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Trade and Sustainable Development News and Analysis on Africa

VOLUME 6, ISSUE 2 – MARCH 2017



Is Infrastructure the Key to Africa's Economic Transformation?

INTERVIEW

Talking infrastructure with ECOWAS' Commissioner for Industry and Private Sector Promotion

SUSTAINABLE DEVELOPMENT

How can transport infrastructure promote sustainable development in Africa?

EMPLOYMENT

Cross-border infrastructure: What potential in terms of job creation?



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Is Infrastructure the Key to Africa's Economic Transformation?



It is widely recognised that infrastructure has a crucial and multi-faceted role to play in promoting sustainable development, particularly in the world's poorest countries where the infrastructure gap is the largest. In light of the urgent need to bridge this shortfall for potentially tremendous gains, the 2030 Agenda for Sustainable Development adopted in 2015 calls for the development of "quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being" (SDG 9.1) among other infrastructure-related objectives and targets. If Africa is to succeed in its development ambition, putting in place the right "hard" and "soft" infrastructure should thus be at the top of African policymakers' priorities.

From an economic and trade perspective, reliable and efficient infrastructure networks are of paramount importance. They are necessary to enhance the competitiveness of African firms and facilitate the flow of goods, services, persons, and information within and across African countries and regions. Appropriate infrastructure makes it easier to produce, do business, and connect to regional and global markets, thus contributing to galvanise the continent's economy and position it on a path to economic transformation.

Although it has long been identified as one of the most significant structural constraints hindering Africa's development, the infrastructure gap is not an easy problem to solve. In particular, due to their large scale and long-term nature, infrastructure projects require considerable amounts of investment which are often beyond the individual capacity of African countries. Addressing this issue is key, as it is estimated that the continent's infrastructure financing needs amount to more than 100 US\$ annually. In this context, what should African policymakers focus on in their efforts to develop infrastructure and maximise its benefits?

This issue opens with an interview with Kalilou Traoré, the Economic Community of West African States' (ECOWAS) Commissioner for industry and private sector promotion. In his answers to our questions, the commissioner highlights both the vast opportunities and the significant challenges associated with infrastructure development, and presents the various efforts deployed by ECOWAS and its member states in this area.

This interview is complemented by four articles, which look at the infrastructure-trade-sustainable development nexus from different angles. While Christian Kingombe explores how transport infrastructure can lay the foundation for the successful achievement of the SDGs on the continent, Niklas Malchow and Anna Waldmann look at the development potential of cross-border infrastructure from a job creation perspective. Yabin Wu and Xiao Lai, for their part, focus on China's infrastructure development strategy in Africa, and reflect on its potential implications for African economies. Finally, Hans-Peter Egler emphasises the importance of developing sustainable and resilient infrastructure in Africa, while offering specific insights on the role of sustainability standards to meet that objective.

As usual, we welcome your substantive feedback and contributions. Write to us at bridgesafrica@ictsd.ch.

INTERVIEW

Developing Infrastructure to Encourage Economic Transformation: Interview with Kalilou Traoré from ECOWAS



Kalilou Traoré is the Economic Community of West African States' (ECOWAS) Commissioner for Industry and Private Sector Promotion.

Bridges Africa met with Kalilou Traoré, the Economic Community of West African States' (ECOWAS) Commissioner for Industry and Private Sector Promotion

Commissioner, it is widely recognised that the lack of infrastructure is one of the most significant structural constraints hindering the African continent's economic development. Why is infrastructure so important?

[Kalilou Traoré] Infrastructure plays an essential role for growth, competitiveness, job creation and the fight against poverty. By infrastructure, I mean the considerable physical structures that are needed for social, economic, political, and scientific activities, among others. However, accessing basic service infrastructure is still a significant challenge in a certain number of developing countries, especially in Africa. According to recent statistics, at least 663 million people worldwide still do not have access to safe drinking water. By 2025, 1.8 billion people will live in areas with absolute water scarcity. Approximately 60 percent of the world's inhabitants do not have Internet access and 1.2 million people still live without electricity. At least a third of the international rural population does not have all-weather roads.

Therefore, infrastructure helps facilitate human activity, in particular by lowering the cost of various economic activities and by improving their quality. This is why it has an essential role to play in the economic transformation of the African continent. Modern infrastructure is especially needed for national land-use planning and to meet regional integration objectives within the various regional economic communities. The weakness of infrastructure in Africa is well known and it is a significant hindrance to our capacity to face international competition.

On a regional level, developing infrastructure that can support economic development is a priority for ECOWAS. What approach have the community and its member states adopted in this respect? What tools have been developed and what are the current and future major projects?

[KT] One of the objectives of ECOWAS' 2020 Vision is to better interconnect countries. These connections mainly take place through economic and social infrastructure such as roads, telecommunication systems, and energy, as well as sea and air transport. ECOWAS has put in place master plans for building infrastructure in these different areas.

For example, the master plan for the energy sector intends to increase the production capacity to over 10,000 megawatts by 2020. Several hydraulic and thermal power stations are being built. The plan also intends to increase interconnection between countries, and some programmes are already in place, among which the CLSG Project to interconnect Cote d'Ivoire, Liberia, Sierra Leone, and Guinea. The expansion of the underwater pipeline that currently connects Nigeria to Ghana all the way to Mauritania and Morocco is also in the works. When it comes to transport, the master plan intends to connect countries in the region from West to East, namely by building a coastal road that will connect Dakar to Lagos and a trans-Saharan road from Dakar to Kano, in northern Nigeria. Several sections of these roads are already in use. When it comes to telecommunications, a major regional project on fibre optic interconnection has almost been completed. Regarding air transport, the rules have been harmonised to ensure transport safety. Finally, when it comes to sea transport, the region is working towards creating a regional coastal navigation services

company in order to provide an alternative to road transport along the coast and to lower costs.

In May 2017, ECOWAS will organise a roundtable of donors to fund priority projects within the community's development programme. Eight major projects have been identified, in the transport, health, water, and agriculture sectors.

How do these efforts complement the work conducted within the framework of the Programme for Infrastructure Development in Africa (PIDA) on a continental level?

[KT] PIDA is the main guidance programme of the African Union (AU), NEPAD, and the African Development Bank (AfDB) when it comes to investment priorities, policies, and programmes in the transport, energy, water, and information and communication technology sectors between 2011 and 2030. The programme aims to set up an engagement framework with African development partners who are willing to support infrastructure on a regional and continental level. ECOWAS works closely with the African Union, NEPAD, and the AfDB. Provisions are taken to ensure regional and continental consistency, particularly in light of the expected establishment of the continental free trade area.

The essential role of infrastructure in development has long been recognised by African policy-makers. What are the main barriers to its development?

[KT] The annual investment that Africa needs to fill the infrastructure gap over the next few years is estimated to be over 100 billion US\$. This is a sizeable amount that cannot be provided by our states' budgets, which is one of the reasons why public investment has been so slow to materialise. Furthermore, private investment is still insufficient. To lower the infrastructure gap, we need to significantly increase investment and rely more on the private sector. Governance, capabilities, and efficiency also need to be improved in order to better leverage the resources granted to infrastructure.

The annual investment that Africa needs to fill the infrastructure gap over the next few years is estimated to be over 100 billion US\$. This is a sizeable amount that cannot be provided by our states' budgets.

