you export matters. *Journal* of *Economic Growth* 12: 1-25.
- Rodrik, D., 2004, *Industrial policy for the twenty-first century.* Discussion Paper # 4767. Center for Economic Policy Research (CEPR). London: CEPR.
- Khaled, M., 2007, Park Chung-hee's Industrialization Policy and its Lessons for Developing Countries, A Paper for the World Congress for Korean Studies-2007 23-25, August.
- Moyo, T., 2013, Public Policy Responses to the Global Financial and Economic Crisis. Lessons from South Africa, *Africa Insight*, Vol. 43 (3), December 2013, pp. 29-41.
- Naseemullah, A. and Arnold, C.E. (nd). The Politics of Developmental State Persistence: Institutions, Origins, Industrial and Agrarian Change, http://www. lse.ac.ke Accessed on 8/11/2016.
- Naudé, W., 2013, Why Indonesia Needs a More Innovative Industrial Policy. ASEAN Journal of Economics, Management and Accounting 1 (1): 48-65 (June 2013) ISSN 2338-9710.
- Oolin, K., Ramgolam, S. & Dorasami, V. 2012. The making of a digital nation.: Toward i-Mauritius. World Economic Forum. http://www3weforum.org/ Accessed on 7/11/2016.
- Owusu, F. and Samatar, A.I., 1997, Industrial Strategies and the African State: The Botswana Experience [accessed from www.public, iastate.edu] on

24/07/2014.

- Republic of South Africa (RSA) Industrial Policy Action Plan (IPAP). 2014/2015-2016/2017. Department of Trade and Industry. Pretoria. http://www.gov.za Accessed 07/11/2016. Statistics South Africa, 2013, Manufacturing Statistics.
- Szirmai, A., 2009, Industrialisation as an engine of growth in developing countries, 1950–2005. *Structural Change and Economic Dynamics*. Vol. 23, Issue No. 4, pp. 406-420.
- United Nations Economic Commission for Africa (UNECA), 2016. Transformative Industrial Policy for Africa. Addis Ababa.
- United Nations Economic and Social Council Economic Commission for Africa, 2013, Industrialization for an Emerging Africa. Issues paper. Sixth Joint Annual Meetings of the ECA Conference of African Ministers of Finance, Planning and Economic Development and AU Conference of Ministers of Economy and Finance Abidjan, Côte d'Ivoire, 25 and 26 March 2013.
- Ville, S. and Wicken, O., 2012, The Dynamics of Resource-BasedEconomic Development: Evidence from Australia and Norway. Economics Working Paper Series 2012. http://www.uow.edu.au/commerce/econ/wpapers.html.
- World Bank, 2012, Botswana Development Policies Review: An Agenda for Competitiveness and Diversification, Report Number 73049, World Bank.
- Zalk, N., Industrial Policy in a Harsh Climate: The Case of South Africa. Downloaded from www.ilo.org on 30/09/2015.
- Zizhou, F., 2009, Industrial Policy Thematic Working Group. Linkages Between Trade and Industrial Policies in Botswana. Trade and Industrial Promotion Strategies (Tips) IDRC and SARN. Available at Http://Www.Worldbank.Org/ En/Country/Botswana/ Accessed On 28/07/2014