

Greening African Economies: reflections on an emerging contested discourse

Edited version of a talk by Mark Swilling to the side event on “Greening Africa’s economies and structural transformation” at the joint AU/UNECA Conference of Ministers of Finance and Economics, Abuja, 28 March 2014.

As an African who spends a lot of time anticipating African futures, I often get asked where I draw my inspiration. I used to refer to two great African texts: Ben Okri's *Mental Fight* and Wangari Mathai's speech when she received the Nobel Prize. But there is a third that I can put on this short list. I am referring to the speech by Her Excellency Dr. Nkosazana Dlamini-Zuma at the 22nd Ordinary Session of the Heads of State and Government in Addis Ababa, 30 January 2014. This speech, for those of you who may not have read it, is an email written in 2063 looking back at how Africa had been transformed during the 50 years since 2013 into a peaceful place where everyone can live a good life.

What I want to do today is contribute to the discussion of this vision of Africa in 2063 so eloquently captured in this speech. I want to suggest ways of thinking about the pathways to this vision that I think will be required if we Africans want to achieve our vision.

Like always in the past, what we in Africa want to do cannot be separated from a world that wants to get its hands on our natural wealth. When the New World needed slaves, they took them from Africa. After the European and North American forests were cut down, it was the African forests that began to be cut. When economic growth in Western economies accelerated after WWII, Africa became the supplier of food and raw materials. Structural adjustment in the 1980s and 1990s opened up African markets and turned African economies into dumping grounds for mountains of debt finance. Today, as the world starts running out of cheap oil and demands rise for rare metals to make the new electronic infrastructures, new oil fields and mines are erupting across the African landscape. New global players in the BRICS (Brazil, Russia, India, China and South Africa) club say to the old colonial powers – “you've had your chance, now it is ours”.

We also know that the world is facing an unprecedented polycrisis. Unprecedented because it is not just another global economic crisis - we have seen four other such major economic crises since the start of the industrial era 250 years ago (1793/7; 1848/50; 1893/95; 1929/33). This particular economic crisis is embedded within a much wider ecological crisis that scientists now agree could threaten life as we know it if major decisions to change course are not made.

We also have the crisis of poverty and its associated social effects. But the underlying causes of poverty are no longer just economic; they are also now ecological (from climate change, to soil degradation, to deforestation).

In short, we have a nested set of crises that is best described as a polycrisis.

Changes underway globally and on the African continent

But crisis is really just another word for change. If change does not happen, then it was not a proper crisis in the first place. Everything depends on how we exploit the crisis. Very rapid changes are underway globally and on the African continent - they are, in fact, so

rapid, complex and multi-layered that they become blurred - increasingly difficult to really grasp and understand. And yet we feel their effects every day.

The economic changes are more familiar:

- rise of the BRICS plus economic powers;
- prolonged sovereign debt crises in the developed economies underpinned by debt financed saturated markets;
- rising cost of manufacturing in China creating new opportunities for manufacturing elsewhere in the world, in particular where labour is cheaper and younger;
- consolidation of the IT sector as it readies itself as the driver of the next long-term development cycle;
- persistent instabilities in the global financial markets as finance capital resists the disciplines and controls that should have been introduced long ago and which could have prevented the 2007/8 financial crash;
- finally, the remarkable economic – albeit inequitable – growth that we now refer to as “Africa Rising” as many African economies join the ranks of the world's fastest growing economies and as the African resources sector drops to 24 percent of continental GDP.

While some of the main ecological crises include the following:

