



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Industry and infrastructure can contribute substantially to African economic growth

Sindiso Ndema Ngwenya

Paper prepared for presentation at the “Mining, Agriculture And Development: Bread from stones?” A joint conference conducted by the Crawford Fund and the Africa Australia Research Forum, Perth, Western Australia, 26-27 August 2013

Copyright 2013 by [author(s)]. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Industry and infrastructure can contribute substantially to African economic growth

His Excellency Sindiso Ndema Ngwenya
Secretary-General, COMESA

Abstract



Africa has potential for economic growth from agricultural production as well as from mineral exploitation. Currently, the continent's economic growth is unbalanced: some countries have much higher average growth than others. With the population expected to double by 2050, much more focus is needed on not only export earnings but also on food production and jobs creation. Industry policy and infrastructure development can change the balance and ensure jobs for Africans across all groups. Mineral resources exported as raw materials bring in income and lead to economic growth, but by value-adding before export Africa could not only earn much more income but also create many times more jobs. For example, one ton of raw iron ore may be worth USD140, but partial processing will not only multiply its export value but also provide five times as many jobs, or 100 times as many jobs if the iron is manufactured into semi-finished goods before export. Africa can go part of the way in value-adding. First it needs to have a policy environment that supports industry and trade. COMESA (Common Market for Eastern and Southern Africa) is working towards facilitation of trade across borders, and improved infrastructure, transport and transit of goods. There is potential for transport corridors and industry clusters to play important roles in future exporting based on the minerals industry.

This talk addresses the issues of infrastructure and development and growth in Africa, and relates those to agriculture. First, it gives some background about the growth trends in Africa, particularly in relation to mining. I will also mention transport corridors and relate them to the mining activities that are taking place, and to how mining and agriculture go together.

Economic growth in Africa is widely predicted to average 6.2%. Obviously there are countries that are achieving higher average growth than that, including Nigeria, Ethiopia, Tanzania, Mozambique, Zambia, Malawi, Rwanda and Democratic Republic of Congo. Some of this growth has been as a result of the abundance of commodities, but for how long that growth will continue is not known. We saw what happened in the 1970s after the OPEC oil crisis when everything collapsed: commodities-based growth is unpredictable.

Africa's potential in agriculture and food production is growing, partly because agricultural land is becoming a more scarce resource in the rest of the world, and partly because as Africa's population grows the local African market

becomes more important. Investors are coming from outside of Africa, with investments geared towards exporting African agricultural produce to the Middle East and beyond. In Africa some families are huge, so the question is not really whether Africa will experience economic growth, but how that growth will take place and what its impact on Africa's population will be.

Africa's economic growth is expected to benefit from expected increases in commodity prices over the next 30 years or so. Many observers expect Africa to follow the current model where economic growth will likely come about through commodity exports. Some would argue that there is nothing wrong with this model — that in fact it is precisely what Australia does, and that Australia is well endowed with minerals which it exports primarily as raw materials. Africa and Australia are also similar in that China is a major destination for raw materials from both continents.

However, there are significant differences between Australia's and Africa's 'economic models'. The Australian economic model contributes a high proportion of gross domestic product (GDP). For instance, mining in Western Australia contributes over 70% of the Western Australian economy's export earnings. Also, Africa does not have a strong manufacturing and services sector, unlike that sector in Australia.

The prognosis therefore for Africa is that it will experience economic growth from commodity exports. However, if this is to be the case then this economic growth will not be for the benefit of the African population as a whole.

Industry and value adding

It is commonly agreed that added value and employment opportunities from commodities are realised along the value-chain. Take the example of iron ore. As ore moves up the iron ore value-chain the employment opportunities from each ton of iron ore increase — and this is not a linear increase. The value at production of one ton of iron ore is about USD140. There are a few processes adding value between the production of iron ore and the casting stage, and by the time that ton goes through the hot rolling and cold rolling stages of manufacturing its value has increased to USD700 and USD800 respectively. The value addition in semi-manufactured goods is about USD1000 per ton, and when this one ton of iron ore that was worth USD140 is used in the manufacture of white goods the value addition reaches about USD6000 per ton, or about USD15,000 per ton when the iron is used to manufacture heavy equipment such as for mining.

The biggest benefit of keeping as much as possible of the value-chain in Africa comes from the employment opportunities offered. Continuing with this example of one ton of iron ore, the number of jobs generated at the cold rolling stage is five times the jobs created at the production stage of the iron ore. The biggest increase in jobs comes during the manufacture of the semi-finished products, where we are looking at about a 100-fold increase in jobs compared to the jobs created in the production of iron ore. In the manufacturing of finished products there is about a 400-fold increase in jobs compared to the number of jobs in producing iron ore.

