MINERALS ARE NOT FOREVER IFAA STUDY FOR THE UNITED NATIONS ECONOMIC COMMISSSION FOR AFRICA

In 2016 IFAA was commissioned to do a study on mineral value chains in South Africa and Africa. The study was done by Ben Turok (lead consultant) with chapters by Anthony Black, Michael Kahn, Chris Callaghan, Pundy Pillay and Richard Levin, supported by IFAA staff.

We reproduce parts of the final chapter since the findings, conclusions and recommendations reflect a great deal of thinking by the authors which we consider relevant to our current policy choices in South Africa, and indeed the rest of the continent.

Africa has vast natural resources, with minerals topping the list. At present most of these are mined by foreign companies with little benefit to the host country. This can be changed incrementally with step by step interventions by the host country using legislation to introduce conditionalities. Of course the host country needs to upgrade its own capabilities such as the institutional mechanisms required for facilitating mining operations.

> **The linkages between mining and manufacturing have weakened**

The policy interventions necessary for industrialisation include training, localization, procurement and many other considerations. Here political will is essential, not as a battering ram on powerful interests, but in ongoing negotiations based on the host's national interest. The potential of industrialisation and an inclusive development trajectory can be realized in every African country.

One of the paramount questions of this study is this:

Why is the South African economy performing so poorly even though the country is blessed with the world's most abundant deposits of mineral resources?

In other parts of this paper we demonstrated that South Africa has been de-industrializing for several decades. While South African manufacturers were once crucial in the production of machinery and equipment for the mining industry, these materials are now mostly imported. In addition, much of the minerals produced by the mining industry is exported rather than used in local manufacturing. The linkages between mining and manufacturing have weakened over this period, with dire consequences for the South African economy and its population. A necessary first step is to engage the stakeholders in this industry to resuscitate the interface between mining and manufacturing by stimulating and deepening it. This is crucial to the country's long-term prosperity.

Africa as a whole suffers from the constraints we outlined in the study, albeit in varying degrees. It is thus necessary to ask what the prospects are for introducing an industrialisation drive that would add value to the continent's minerals? This potential »

> It is not clear why developing countries are deindustrialising so early in their growth trajectories

needs to be realized if we are to achieve the inclusive growth necessary to lift millions out of poverty and achieve the goals of Africa's liberation movements. This study has been an effort towards this objective.

In summary, we have found three major constraints to achieving rapid industrialisation in South Africa. Similar constraints are found across the continent.

First, the South African state is uncoordinated both on substantive programs and on practical issues. Interdepartmental collaboration and unity of outlook and action are sorely lacking. This is a major hindrance to the country's efforts to industrialise.

Second, the relationship between the private sector and the state in South Africa is fraught with distrust and animosity. Much of this has to do with the private sector's reluctance to accept developmental goals, but it also stems from the state's internal struggles as identified in the study. This will need to be addressed and resolved if there is to be progress on industrialisation. There has to be an acceptance by the main players that South Africa has a mixed economy.

Third, and related to the above, the mining sector specifically seems unwilling to accept the need to deepen its domestic linkages, arguing instead that it should not be required to alter its business practices to serve other interests. The Chamber of Mines, for example, has expressed reservations about downstream beneficiation in particular and has a sophisticated intellectual cover for this view. These will need to be aired and critiqued if common ground with the state is to be found. This will of course need to be supplemented by resolving the two previous issues cited earlier.

CAN BENEFICIATION PLAY A ROLE IN AFRICA'S INDUSTRIALISATION?

While he was President, Thabo Mbeki invited a team of Harvard economists led by Ricardo Hausmann and Dani Rodrik for an extended visit during which they had unparalleled access to Ministers and officials in the economic cluster. The team produced 22 research papers which advised against pursuing beneficiation. A press statement by National Treasury on the proposals of the Harvard Panel said quite emphatically: "Beneficiation should not be used as a basis for selective intervention and industrial promotion." (National Treasury, 2008)

This position is in line with the general view of a number of conservative and (often) Western economists that the comparative advantage which developing countries possess in terms of their mineral endowment does not necessarily translate into a competitive advantage through industrialisation.