- climate change and the findings of the Intergovernmental Panel on Climate Change (IPCC) that Africa will be affected first and most by climate change even though Africa has contributed least to the problem;
- according to the Millenium Ecosystem Assessment, 60 percent of the global ecosystems that we depend on for human prosperity are degraded with no sign of significant improvements happening in the near future;
- the era of cheap oil is over, and this in a world that still operates as if oil will remain cheap and abundant forever - oil meets 60 percent of world energy needs, but since 2005 global production has never gone higher than 75 million barrels per day;
- more and more people and areas are facing water scarcities, while at the same time we lose between 30 and 60 percent of the water that we capture and pump through poorly maintained leaking water pipes;
- slowly slowly we are starting to recognise that global soils are degrading - roughly 23 percent of the 8.7 billion hectares that we use to sustain ourselves are degraded. This contributes significantly to declining yield growth while at the same time more and more effort is put into finding more land for agricultural production - a process that inevitably reduces forest cover and open pastures;
- finally, and most importantly of all, reflecting the underlying dynamics of resource depletion, the century-long decline in real prices of natural resources ended in 2000/2002 - since then resource prices have steadily increased confirming the predictions of those who argue that we will see a long-term super-cycle of 25-35 years of rising resource prices.

The green economy in a transforming world

The rise of the green economy discourse since it was first discussed at the G20 meetings in 2009 and Rio+20 in 2012 can be explained as a response to this polycrisis. It is an

implicit recognition that the language of trade-offs between the economy and environment inscribed in the notion of the 'triple bottom line' is no longer useful. If the one goes, so does the other. The fates of both are now irrevocably coupled. Develop now, clean up later is no longer an option. Instead, the economics of repairing our ecological future may well become the primary driving force of economic recovery and, after that, the next long-term development cycle. Hence the call for “fundamental technological and structural transformation” in the official definition provided in the 2011 United Nations World Economic and Social Survey that includes:

- “(a) Reduction of resource requirements in general and of energy requirements in particular, in both absolute terms and relatively, per unit of output;
- (b) Substitution of renewable for non-renewable resources, given the total resource use;
- (c) Substitution of biodegradables for non-biodegradables, at any given level of output or waste;
- (d) Reduction of waste (including pollution), at any given level of resource use;
- (e) Protection of biodiversity and ecosystems.”

Granted, the green economy means many things to different people, but for the purpose of this analysis, it is understood as a discourse that reflects an underlying reality rather than a fixed and clear ideological position.

But it is not just a discourse that responds to the polycrisis. It has been used to refer to a wide range of real changes taking place, as the old ways become unviable because there are more economical alternatives. As the old saying goes: the Stone Age did not end because we ran out of stones. We have entered an extremely exciting period of revolutionary innovations that are already disrupting the world that was imagined in the 19th century and built in the 20th century.

Over 1000 cities have programmes to become low carbon and resource efficient; the biggest IT companies in the world market their products as necessary for building smart green cities and green economies; 33 countries introduced carbon taxes by 2013 covering 850 m people and 30 percent of the global economy; since 2012 more than half of all annual net additions to electricity generation capacity are renewables and renewables now supply 22 percent of all electricity globally - and SA has emerged as the country with the fastest growing renewable energy procurement programme in the world; restorative farming and agro-forestry is the fastest growing sub-sector of the agricultural sector; hybrid cars have expanded faster than most predicted; and bus rapid transit (BRT) systems that originated in Latin America are spreading rapidly, including in a number of African cities. Call all this “green economy” or any other word; but no matter what you call it, these are significant changes responding to the fact that the old ways are no longer working.

As resource prices rise, all sorts of new ways of doing things become possible. Those with the capacity for innovation can take the gap, stimulating new value chains, investments and jobs.

Value now is no longer only about how much capital you have or how productive your labour is. Value in a rapidly transforming world is now determined by ingenuity - that powerful catalyst of change that is not just the product of a few brilliant minds as in the past; now ingenuity is the emergent outcome of the collective mind embedded in the highly complex computer-mediated networks created by the internet. Millions of the best minds

around now no longer only ponder what goes on in the private lair of their own skulls; they react to and stimulate the thousands of signals that flash across their screens every day and in so doing contribute to solutions way beyond what they can individually imagine. This relational mode is well suited to African realities.

The winning nations of tomorrow will be those that supported, nurtured and celebrated the ingenuity of their networked innovators who coalesce across institutional boundaries in the physical and virtual hubs of the 21st Century's great green transformation.

It is in this light that I reflect on Agenda 2063, a vision and action plan for Africa advocated by the African Union (AU). After all, it would indeed be a tragedy if we tried to realize our 21st century dreams using 20th century technologies that many others are trying to dismantle. I strongly believe that possibly for the first time ever Africa has a chance to SHAPE rather than BE SHAPED by the world that it is part of. This will not happen, however, if we get stuck in ideological debates in pursuit of the fantasies of perfection.