As you explained, implementing an efficient infrastructure network calls for significant investment, and the financing issue is often seen as a major challenge. Do you think that, by better mobilising its own resources and by allocating them strategically, the continent has the means to tackle this challenge?

[KT] Financing infrastructure is a huge challenge when it comes to the size of the gap, but also when it comes to the high cost of the materials and technology needed. This requires mobilising all the necessary means, whether on a national, international, public, or private level. On a continental level, several studies have suggested that more resources could be mobilised by using the income from raw materials to finance infrastructure. This is why ECOWAS has launched the development of FODETE, a fund to support infrastructure projects in the energy and transport sectors, which will be financed by a levy on certain exports of raw materials. The studies are now complete and have already received technical approval. The political approval will take place in the weeks to come. When it comes to countries and regional agencies, initiatives have also been taken to meet this challenge. However, they are more or less successful as our states are faced with many development constraints, in every sector.

What role can foreign financing – public or private – play? How can it be attracted and best used to complement internal resources?

[KT] As I mentioned, mobilising internal resources is not enough to meet the infrastructure challenge, both on a financial level and regarding the transfer of technology. External

financing is very demanding when it comes to the security of the business environment. This type of financing typically requires feasibility studies, which can be particularly expensive. This is also one of the reasons behind FODETE. This fund will help finance these studies in order to make it easier to raise the financing needed to carry out various infrastructure projects.

Our action, on a public level, is to do our utmost to satisfy investors and financial institutions in order to mobilise these resources. Furthermore, we have been working to set up a regional cooperation network for public-private partnerships (PPPs), an especially important tool for financing infrastructure. ECOWAS has also launched programmes to improve the investment framework, in particular through the project of a common investment code. We have also implemented a regional investment guarantee mechanism with ATI (African Trade insurance). All these programmes aim to attract the investments that the region needs to carry out major projects such as infrastructure projects.

Although it is not new, the infrastructure issue seems to be gaining more and more attention at the multilateral level, in particular with the creation of the Global Infrastructure Forum, the second iteration of which will take place in April. According to you, what should we expect from this type of effort at the global level?

[KT] We should expect more engagement and more consistency for international community initiatives on infrastructure financing. We now know that we cannot win the fight against poverty and ensure social inclusion if infrastructure implementation is not at the top of our priorities. That is why the implementation of infrastructure was identified as a requirement to meet the Sustainable Development Goals (SDGs). Infrastructure financing must therefore be a priority for development aid and international cooperation, particularly since, due to the level of our countries' economies, the amortisation of the infrastructure takes a long time, something that not all investors and finance providers are ready to accept. The Global Infrastructure Forum was commissioned by the Addis Ababa Action Agenda on financing development in order to help bridge the infrastructure gap. The Forum should help better harmonise and coordinate initiatives from respective partners.

In conclusion, faced with the level of the infrastructure gap, which is a real leaden weight for the industrial sector, what do you think the key to success will be for the region?

[KT] The regional manufacturing industry represents less than seven percent of the regional GDP. Despite all our efforts, industries can only be competitive if the appropriate infrastructure is in place. Industries are therefore among those who benefit the most from infrastructure. In addition to general infrastructure, which consists of transport, energy, and communications, the industrial sector has specific infrastructure needs to speed up investment and increase competitiveness. This relates in particular to the establishment of industrial zones and their connection to service networks. Furthermore, ECOWAS is in the process of implementing a regional quality infrastructure, which will help harmonise regional standards, provide the necessary certifications to companies and products, and connect analysis and metrology laboratories. All this comes at a price and requires significant public and private investment. We have therefore been working with several donors and agencies to develop various structured financing, mixed financing, PPP, and crowd-funding methods. ECOWAS intends to organise the first ECOWAS Industrial Exhibition and Forum in Abidjan this year. It will be a platform for dialogue between politicians, backers, industrialists, and all development stakeholders.

SUSTAINABLE DEVELOPMENT

How Can Transport Infrastructure Promote Trade and Sustainable Development on the African Continent?

Christian Kingombe

The role of infrastructure in economic development is widely recognised. How can the development of a more integrated transport infrastructure network support the achievement of the Sustainable development goals on the African continent?

Recently, the heads of the Multilateral Development Banks (MDBs) and the IMF jointly stated that “no country has developed without access to well-functioning infrastructure.” More specifically, infrastructural development is essential for competitiveness and trade, which in turn can play a pivotal role in achieving sustainable development. This article looks at choices made in Africa on how to prioritise trade-related infrastructure and transport activities to advance sustainable development goals (SDGs), and also provide a few suggestions on how these efforts could be strengthened.

Overcoming constraints

Africa's structural transformation and inclusive green growth, which are pre-conditions for reaching most of the SDGs, are hampered by a range of natural and man-made constraints. The latter constitute serious obstacles to deeper regional integration and are linked to the fact that Africa is divided into 54 economic spaces, including many landlocked (16) and least developed countries (34). These countries are further scattered across more than 30 overlapping sub-regional and regional organisations – what some experts have come to call a “spaghetti bowl”. Because of this complex architecture, there is a wide range of soft infrastructure constraints obstructing the regional integration process, including the lack of harmonisation of policies, regulations, and procedures governing both trade and infrastructure development. In addition, poor hard infrastructure continues to cast a long shadow on Africa's competitiveness and diversification. Finally, other significant constraints encompass institutional, administrative, and financial capacity, governance, and the coordination of efforts between the African Union Commission (AUC) and the regional economic communities (RECs), as well as among their member states.

Dismantling the barriers to moving goods and services across and between African countries, including by addressing the problems related to overlapping REC memberships, would thus go a long way to address Africa's complex challenges to regional integration as a stepping stone towards reaching the SDGs. In particular, it is essential to scale-up investment in efficient, seamless, and cost-effective transport, energy, water, and ICT cross-boundary networks, as well as in soft infrastructure reforms such as one-stop border posts. The Programme for Infrastructure Development in Africa (PIDA), whose 51 programme and projects are meant to fully interconnect, integrate, and transform the African continent, is an important step in that direction. Constructing, rehabilitating, and maintaining reliable and efficient regional infrastructure would act as a catalyst for development, by bringing down the time and thereby the costs of cross-border trade and transport, which in turn would foster trade, the creation of decent jobs, inclusive green growth, and lead to an integrated continent as a pathway to sustainable development. In this process, the biggest gains would accrue to the most isolated and resource-deprived regions.