Indeed, more recently Rodrik has argued that industrialisation may not be possible for developing countries in the near future. He states that all developed economies have gone through a cycle of industrialisation followed by deindustrialisation and he gives data of percentages of the workforce employed by manufacturing to show that in the early stages these percentages grew significantly but then tailed off as de-industrialisation set in. He writes:

"Only a few developing countries, typically in East Asia, have been able to emulate this pattern. Thanks to export markets, South Korea industrialised exceptionally rapidly. With manufacturing's share of employment rising from low single figure digits in the 1950s to a high of 28% in 1989 (it has since fallen by ten percentage points). South Korea underwent in three decades a transformation that took a century or longer in the early industrialisers.

> "But the developing world's pattern of industrialisation has been different. Not only has the pattern been slow, but deindustrialisation has begun to set in much sooner."

Rodrik goes on to examine the Brazilian and Indian cases which both experienced industrialisation growth but where manufacturing employment peaked at a meagre 13% in 2002 and has since trended down. The same is true for East Asian countries and China, whose shares of manufacturing employment and per capita incomes are declining and remain relatively low compared to the developed countries.

In order to explain this Rodrik continues:

> "It is not clear why developing countries are deindustrialising so early in their growth trajectories. One obvious culprit may be globalisation and economic openness. But global competitiveness cannot be the main story."

Rodrik concedes that this does not bode well economically or socially:

> "The economic, social and political consequences of premature industrialisation have yet to be analysed in full. On the economic front, it is clear that early deindustrialisation impedes growth and delays convergence with the advanced economies...The social and political consequences...

could be momentous...today's developing countries will have to travel different, as yet unknown, and possibly bumpier paths to democracy and good governance." (Rodrik, 2013)

In a major study on industrial policy Arkebe Oqubay, Minister of Trade and Industry in Ethiopia agrees that deindustrialisation has been a feature of Sub Saharan Africa, including South Africa. However, unlike Rodrik he rejects the view that this is inescapable (Oqubay, 2015). He agrees that globalization has contributed to deindustrialization but notes that this was as a result of certain policy choices. He writes:

"...mainstream economic theories emphasise that there is no case for active industrial policies and that free markets and trade are superior to interventionism in terms of economic growth." (Okubay, 2015)..."Industrial policy can be effective in Africa, notwithstanding the conventional wisdom among development agencies, economists and IFI s" (Okubay, 2015).

He is also critical of "advice from development economists and aid organisations that interventions should be tailored to current "capacity." (Okubay, 2015).

Okubay's view is

"...active industrial policies and an activist state go hand in hand, and that an active industrial policy must essentially focus on manufacturing and exports (because of the dynamics of increasing returns, learning by doing, spill-over and linkages)" (Okubay, 2015)

He argues that the strategic orientation to exports and accumulation of technological capabilities are essential as are the productive use of rents through reciprocal control and mechanisms. (Okubay, 2015). However, in some sectors, e.g. cement, the domestic market is the primary driver of performance (Okubay, 2015). In others, attracting foreign firms that are key players in global value chains is important (Okubay, 2015). This perspective is in accordance with the findings of this study.

In the same paper cited above Okubay notes that successful industrialisation will require the emergence in each African country of a developmental state that is "based on development projects that have the potential to organize society around its vision, and the autonomy to insulate itself against the narrow interests of specific actors and to secure the support of all social forces (Okubay, 2015).

The evidence gathered in this study also suggests that Africa will not industrialise through market forces operating in the mineral value chain alone. If Africa is serious about industrialisation governments will have to take deliberate measures to move in that direction. This requires political will and determination and the introduction of effective governance systems that will deliver different outcomes from the present. It will require new relationships with capital, domestic and foreign. It will have to find a delicate balance between firm government and participatory democracy. It will have to have confidence in its own policy making capabilities and treat external influences with caution.

Yet the foundation of the country's real economy - mining, manufacturing and agriculture - is experiencing zero growth. The message of this chapter, and indeed this study as a whole, is that while excellent policy documents are essential, and good institutions are vital, what matters ultimately is the outcome of all these efforts. Has it led to higher growth through increased value addition with the consequent benefits shared proportionally throughout the society?

The evidence indicates that although South Africa has developed a great deal of policy on how to benefit from mineral value chains the outcomes have not been proportional to expectations. Yet outcomes are the only true measure of success.