I strongly believe we have what it takes to take advantage of the transformative dynamics I have referred to - dynamics that the static notion of the "green economy" simply fails to capture. What is underway is the next industrial revolution - the start of the next long-term development cycle, and the driving force will be about finding ways to work with rather than against natural cycles of regeneration and restoration. However, there is no guarantee this will be a just transition - this will depend on the balance of forces, and in particular how well organised the poor and their allies become. In the case of Africa, a key factor will be the role of democratic governments: if they start to realize that they have more to lose by acceding to the demands from global mining corporations and resource-hungry BRIC nations and more to gain by investing in knowledge infrastructures, social development programmes and redistributive entrepreneurial initiatives, then one could foresee a more just transition that could potentially leapfrog some of the more socially and ecologically destructive dimensions of industrialization.

Will Africa recognize this historical moment and take the lead? Or will we miss this moment like we missed the post-World War II long-term development cycle (or at least the second half from the 1980s onwards)? There were some who said that Nikola Tesla was mad when he predicted in the late 1880s that the long-distance transmission of electricity would transform the world as it was then. How wrong they were. There were some who said in the late 1970s that the prophets of the IT revolution were mad. How wrong they were. How wrong we might be if we in Africa say now that the greening of the next long-term development cycle is just a passing fad and not a material reality.

As we deliberate the pathways to 2063 we need to remember that there have been two great technological transformations during the course of the industrial era - both came about because new communications technologies conjoined with new energy technologies:

- the first was when the steam engine conjoined with the printing press in the 1800s: the result was for the first time ever it was possible to mass produce written material, without which newspapers and the mass education of the industrial workforce and professional classes would have been impossible;
- the second was when the combustion engine conjoined with long-distance electrical communications and electricity transmission - without this, 20th century industrialisation and urbanisation would have been impossible;
- the third is the conjoining of the internet as our primary means of communication with decentralised renewable energy systems - this so-called great green

transformation will undoubtedly have as great an impact as the previous two great technological transformations.

African government run the risk of denying the reality of the third great technological transformation at great cost. However, the proposal by the International Renewable Energy Agency for a Clean Energy Corridor stretching from the desert regions of the South West, across the hydro resources of the Great Lakes region, up through the geothermal resources of the Rift Valley in the North East holds great promise. Africa has the installed energy capacity of France with a population of over 1 billion people and relatively high average growth rates. If it decides to power this growth with business-as-usual technologies, global climate targets will be breached. Africans and the world have an interest in making sure that Africa is energized by renewable rather than fossil-fuel based energy infrastructures.

Key economic realities

Given our development challenges, what are the key economic realities that need to be addressed to unlock the diverse potentials of African ingenuity to achieve more sustainable futures? I would like to recommend three:

- recognise the benefits of urbanisation - learn to love our cities;
- recognise the crisis of our soils and learn from those who still know how to care for rather than destroy our soils;
- break, once and for all, the resource curse that will get worse in a world of rising prices.

Learning to love our cities

There are currently just over 400 million Africans living in African cities – more than the number of people living in cities in North and South America and Europe put together. This is projected to increase by 800 million to 1.2 billion by 2050. Compared to other regions, there is a higher percentage of the urban population living in slums in African cities (62 percent compared to 35 percent for South Asia and 23 percent for Latin America). And yet, cities and towns is where education levels are rising, the middle class expanding, most investment is taking place, social movements emerging reflecting new oppositional identities, innovations centres are clustered and where an increasing percentage of the economy is concentrated. Everything will depend on what kinds of urban infrastructures get built within these cities. Urban infrastructures conduct the flow of resources through cities. Traditionally, African cities have adopted technologies developed in the West at a time when resource depletion was unheard of. If these technologies continue to be used, African cities will be set up to fail. For example, African cities should limit provision of roads for use by the private car and maximise public transport. Like in New York and Stockholm, African cities should produce biogas from the sewage treatment plants. This kind of approach will create more livable and sustainable environments, including more appropriate spaces for the expansion of economic activities. However, none of this will happen if African Governments do not formulate integrated urban development policies and then empower municipal governments to actively govern their cities. African Governments will need to realise that their industrialisation strategies will only work if the cities are spatially reconfigured to become more functional, integrated and culturally inclusive.