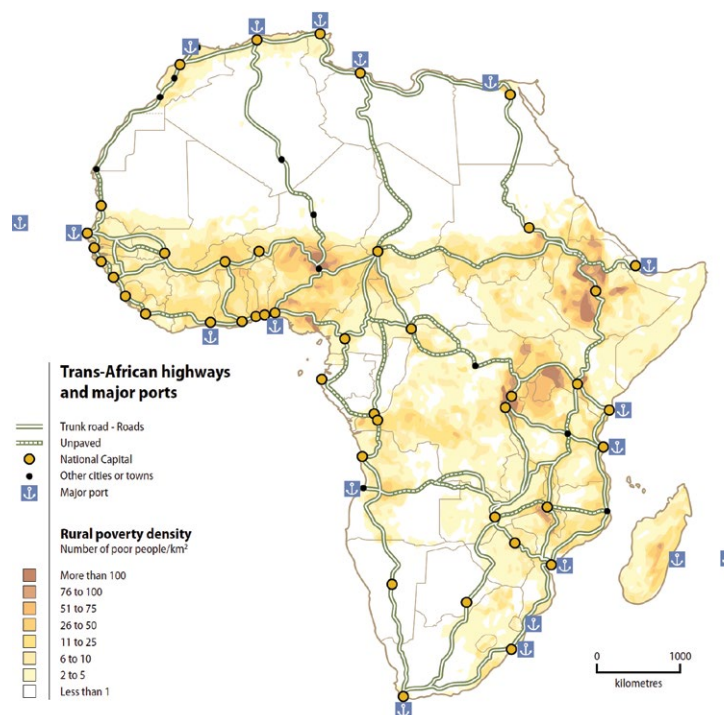
Moreover, regional commitments would also need to be harmonised with AU and REC member states' external bilateral and multilateral trade and cooperation agreements, although such deals are easier to call for than to negotiate. For example, trade facilitation is a global problem which calls for a multilateral solution. When the WTO's Trade

Facilitation Agreement (TFA) entered into force on 22 February 2017 after two thirds of the organisation's members ratified it, only 19 African countries had presented their instrument of ratification. This is unfortunate, because African countries in general, and LDCs in particular, are expected to see the biggest average reduction in trade costs resulting from the implementation of the TFA, although most RECs in Africa already have provisions in place addressing trade facilitation issues.^①

Transport infrastructure as an "enabler" to achieve the SDGs in Africa

The literature has shown that access to transport, in particular through trunk and feeder roads, has a significant impact on inclusive growth, access to social services, and regional integration. In the framework of the SDGs more generally, transport plays a central role, as seven of the seventeen SDGs include specific targets that incorporate both rural and urban transport. Transport is thus recognised as an important tool for reducing emissions, improving equity, and reducing poverty.^② But the reality is that Africa's road infrastructure development – perhaps because of the continent's difficult economic geography – is still very weak in terms of quantity, quality, or access, and is also characterised by missing regional links (see figure 1).^③ As a percentage of all the continent's roads measured in length, less than 20 percent of roads are paved. On top of that, a substantial share of the road networks built in the 1970s and 1980s are in poor condition due to lack of maintenance.^④ Moreover, Africa's rail transport system, which is essential for both freight and passenger transport, is even more poorly interconnected than the roads, since different rail gauges do not allow cross-border network connectivity and usage of the same rolling stock between neighbouring countries.^⑤

Figure 1. Trans-African highways and major ports



Source: AfDB. Development Effectiveness Review 2012. Promoting Regional Integration.

It was partly on this background that in January 2015, China and the AUC signed a far-reaching agreement within the framework of AU's Agenda 2063. The pharaonic vision is to link all African capitals by roads, high-speed trains, and air transport services. The implementation of common frameworks for the construction of regional infrastructure networks (such as AU Agenda 2063 and PIDA) is expected to boost intra-African trade, which has been identified as having more (manufacturing) value-added content than Africa's trade with the rest of the world. This would, in turn, boost job creation (SDG8) on the continent and contribute to advancing many other SDGs through various transmission mechanisms. Positive effects would also be especially important in remote rural areas, particularly in the 34 African LDCs where two thirds of the population live in

rural communities. As rural transport networks improve, they provide the rural non-farm (impact-) enterprises and smallholder farmers with new economic opportunities, including through potential economies of scale, by accessing external input and output markets. This, in turn, can enable the implementation of nearly all the SDGs in rural Africa.

Notwithstanding the above-mentioned entry into force of the WTO TFA, given today's context of increasing scepticism towards the benefits of multilateral trade, the next phase of Africa's productive and export capacity building will have to come through Africa's own mega-regional trade agreements, successively the Tripartite Free Trade Area (TFTA) and the Continental Free Trade Area (CFTA). Underlying these significant regional integration opportunities is the transport infrastructure network, which consequently will play a key role as an enabler to achieve the SDGs over the next 13 years. Transport facilitation, defined as the simplification and harmonisation of international transport procedures and the information flows associated with them, means faster, more efficient, and predictable exports and imports. However, as with hard infrastructure development, there is still a lot of ground to be covered in Africa to address the seven SDG transport targets. Africa's infrastructure services are twice as expensive as elsewhere, reflecting both diseconomies of scale in production and high profit margins caused by lack of competition.

The most prominent step to overcome this challenge has been taken in October 2008, when heads of state and government representing the 26 member states of COMESA, the EAC, and SADC met in Kampala, Uganda, and signed the Tripartite Memorandum of Understanding, with the goal of establishing a single "grand FTA" covering the three RECs. The TFTA adopted a genuine developmental approach to the Tripartite integration process, anchored in three pillars: (1) market integration based on the TFTA (SDG 10.a; SDG 17.12 and 17.13); (2) infrastructure development to enhance connectivity and reduce costs of doing business (SDG 8.a); and (3) industrial development to address the productive capacity constraints (SDG 9). Building on this foundation, the TFTA adopted a Comprehensive Tripartite and Trade Facilitation Programme (CTTFP), which aims to develop transport and infrastructure in a coordinated manner. However, the implementation of CTTFP has faced a number of challenges such as the slow domestication of the protocols, the low level of implementation of the RTAs, and the proliferation of transport related non-tariff barriers (NTBs). These need to be addressed to reduce transport costs, boost trade, and ensure access to sustainable transport for all.

The existing literature does seem to confirm that both transport facilitation and hard infrastructure development indeed are enablers for development and inclusive growth, e.g. through the development of agriculture and rural livelihoods.⁶ In particular, transport facilitation and transport infrastructure facilitate the flow of goods, services, and people, and lowers the cost of doing business, which allows economic activity to flourish. Since it is not yet possible to fully monitor the progress towards the SDG targets at the REC level, future research could seek to explore to what extent overcoming these CTTFP challenges are linked to the implementation of SDGs in the TFTA and the CFTA.

What should Africa and the international community focus on?

The sustained growth which African economies have achieved since 2004 needs to be reoriented to provide a stronger basis for the transition to sustainable development. Africa must thus intensify its efforts to foster structural transformation, in particular through regional integration, while keeping poverty reduction and sustainability concerns at the centre of its development aspirations. In order to succeed in such an ambitious programme, one of the keys lies in the development of a single and integrated regional road transport market characterised by harmonised policies.

Enhancing policy coordination

The development of a more competitive, integrated, and liberalised regional transport market on the African continent will be fundamental to achieving the SDGs, implementing the WTO's TFA, and establishing well-functioning African mega-regional trade agreements such as the TFTA and the CFTA. Ineffective trade, transport, and infrastructure development strategies and low policy coherence are often due to an ad-hoc

and fragmented approach to policy making and private sector consultation. Given their inter-sectoral linkages, uncoordinated policies can make it difficult to achieve the SDGs. Therefore, the development of a governance framework for inter-ministerial coordination and stakeholder policy consultation in the area of trade and transport facilitation policy making, both at the national level and at the RECs level, would be an important step in the right direction. It would help bring about coherence and complementarity in the regional integration policy making process, while ensuring alignment with the member states' sustainable development objectives.