Across Africa there are debates about how to leapfrog out of underdevelopment. Though this study has focused on the mineral value chain, there are also champions of agriculture and of manufacturing. It may be mistaken to focus on any one sector in isolation, and examine instead a whole value chain which may include agriculture and manufacture, from its beginning to the final market. Such an approach has also been included in this study which at times seeks to identify the whole process in the mineral value chain from exploration to the creation and sale of final products. Intervention by the host country can then be assessed according to available and potential capabilities anywhere along that value chain.

This study opened with the problematic of "intangibles" that are critical for successful development of mineral value chains. Peter Evans puts it this way:

"The question is whether there are plausible paths for the emergence of states with the institutional capacity and political character that will enable them to play the role required for development success... only aggressive and efficient entrepreneurial engagement by public institutions can deliver what is needed.... The most obvious starting point .. is ramping up the effective delivery of capability-expanding services" (Evans quoted in Williams 2014)

In this and other essays by Evans and the eminent theorist Amartya Sen emphasis is made on the development on human capabilities including public participation in decision-making in a new state-society relationship which will "generate new skills, knowledge and ideas and the networks needed to diffuse and take advantage of them" (Okubay, 2015). Whether the emphasis is on individual capabilities or on systemic capabilities, it is evident that rapid increase of capabilities is the responsibility primarily of the state and a priority of developmental states in partnership with the private sector. "States that manage to move in the direction of capability expansion will be rewarded with more productive and dynamic economies" (Okubay, 2015)

This chapter concludes with the following set of recommendations, starting with the South African case before moving to the continent at large.

SOUTH AFRICA

1. South Africa needs a Minister of Industrial Development responsible for mining and manufacture. This Minister should have senior status in the Cabinet, equal to the Minister of Finance, with whom the Minister should have specified coordination functions.
2. The Minister should be responsible for annual, three and five year plans and the Director General should operate as a leader for the economic cluster of Ministers and Directors General which should meet regularly to oversee implementation.
3. A special structure is needed to involve state-owned entities, mining and manufacturing companies, labour, and experts, with obligations to make inputs to the plans and report on outcomes in their specific areas.
4. The slide to de-industrialisation can be reversed by state support to critical industries, including light manufacturing which has large employment creating potential expanding domestic demand for goods and services.
5. The state must use its licencing power to impose conditionalities requiring a degree of localisation and local procurement
6. State interventions should focus on production more than consumption, on promoting industry rather than services.
7. Measures need to be taken to counter import parity pricing, high costs for energy and other state provided services.
8. Management and professionals costs need to kept within a reasonable ratio to other salaries.
9. The inherent comparative advantage of mineral wealth should be used to build national physical infrastructure and manufacturing capabilities.
10. The increased supply of energy is critical.
11. Trade inhibitors with the rest of Africa should be discouraged and deeper regional integration needs to be pursued as a basis for industrialisation in South African and across the continent.

> **Africa will not industrialise through market forces operating in the mineral value chain alone**

AFRICA

1. Conduct studies and surveys of existing value chains for each mineral
2. Undertake surveys of skills and capabilities and suggest programs for upskilling in appropriate fields
3. On the basis of the above, take steps to intervene at the appropriate level in order to establish a foothold for local participation in each value chain. Where multinational companies are brought in as lead firms, they must be required to make provision for local participation and procurement. MNC's should also be encouraged to engage in skills transfer.
4. Establish a formal structure for implementation, preferably a senior Ministry on Mineral Value Chains with special powers of coordination. This Ministry should be charged with:
   a. Produce one year, five year and ten year implementation plans;
   b. Create mechanisms for regulating multinational corporations, reviewing licensing procedures, taxation and other conditionalities such as local procurement and localization of value addition in whole or in part;
   c. Establish agencies for monitoring and evaluating the human and environmental impact of mining on communities and prescribing remedies.
   d. Establish an oversight agency for effective governance as a whole. This must include emphasis on intra-governmental coordination, mechanisms to counter rent-seeking, and means to foster a socially optimal relationship between the state and private sector.
   e. Explore possibilities of domestic industrialization through deeper regional integration across the continent. UNECA should evaluate obstacles and prospects for this.
   f. UNECA should create a special agency/department for reporting on the above. NA