Farming by restoring the soils

According to research by the International Food Policy Research in Washington DC, Africa has 187 million hectares of agricultural land, 793 million hectares of pasture and 683 million hectares of forest. 65 percent of the agricultural land is degraded - a rate second only to Central America (which is at 74 percent). Of the total of 1.6 billion hectares of usable land in Africa, 494 million hectares is degraded (30 percent). This explains why yield growth for key staples has been declining since the 1970s, in some cases there has been negative growth. It will be impossible to reverse the low level of agricultural output per capita in Africa without restoring the soils. Unfortunately, this will not be achieved by adding more fertiliser or using genetically modified crops - both these solutions are heavily funded by international donors, with poor results. Where African farmers have learnt to work with rather than against nature using various agro-ecological farming methods, the results are far more encouraging.

Breaking the resource curse

Finally, Africa needs to break the resource curse. The resource curse is when the flow of resource rents from raw material exports is so good that it creates a disincentive to diversify. UNCTAD's 2012 Report captured recent research on the material footprint of nations that makes it possible to gain a deeper insight into the resource curse.

It is now possible to calculate the total quantity of materials (in tons) consumed by every nation - this includes fossil fuels, minerals and metals, biomass and construction materials. This equals the total amount extracted minus what is exported, plus the total amount imported plus the resources needed to generate the exports/imports.

A closer look at Africa shows that an increasing number of African countries that used to be net exporters are now net importers. According to the UNCTAD Report, the total quantity of extracted materials has increased by 87 percent between 1980 and 2008.

During the same period, exports of non-renewables – mainly fossil fuels and metals - have increased, and imports of refined fuels and food have also increased. The net result is that Africa is a net exporter of non-renewables and a net importer of biomass (a renewable resource).

This is not a recipe for long-term sustainable development. And this is why the UNCTAD Report calls for a managed process of “sustainable structural transformation”. It warns strongly that current levels of economic growth are too dependent on raw material extraction and exports.

Africa will need to do three things to break the resource curse: secure higher prices for its raw materials by improving the governance of natural resources - what some African leaders have referred to as “resource nationalism”; ring-fence resource rents in Sovereign Wealth Funds so that investments can be strategically focused on infrastructure, human capital development and innovation; reverse the long-term decline in manufacturing so that African resources can be used to benefit African development.

Conclusion

In conclusion, Africans have a unique opportunity to shape our own future. We can choose to wait and see how things pan out and then respond; or we can anticipate a future and position ourselves accordingly. I have tried to make out what I hope has been a strong

case for the second option. A key factor will be whether or not a new set of political coalitions can emerge to either take over governments through the democratic process and/or influence policy in ways that will give substance to the emerging 'resource nationalism' discourse. Resource nationalism could become a rallying cry for these new political coalitions, especially if it emerges as a slogan that expresses policies that are explicitly aimed at a just transition that results in highly diversified economies that are more socially equitable, ecologically sustainable, less financialized and less dependent on raw materials exports.

I would like to end with a quote from Ben Okri book *Astonishing the Gods* that I believe captures in an authentic African voice how we should understand that potential that can be unleashed if we want this badly enough:

"But when a nation or an individual creates things so sublime - in a sort of permanent genius of inventiveness and delight - when they create things so miraculous that they are not seen or noticed or remarked upon by even the best minds around, then that is because they create always from the vast unknown places within them. They create always from beyond. They make undiscovered places and infinities in them their friend. They live on the invisible fields of their hidden genius. And so their most ordinary achievements are always touched by genius. Their most ordinary achievements, however, are what the world sees and acclaims. But their most extra-ordinary achievements are unseen, invisible, and therefore cannot be destroyed. This endures forever. Such is the dream and reality of this land. I speak with humility." pp.51-52