Sustainable transport infrastructure in countries in special situations

The development of reliable, efficient, and sustainable infrastructure systems, and especially transport infrastructure, is of particular importance for countries in special situations such as LDCs and landlocked developing countries (LLDCs). However, the levels of investment required for the development of large-scale regional infrastructure projects are often beyond the individual capacity of LDCs and LLDCs, hence the importance of regional cooperation and international support – including from a financial point of view. This could partly come from the improvement of international support measures to better fit the developmental needs of countries in special situations, as suggested by de Melo and Wagner who recommend allocating a greater share of aid for trade funds to countries with special needs in the area of trade facilitation, e.g. for establishing and strengthening national trade facilitation committees.⁷ Such a more focused approach could also be adopted with regards to hard infrastructure.

Financing sustainable transport infrastructure: The role of PPPs

The increase in infrastructure investment needed to successfully implement the SDGs is considerable, with the cost of addressing Africa's infrastructure needs estimated at around US\$100 billion a year.⁸ Although the largest share of Africa's infrastructure is financed domestically, African governments should take advantage of the renewed interest from private investors and operators to improve and maintain the continent's transport infrastructure network over the next decades. With this aim in mind, African governments, MDBs, and other relevant stakeholders should explore people-first public-private partnerships (PPPs) and innovative financing approaches, such as risk instruments that guarantee a certain volume of transactions, as means to attract private impact investment in support of infrastructural development and the SDGs.

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¹ WTO. "How does the TFA cut red tape at the border for easier trade." 2017.

² Institute for Transportation & Development Policy. "The Role of Transport in the Sustainable Development Goals." 2015.

³ See Virtual PIDA information Centre (VPiC): <http://www.au-pida.org/>

⁴ Kingombe, Christian. "An Enquiry into the Causes and Nature of the Transmission Mechanisms between Labour-Based Rural Roads, Sustainable Growth, and Agricultural Trade in Zambia's Eastern Province." PhD Thesis, University of London, 2011.

⁵ African Development Bank Group. *Africa in 50 Years' Time: The Road Towards Inclusive Growth*. September 2011.

⁶ See, for example: UNCTAD. *Least Developed Countries Report 2015: Transforming Rural Economies*. 2015.

⁷ De Melo, Jaime, and Laurent Wagner. "How the Trade Facilitation Agreement Can Help Reduce Trade Costs for LDCs." E15 Initiative, ICTSD and the World Economic Forum, January 2016.

⁸ "Africa needs \$100 billion annually to close infrastructure financing gap – AfDB." *Premium Times*, 13 December 2015.

AFRICA

The Development Potential of Cross-Border Infrastructure in Africa: A Job Creation Perspective

Niklas Malchow and Anna Waldmann

How can Africa leverage the potential of cross-border infrastructure to address critical economic bottlenecks, boost regional integration and intra-African trade, and create employment for the continent's growing population?

Cross-border infrastructure (CBI) is a key prerequisite for the regional integration of landlocked economies and the facilitation of trade in goods and services. In the energy sector, hydroelectric plants can support stable regional electricity trading markets that distribute affordable electricity via cross-border transmission lines. In the transport sector, cross-border road and rail infrastructure is necessary to build regional economic development corridors. Hence, CBI is an effective solution to address some of the most critical bottlenecks to regional integration and economic transformation in Africa.

In comparison to national infrastructure, CBI involves transnational risks and benefits, large scale structural complexities, and the coordination of multiple key actors who are scattered across countries and governance levels. Project costs and benefits can be unevenly distributed among countries, thereby challenging national ownership and commitment. Moreover, while a substantial part of the cost of regional infrastructure and integration is borne in the short term, the national and regional gains from the development of CBI can take some time to materialise, especially for small and less developed economies.

Consequently, some of these initial challenges may lead various actors to underestimate the multifaceted gains associated with CBI, which can undermine its development. To address this issue of misrepresentation, this article looks through the lens of job creation to emphasise one of the central promises of CBI development: unlocking socio-economic opportunities and promoting sustainable development on the African continent.

Three dimensions of job creation

To illustrate the importance of regional infrastructure as a key driver of socio-economic development, three dimensions of job creation are analysed: the direct employment effects, indirect employment effects, and spill-over effects. Emphasis will be put on the latter dimension, as the first two have been widely discussed elsewhere and spill-over effects demand a nuanced narrative to reveal the broader socio-economic benefits of CBI.

Direct employment effects are the jobs created in the preparation, construction, and operation and maintenance (O&M) phases of an infrastructure project. For example, a construction company hires 1,000 workers to build a transmission line that runs between three countries, and a concessionaire then hires a staff of 300 workers for O&M during a 20-year contract.

Indirect employment effects consist of the jobs created as a result of the goods and services inputs needed for the realisation of infrastructure projects, i.e. jobs in the supply chain. In the previous example, the firm that constructed the transmission line buys cement and cables for construction and technical equipment for O&M, hence creating jobs in other sectors of the economy.

Regional economic spill-over effects comprise macroeconomic gains stemming from the infrastructure service provided, i.e. the overall economic impact. The constructed transmission line improves the business environment in the region by providing cheaper

Landlocked countries

In Africa, there are more landlocked countries than in any other region (16), and the continent also ranks first in land border's share of total border's length (84 percent).

and consistent electricity access to local firms. This may lead to the establishment of a market cluster that encourages manufacturers to invest in factories due to a stable power supply and transportation infrastructure. These market outcomes are also beneficial for farmers, as lower transport costs and additional trade result in productivity gains and higher incomes.

How can regional infrastructure spur sustainable development?

Overall, the development of CBI results in better integrated economies. A transport corridor has the potential to revitalise existing regional markets, create new ones, and support the establishment of value chains through commercial and service hubs along the corridor. This can lead to higher intra-African trade and efficiency gains, eventually promoting economic diversification on the continent and allowing African economies to become industrialised middle-income countries. During this process of productive capacity development, a variety of skills need to be developed to take advantage of the newly created employment opportunities. However, the medium-to-long term employment and growth effects generated by CBI are frequently overlooked in policy making.

In this way, regional infrastructure can play a decisive role in achieving two important and interrelated Sustainable Development Goals (SDG): Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all (SDG 8); and build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation (SDG 9). It can also support various other SDGs in a more indirect manner.

Why should cross-border infrastructure be prioritised?

The realisation of African countries' aspiration to transform, grow, and industrialise their economies, as expressed in the African Union's Agenda 2063, depends on reliable infrastructure services, which are critical to boost intra-African trade, diversify economic production, and stimulate employment by generating business opportunities. As recently emphasised by the World Bank's vice president for Africa, Mr. Makhtar Diop, such a scenario can be achieved through "full-fledged programs" that foster the development of infrastructure and the creation of regional value chains.^①

One such "full-fledged program" that focuses on cross-border implementation of energy and transport corridors and regional internet exchange networks is the Programme for Infrastructure Development in Africa (PIDA). PIDA is anchored in the 2063 Agenda and was recently emphasised at the 2017 World Economic Forum as one of many Pan-African strategies offering tangible solutions to the significant challenges impeding intra-African trade and industrialisation. The New Partnership for Africa's Development (NEPAD Agency), with support from the German Government, is currently developing a methodology for estimating direct and indirect labour market effects resulting from PIDA projects, as well as a manual on how to optimize job creation and skills development during the infrastructure project cycle.