I wish to emphasise here that I'm not advocating that Africa should aim to capture the whole value-chain for minerals and metals, but I am suggesting that the future economic development of Africa lies in moving at least a few rungs up the value addition ladder.

There are opportunities to add value and then export the product and reimport it after it has been modified overseas, and there is nothing unique in this. For example, Australia exports alumina to Japan and Dubai and imports the aluminium metal which it uses to manufacture finished goods.

Africa's population is growing at an exponential rate, and the population is expected to double from the present figure of about one billion people, by 2050 — that is a doubling of the continent's population in only 40 years. Therefore it is important for Africa that not only should there be economic growth, but that the economic growth should be translated into jobs for Africans and raise the standard of living of Africans. That should not be just for the small elite that will become extremely wealthy, with the majority kept in poverty, if the current trend, to export or reproduce and import what we consume, is maintained.

The question, then, becomes how can Africa capture the value-chain especially in commodities? To capture this value-chain, by keeping as many processes in the value-chain in Africa as possible, there needs to be an environment that is conducive to both industrial production and trade. This will depend on improvements in infrastructure, including roads, railways, ports and airports, and also on improving trade conditions and efficiency and facilitation generally. Although at the moment Africa as a whole has a low standing in regard to trade, infrastructure, trade policy and trade facilitation, the various economic communities are now addressing these issues.

Infrastructure

There are transport corridors running from the landlocked countries to the coast. In relation to these, the Common Market for Eastern and Southern Africa (COMESA), working with the East African Community (EAC) and the Southern African Development Community (SADC) within the Tripartite framework, is addressing market integration, infrastructure and industrialisation. For instance, we are focusing on the issues of investment in infrastructure and also trade facilitation, including initiatives which have reduced trucking delays in some cases from an average of four days to three hours.

Large-scale mining investments taking place in Africa are also having a positive effect on the development of infrastructure. For example, coal and oil exports are driving both investment in and upgrades of railways and ports in particular. To give an example, in Mozambique the mining companies are investing in a rail line from Moatize to the port of Nacala via Malawi, and they are financing the bulk coal terminal carousel. Mining companies are also underwriting investments in and upgrade of the railway line from Moatize to Beira, and investing in port upgrades. Similarly, oil deposits in the Albertine Basin in Uganda and Southern Sudan are partly driving the investments in the Lamu Port–Southern Sudan–Ethiopia transport corridor.

What is interesting is that traditionally the mining companies have not been involved in infrastructure; they would expect governments to deal with infrastructure. Now we are seeing a different situation develop. I sat in one Presidential Commission — I will not tell you which country — listening to the discussion among all the major mining companies. There were mining companies that had not worked in Africa before, asking the other mining companies: Why are you not involved in infrastructure? Why are you not involved in agriculture? It was quite an interesting debate. As His Excellency Festus Mogae said, African countries would not decree that companies should do that, but it would be in their interest because they need to be able to feed their workers. To import food from outside the country costs more than supporting local agriculture to establish a local supply chain.

Mineral clusters have good potential, for example in Mozambique. When there is a cluster a company does not just take away 50 million tons of coal, as the Brazilian company Vale wants to do. Instead the mine becomes part of an industrial cluster that uses that non-coking coal to produce gas; and from gas, via the Fischer–Tropsch synthesis process, a number of liquid hydrocarbons and also urea (African countries currently import millions of tons of fertiliser). Establishing a cluster at Moatize, close to the Zambezi waterway, also opens the possibility of linking mining in a cluster with agriculture. An example of success for minerals is the diamond cluster set up in Botswana, which has stopped selling raw diamonds in Antwerp and Mumbai. The buyers now come to Botswana.

In conclusion, the future for Africa is bright, but only if Africans can use the resources we have to build mineral clusters and then ensure that they attract value-addition industries. It is in this way that Africa will be able to create jobs, create original markets and create equitable and strong economic growth.

His Excellency Sindiso Ndema Ngwenya is the third Secretary-General of the Common Market for Eastern and Southern Africa. He has over 27 years of service in industry, the public sector and quasi-government institutions. Before his current appointment, Mr Ngwenya was the Assistant Secretary-General of COMESA, responsible for overseeing the development and implementation of COMESA programs including the Leather and Leather Products Institute, the Clearing House and the Regional Investment Agency. Industry involvement includes the design and implementation of transportation projects. At the regional level, Mr Ngwenya was instrumental in the formation of COMESA, culminating in the launch of the COMESA Free Trade Area on 31 October 2000. His personal mission is to contribute to sustainable social and economic development, and uplift the living standards of Africa's populace through regional cooperation and integration to transform and modernise economies of COMESA member states individually and collectively, with the ultimate objective of realising the African Economic Community under the auspices of the African Union.

Email: filippo@wato.ae