In order to address key economic bottlenecks, a promising approach lies in the development of regional economic development corridors, which integrate hard infrastructure (such as transport, information and communications technology (ICT), and energy infrastructure) with soft infrastructure issues such as customs and trade regulation and one-stop border posts (OSBP) to galvanise regional economic activity, connect rural areas to market opportunities, and generate new job opportunities. A key element of regional economic development corridors are regional transport corridors, which comprise port, road, and rail infrastructure, usually spreading from a harbour to regionally integrate hinterland economies. In Africa, there are more landlocked countries than in any other region (16), and the continent also ranks first in land border's share of total border's length (84 percent).^② Thus, CBI and regional economic development corridors not only have the potential to generate enormous economic gains from regional integration, but they are also critical in connecting landlocked economies to regional and global markets.

Creating new value chains and boosting growth through regional transport corridors

When a regional transport corridor becomes operational, its road, rail, and port infrastructure triggers spill-over effects that can catalyse a comprehensive process of regional socio-economic development. In economic theory, as transportation costs decrease, traffic increases, and as a result, trade in goods and services intensifies. Due to lower trade barriers and enhanced market opportunities, new commercial and service hubs are established along the corridor. On the one hand, regional transport corridors can incentivise the creation of new businesses, and on the other hand, they can also connect existing manufacturing and agricultural clusters to new cross-border markets. Likewise, feeder roads can link agricultural areas with the manufacturing sector, similarly creating the potential for new value chains. The new corridor can thus generate substantial competitiveness and productivity gains, create new economic opportunities, and ultimately lead to an increase in national and regional GDP.

To give a practical example, the Central Corridor, a so-called “multimodal” transport system (road, rail, and port) and flagship program of PIDA, starts from the Port of Dar es Salaam and connects Tanzania with the Democratic Republic of Congo, landlocked Burundi, Rwanda, and Uganda, through integrated transportation services. At African ports, the average container processing time is 20 days, compared to three to four days at other international ports.^③ As a result of the Central Corridor infrastructure programme, the average container processing time at the port of Dar es Salaam is expected to decrease from 29 to 9-11 days and the container capacity is expected to double from 600,000 to 1,2 million 20-foot equivalent container per year.^④ The enlarged bridge connecting Rwanda and Tanzania allows for the transport of 400 tons of cargo, compared to the former capacity of 56 tons, and the number of official border checks is expected to decrease from 17 to three thanks to OSBPs. The Central Corridor is opening up new value chains for domestic producers and new opportunities for economic development.

On top of providing adequate physical infrastructure, addressing the critical issue of soft infrastructure (including though OSBPs, port processing, and logistics) can lead to vast efficiency and competitiveness gains, as illustrated by the Central Corridor project. These gains, in turn, can trigger a broader process of socio-economic development and overall structural transformation. To unfold the full regional economic potential of the Central Corridor, several elements are currently being implemented.

Regional economic spill-over effects

Commercial and service hubs have the potential to transform into labour intensive industrial parks and to boost employment and economic growth. For example, if implemented as planned, projections estimate that the Hawasa Industrial Park in Ethiopia may generate 60,000 jobs and US\$ 1 billion in apparel export value per year.^⑤ Generally, industrial parks might further develop and turn into growth poles that agglomerate multiple industries. Such poles benefit their periphery through spill-over effects such as technology, knowledge, or institutional transfers, and as a result, they can foster economic growth in neighbouring states or other parts of the country.^⑥ An important aspect is that CBI lays the groundwork for this process by incentivising private sector involvement and financial investment, which is needed for the establishment of new factories and branches of private sector operators that can, with the help of ICT, energy, and transport infrastructure services, eventually develop into fully integrated regional economic development corridors involving industrial parks and growth poles.

Regional transport corridors have tremendous potential in terms of direct, indirect, and spill-over job creation. However, these employment opportunities – that can be related to the construction of roads, the O&M of power plants, regional electricity trade, technical machinery operation, or the establishment of small and medium sized businesses – require specific skills. In this way, all three dimensions of job creation encourage public and private institutions to develop a workforce with technical and entrepreneurial skill sets, that is able to benefit from these newly created job opportunities. This is well illustrated, for example, by a recent ECOWAS initiative that currently runs a feasibility study with a

view to maximising the creation of business opportunities for women in the energy value chain.⁷

Ensuring cross-border infrastructure's potential is fully tapped

To illustrate the potential gains of cross-border infrastructure (CBI), this article explained the extensive gains associated with CBI development in Africa by looking at its effects on job creation. To ensure this potential is fully tapped, it is crucial to foster an understanding among key African and international stakeholders of CBI development as a cross-sectoral and multi-faceted process able to address multiple policy issues in an integrated manner. This should be done by contextualising CBI in its broader chain of effects, including in terms of job creation and skills development, regional economic integration, diversification of economies and revenue streams, industrialisation, and sustainable development. For example, the holistic approach of regional economic development corridors is one particularly promising way to realise and apprehend the benefits of CBI.

Although not a panacea, CBI development will be pivotal in achieving SDG 8 and SDG 9, and in supporting the realisation of other SDGs. However, it is a policy area that is often overlooked and needs to be put higher on the continental, regional, and national agendas for medium-term and long-term policy planning. To be effective, multi-level coordination networks, such as regional and continental organisations, need to be strengthened in their role as honest brokers and coordinators of CBI development. This can only be realised if CBI's potential contribution to sustainable development, in particular by addressing key structural constraints and providing a multi-faceted stimulus, is widely recognised. It remains to be seen whether the job creation and development potential of CBI can be used as an effective political leverage tool to gain national commitment and ease bottlenecks during the preparation and implementation phases.

The views expressed in this article are those of the authors and do not represent those of the institution with which the authors are affiliated.



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CHINA

China's Infrastructure Development Strategy in Africa: Mutual Gain?

Wu Yabin and Bai Xiao

Plunder or mutual gain? On the ever-growing scale of China's investment in infrastructure in Africa.

Africa is rich in natural resources and has enough people of working-age to drive the economy. However, despite swift progress in urbanisation, poor infrastructure is one of the key obstacles to its development. To accelerate domestic socio-economic development, there is an insatiable demand for more and better infrastructure, with most of the funding coming from outside. In 2015, the total reached US\$83.4 billion, of which US\$20.9 billion came from China.^①

With the intensification of China's overseas investment strategy in recent years, the overall scale of China's direct investment in Africa has risen considerably. Chinese investment encompasses railways, highways, ports, oil and gas fields and power plants (for the latter, see Table 1), whereas investment from the US and European countries mostly focuses on energy and power. As many as 322 large-scale projects for infrastructural development began in Africa before June 2013. Around 12 percent of these projects were undertaken by Chinese companies, while 37 percent were undertaken by European and US companies.^②

The value of contracts newly undertaken by Chinese companies in Africa reached US\$75 billion in 2014, with a turnover of US\$53 billion, which is 40 times more than the figure in 2000.^③ Among them, the coastal railway project contract in Nigeria, acquired by China Railway Construction Corporation Ltd, had a total value of US\$11.97 billion, the highest value of a single-contract project in the history of China's foreign engineering activities. Stage one of the Addis Ababa–Adama Expressway, with a total length of 78 kilometres, was completed in May 2014. Designed and constructed by China Communications Construction, this expressway is the first in Ethiopia and the first with such scale and quality in East Africa. Bidding for the construction of a new bridge over the Cuanza River in Angola was jointly won by an Angolan company, China Road, and a Portuguese company, Bridge Corporation, in November 2014. The project has a total contract value of about US\$110 million, making it the first major public works contract won by a Chinese-funded company in collaboration with foreign companies since the influx of Chinese-funded companies into Angola in 2003.

Table 1: Number of power projects with Chinese participation in sub-Saharan Africa between 2010 and 2020

	Generation capacity			Transmission and distribution capacity		
	Completed projects	Current projects	Planned and financed projects	Completed projects	Current projects	Planned and financed projects
East Africa	14	9	5	10	10	1
West Africa	17	4	2	6	2	2
Central Africa	8	5	2	5	1	2
Southern Africa	15	7	8	4	5	1
Total	54	25	17	25	18	6
	96			49		

Source: OECD/IEA. "Boosting the Power Sector in Sub-Saharan Africa: China's Involvement." July 2016.

China's approach to investment in infrastructural development in Africa differs from that of the West. While the latter emphasises the model of "democracy first," China believes in driving the economic growth of the receiving country through infrastructural development. As a result, the West often questions the motive for China's investment and construction support in Africa from its own point of view. The questions usually focus on the following three perspectives.

Does Chinese investment in infrastructural development take away jobs from Africans?

The Sino-African collaboration in infrastructural development is based on the global value chain concept of mutual benefit. All engineering projects undertaken by China involve the construction of infrastructures much needed by Africa. For that purpose, China introduces competitive industries urgently needed for African industrialisation and hires and fosters a large number of local workers and technicians for the construction.

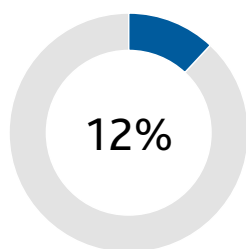
Global investment that follows infrastructural advance not only boosts local employment but also generates spillover effects, such as skill development, management experience, and technology transfer, which also help to reduce the high unemployment rate in Africa. According to unofficial statistics, the number of people employed by Chinese-funded companies in South Africa exceeded 26,000 by the end of 2015, of which 24,000 (90 percent of total employees) were locals.⁴ China's involvement in Africa has lasted more than a decade. To date, it has built six training centres, which provide training to 12,000 people annually.

Chinese businesses are placing a greater emphasis on the multiple social effects of investment, including in terms of technology transfer, capacity building, and ultimately improvement of living standards.

Is it a form of "neo-colonialism" that facilitates plundering of resources?

China needs resources because it is a world leader in manufacturing and a major supplier for the global market. The economic cooperation between Africa and China brings mutual benefit and gains. China's investment in infrastructural development in Africa comes with no political strings attached, as Chinese Premier Li Keqiang stated: "China will not follow the beaten track of colonialism of other countries or allow the re-emergence of colonialism in Africa. To Africa and China, collaboration means opportunities and mutual gain." More and more people in the West are becoming aware that China's development projects in Africa are part of its public diplomacy strategies to build friendly relations and win future international support.

In a paper dated July 2016, David Dollar, a senior research at Brookings, reached the conclusion that China's involvement in Africa has been gradually shifting from natural resources to human resources.⁵ Chinese businesses are placing a greater emphasis on the multiple social effects of investment, including in terms of technology transfer, capacity building, and ultimately improvement of living standards. In another study published in 2015, researchers come to the following conclusions.⁶ First, China's overseas investment is primarily profit driven. It is a rational business choice within the context of globalisation, as China keeps in mind the significant market potential of Africa and accordingly develops international collaboration. Second, China's direct investment in Africa may be growing rapidly, but the amount remains relatively small, at about 3 percent of the total. Third, the investment of Chinese businesses in the field of natural resources in Africa is small compared to that in the services industry, which occupies a leading position, while investment in manufacturing is also significant.



As many as 322 large-scale projects for infrastructural development began in Africa before June 2013. Around 12 percent of these projects were undertaken by Chinese companies, while 37 percent were undertaken by European and US companies.

Is Chinese investment in infrastructural development in Africa sustainable?

The Tanzania–Zambia railway is often used as an example of the non-sustainability of Chinese infrastructural investment. Although it was the beginning of China's investment in railways in Africa and played an unparalleled and historical role, it fell into neglect after a vicious circle of insufficient maintenance and funds, loss of technicians, continuously reduced transport capacity and heavy losses. On the one hand, China's investment in Africa has a clear competitive advantage. China offers lower quotations for investment in infrastructural development, attributable primarily to the mature technology and efficient engineering of Chinese businesses in the field, thus greatly shortening construction schedules without compromising on quality. Furthermore, a lot of the raw materials come from China, being cheaper than the local ones. The cost of financing is also more favourable: the interest rate on loans from China to African countries is lower than the local rate. On the other hand, the uncertainty brought about by the huge scale and long-term nature of investment in infrastructure, the intricacy of the various political, legal, and culture factors at play in the host country, as well as the heated international competition, generates significant challenges for the sustainability of Chinese investment in infrastructural development in Africa.

Currently, economic growth in Africa is lower than expected due to a sluggish global economy, uncertainty about economic globalisation, and the decrease in global commodity prices. In this context, Sino-African collaboration is an asset, particularly in infrastructural development, and should be a source of hope and optimism.

At the Forum on China-Africa Cooperation in December 2015, China announced its offer of US\$60 billion and support for the "Ten Major Collaborative Plans," which involve areas such as industrialisation, agricultural modernisation, infrastructure, finance, green development, trade and investment, poverty reduction and public welfare, public health, and peace and security. At the G20 Hangzhou Summit held last year, Chinese President Xi Jinping proposed establishing a global alliance for interconnectivity among infrastructures and intensified monetary investment and intellectual support in infrastructural development projects, so as to accelerate the process of interconnection and intercommunication in the field of infrastructure at the global level. This initiative, as well as China's proposal for the establishment of an Asian Infrastructure Investment Bank in 2013, shows the country's determination in advancing infrastructure development as a global public good, including through infrastructural investment and financing.

The development advantages of China, in terms of funds, technology, markets, businesses, talent, and experience of success, closely combined with the natural resources, huge population, and market potential of Africa, are bound to yield promising development outcomes for the people of China, Africa, and the world.

African countries need to put in place far-sighted and appealing investment policies and provide a macroeconomic environment and micro-operations settings that are politically stable, business friendly, and open.

Way forward: What should be the priorities for Africa?

In conclusion, the following recommendations would enable African policymakers to make the most of Chinese investment in infrastructure development, so as to foster sustainable development on the continent.

First of all, African countries need to seize the unprecedented opportunity for China and Africa to team up in planning and promoting infrastructural development and industrial collaboration, so as to accelerate industrialisation and agricultural modernisation.

Financing should only be carried out after scientific assessments of each party's risk tolerance to minimise any dangers of insolvency.

Secondly, political stability and continuity is the foundation and guarantee of successful Sino-Africa collaboration in infrastructural development. To attract much-needed investment, including from China, African countries need to put in place far-sighted and appealing investment policies and provide a macroeconomic environment and micro-operations settings that are politically stable, business friendly, and open. Certain complementary preferential policies need to be in place during the initial stage at a time when there are risks to be managed, including opaque policies, corruption, and security concerns.

Thirdly, the success of projects depends on how African governments execute and maintain them. China should be asked to manage the follow-up operations for a certain period of time where that is possible. In many unsuccessful cases, the problem can be attributed to a quick transfer of authority to the local side on completion.

Finally, African countries need to increase the effectiveness of their training of local technicians and try to retain them. This not only determines the project's success but also lays the foundation for Africa's future industrialisation. The Tanzania–Zambia railway should serve as a classic example, when the technicians cultivated by China eventually migrated to other countries, such as South Africa. The situation was compounded by Tanzania's persistently declining educational standards since the 1980s, which led to a gap in the technicians' training process, with dire consequences.



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SUSTAINABLE DEVELOPMENT

Sustainable Infrastructure: A Driver to Achieve the Sustainable Development Goals in Africa?

Hans-Peter Egler and Juraj Jurik

In light of Africa's current development challenges, how can sustainable and resilient infrastructure pave the way for the successful implementation of the Sustainable Development Goals on the continent?

The successful implementation of the Sustainable Development Goals (SDGs) depends heavily on infrastructure, as according to the OECD more than 80 percent of the SDGs rely on infrastructure development of some form. Given the long-term nature of infrastructure, its benefits for society, and its undeniable impact on the environment, sustainable and resilient infrastructure systems will be vital in ensuring that sustainable development, particularly on the resource-intensive African continent, is able to succeed. Sustainable infrastructure is a means to mitigate environmental, economic, and social risks, as well as to increase resource optimisation and benefit creation. However, in order to turn this potential into reality – through the development of sustainable and resilient infrastructure projects – the roles of the private sector, master planning, public procurement, and public-private partnerships (PPP) are vital.

Sustainable and resilient infrastructure: A backbone for the SDGs

Infrastructure such as telecommunication networks, transportation systems, water treatment and waste management facilities, hospitals and schools, are necessary to ensure effective economic and social development. Humanity strongly depends on the services such types of infrastructure provide. However, besides the undisputable benefits they deliver, they also have significant impacts on the environment – resulting in a loss of biodiversity and a decrease in human well-being. Including the right sustainability and resilience aspects into the development and financing of infrastructure projects is becoming increasingly important, and could turn infrastructure into the backbone of sustainable development. In light of the following two trends, it has become even more important to integrate these crucial aspects into infrastructure planning in Africa.

Firstly, the continent's population is booming. Secondly, it is experiencing a huge demographic shift from rural to urban areas. After Asia, Africa is the world's second-fastest region in terms of pace of urbanisation. The total population living in Africa's urban areas is expected to rise from 400 million in 2010 to around 1.26 billion in 2050.^① According to the McKinsey Global Institute, the number of urban-based Sub-Saharan African households is likely to grow at a rate of 4.1 percent per year until 2025.^② This expected growth demonstrates a need for better urban management, institution building, and a new paradigm for planning and implementing infrastructure projects.

Today, however, Africa is lacking appropriate and sustainable infrastructure solutions to meet these growing challenges. For example, 80 percent of Africa's agriculture still relies on rainwater rather than irrigation networks. Electricity production plants, as well as health and educational services, are also insufficient. Not only does this rapid development threaten the fulfilment of African people's most basic needs today, it also indirectly affects the ability of future generations to meet theirs. Sustainable and resilient infrastructure has tremendous potential to help achieve the SDGs and other sustainability-related targets set by international agreements, such as keeping the global temperature increase to no more than 2 degrees Celsius by the end of this century. In particular, through better roads, ports, and other transport means, sustainable and resilient infrastructure can improve the connectivity of goods, services, and people, thus strengthening African economies, supporting their integration into global trade and international value chains, creating more jobs, and offering better income possibilities for their growing population.

A new element to consider: Nature-based solutions

Nature-based solutions (NBS) are increasingly recognised as complementary solutions that provide infrastructure projects with numerous benefits and increase their levels of sustainability and resilience. These solutions are especially important for Africa as they can help tackle many of its current challenges. NBS are natural systems – like wetlands, forests, or mangroves – that can substitute for conventional man-made infrastructure, such as dams and water treatment plants, and are integral to the health of ecosystems and human well-being. There is a strong business case for investing in NBS, as they can reduce construction and maintenance costs, improve operation costs, and generate financial gains. Furthermore, in many cases, NBS can generate more co-benefits and function longer than conventional, man-made infrastructure.

These qualities of NBS are especially interesting in the context of Africa's future development trajectory. For example, NBS can contribute significantly to soil restoration, green space rehabilitation, the development of food gardens, and disease prevention. They also reduce the occurrence of disasters due to their ability to strengthen soil, control floods, and produce microclimates in cities. Furthermore, they can help purify water supplies and support the retention capacity of soil.

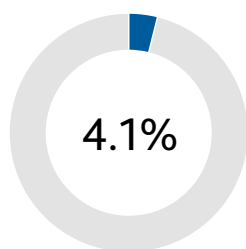
Using new tools to integrate sustainability-related aspects into planning

How can the resilience and sustainability aspects of infrastructure projects be demonstrated to city planners, project developers, investors, and decision makers? Are there currently any tools that could look at an infrastructure project and assess its qualities, risks, and benefits for infrastructure stakeholders?

Standardised approaches can contribute to benchmarking, increase the comparability of infrastructure projects, and create a common language between the main stakeholders. Therefore, credible standards are essential.

Standardised approaches can contribute to benchmarking, increase the comparability of infrastructure projects between countries and sectors, and create a common language between the main stakeholders. Therefore, credible standards are essential. GIB, together with the French investment bank Natixis, has been working with a wide range of stakeholders across regions and sectors to produce a standard that can achieve these objectives. The Standard for Sustainable and Resilient Infrastructure (SuRe®) was launched at COP21 in Paris in December 2015, and provides a basis upon which infrastructure projects can be certified as sustainable and resilient. It integrates the IFC performance indicators and relevant international conventions – such as the Sendai Framework for Disaster and Risk Reduction, the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the ILO Declaration on Fundamental Principles and Rights at Work – into its performance assessments. GIB has also included nature-based solutions in this standard, which ensures that it provides benefits beyond the immediate scope of the SDGs. The SuRe® Standard creates a common understanding between the public sector, project developers, and the financial sector. In order to channel larger financial flows from institutional investors towards sustainable and resilient infrastructure, complementary tools focussing on the default risk assessments of debt financing and underwriting are also needed. Therefore, GIB is also working with market players to develop these complementary tools.

How can these and similar tools help vulnerable African cities handle and overcome the challenges they are facing? First, they facilitate appropriate procurement criteria, enable the comparison of infrastructure projects, and help the project selection process. Second, they ensure that environmental, social, and governance criteria are covered, thus



According to the McKinsey Global Institute, the number of urban-based Sub-Saharan African households is likely to grow at a rate of 4.1 percent per year until 2025.

increasing the quality of infrastructure, improving risk management, and creating benefits. Third, they prepare projects for the scrutiny of potential financiers, who increasingly focus on such criteria when assessing projects. In this regard, the involvement of private investors helps such projects to access private finance.

The risk mitigation and benefit creation potential of sustainable infrastructure

Considering the social, economic, and environmental elements of an infrastructure project helps mitigate risks, and is particularly cost-effective when done at the beginning of the development process. An illustrative example is the construction of a renewable energy water dam that creates risks for the local biodiversity and ecosystem as well as the habitat of indigenous people. Such a project could endanger the fish population and potentially lead to the displacement of the local indigenous population. Mitigation measures would include stakeholder engagement: preparing, informing, and negotiating with the indigenous communities before such displacement decisions take place, and better assessing the impacts on biodiversity and ecosystems, resulting in the possible redesign of the project in question.

Embedding the aspects of sustainability and resilience into infrastructure projects can provide benefits such as lower energy, repair, and maintenance costs, as well as proactive environmental approaches. This results in better environmental and biodiversity protection, including through reduced CO₂ emissions. Infrastructure development and upgrade present significant opportunities in relation to climate change adaptation and mitigation, since such projects are usually built to last for decades and influence the livelihoods, lifestyles, and consumption behaviour of many people every day. Houses built according to energy efficiency standards, wind farms that replace coal-fired power plants, innovative water and waste treatment plants, as well as public transport systems, can save large amounts of greenhouse gas emissions throughout their life cycles, including by increasing the share of renewable energy consumption and protecting carbon sinks.

Using innovative tools – such as the SuRe® Standard – to assess the sustainability and resilience of infrastructure projects can generate significant benefits for the various stakeholders involved: it helps financiers to identify sustainable investment opportunities (particularly for unlisted infrastructure) and compare the performance of infrastructure projects across sectors with regard to ESG elements; it also supports project developers in identifying how to use project resources efficiently (financial and natural) and communicate the benefits clearly, which can in turn make the relevant project more acceptable to the public and attract additional financial resources from the private sector; and it allows the public sector to benefit from the increased quality of infrastructure, greater resilience, and the more efficient use of limited public resources, while also encouraging the establishment of appropriate procurement criteria.

The crucial role of the public sector

Given the key role of infrastructure design and implementation in the whole sustainable development process, the public sector will play a crucial role in the successful integration of sustainability and resilience elements into projects, in particular regarding the adoption of appropriate public procurement systems and the design of public-private partnership (PPP) models. Such action should be based on well-designed master plans, laying the foundation for the creation of safe, secure, and healthy urban environments with access to basic services for all. In the majority of African countries, public procurement needs to be improved in order to implement innovative infrastructure solutions.

In Africa, there is growing pressure on government budgets, insufficient investments due to scarce financial resources, and a lack of capacity within the infrastructure sector. Therefore, PPPs have emerged in the African market as a solution to overcome local challenges. In general, PPPs allow public and private know-how to be combined in order to enhance the quality of services, increase resource efficiency, improve risk allocation and – due to the skills and effectiveness of the private sector – contribute to reducing the whole life cost of a project compared to those developed via standard public procurement. In addition, such collaboration will allow projects to access innovation and additional

technical know-how, both of which are key inputs. Recognising the great potential of PPPs, GIB has teamed up with C.R.E.A.M. Europe to develop the ImPPPact initiative, which aims at stimulating innovative approaches and resource efficiency with regards to infrastructure projects. Such initiatives have the potential to foster the implementation of the SDGs through PPP infrastructure projects.

Conclusion

The African continent is urbanising rapidly and must provide its growing population with the necessary goods and services. Built infrastructure, although needed, is having a detrimental effect on the environment and human well-being. In this context, it is critical to ensure that infrastructure development becomes a driver to achieve the SDGs and other targets set by international agreements. This will in turn boost economic development, protect the environment, and provide African societies with a variety of social benefits.

It is critical to ensure that infrastructure development becomes a driver to achieve the SDGs and other targets set by international agreements.

Thanks to the fact that sustainability and resilience elements can contribute to the mitigation of risks and even increase the benefits associated with infrastructure projects, sustainability and resilience thinking should be considered not as an additional cost, but rather as a return-providing investment. Nature-based solutions can contribute to lower cost solutions and enhance the benefit creation potential and resilience of infrastructure. Strengthening the ties between the public and the private sector (PPPs), efficient public procurement systems, and well-designed city master plans are all key ingredients to implementing sustainable and resilient infrastructure projects. The public sector, construction companies, and financial intermediaries need to apply more innovative tools. Together with renowned business players, GIB has started to provide such market-oriented tools and services. Halting the current tempo of urbanisation is not an option. However, introducing sustainability and resilience aspects into infrastructure projects can shift us onto a more sustainable path.

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Germany Presents its "Marshall Plan with Africa" to AfDB Experts

Gerd Müller, the German Minister for Economic Cooperation and Development, has presented in early March the "Marshall Plan with Africa" developed by his government at the Africa Development Bank (AfDB) in Abidjan. The plan constitutes a large-scale initiative aimed at supporting development on the African continent.

"It represents an overall concept that goes far beyond development policy. It brings together economic, financial, trade, security, legal, environmental and health policy," said Müller in February while addressing the German-African Business Summit.

A first version has been unveiled in January by the German government. It is articulated around three thematic pillars: (1) Economic activity, trade, and employment; (2) peace, security, and stability; and (3) democracy, rule of law, and human rights.

WTO's Trade Facilitation Agreement has entered into force

The World Trade Organization announced at the end of February that the Trade Facilitation Agreement (TFA) has now entered into force, having surpassed the minimum requirement of 110 ratifications from members. "The Trade Facilitation Agreement is the biggest reform of global trade this century," said WTO Director-General Roberto Azevêdo in commenting on the news. "It sends a message about the power of trade to support jobs and growth around the world – in developed and developing countries alike," he continued.

The landmark agreement aims to cut customs-related red tape, easing the flow of trade between countries by simplifying customs procedures, speeding up the clearance of goods, supporting cooperation among customs officials, and otherwise making it quicker and more efficient for goods to cross borders.

Food Crisis Worsens Across Several African Countries, UN Warns

Millions of people face acute food shortages across a swathe of African countries, with parts of South Sudan in particular facing famine, the UN has recently warned.

At a humanitarian summit in late February in Oslo, governments pledged US\$672 million in funds for Nigeria and the Lake Chad region, three days after the heads of the UN Food and Agriculture Organization (FAO), the World Food Programme (WFP), and the United Nations Children's Fund (UNICEF) issued a joint statement warning of famine in South Sudan.

"People are dying of hunger. We must take action now," said the FAO's José Graziano da Silva, the WFP's Ertharin Cousin, and UNICEF's Anthony Lake in this communiqué. The landlocked African country has been ravaged by civil war since late 2013, just a couple of short years after it became independent from Sudan.

WTO Director-General Roberto Azevêdo Gears Up for Second Term

WTO members formally reappointed Director-General Roberto Azevêdo for a second term on Tuesday 28 February, with the global trade chief outlining to members the day before his vision for the organisation's next four years. Speaking to members at the General Council, Azevêdo described both the achievements seen during his first term, as well as his plans and possible challenges going forward.

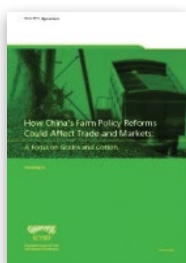
Azevêdo's second term will formally begin on 1 September 2017, just months before trade ministers head to Buenos Aires, Argentina, for their eleventh ministerial conference (MC11). "My honest assessment is that in all areas we still have a long way to go – and a huge amount of work ahead if we are to arrive at concrete outcomes," he said, noting that effectively WTO members have eight working months left to prepare for the ministerial.

Publications and resources



Building Inclusive Rules of Origin in the 21st Century – ICTSD and IDB – March 2017

This report provides an analysis and evaluation of rules of origin (RoO) in the context of regional trade agreements (RTAs) and the multilateral system. To do so, it looks at the various sectoral approaches to RoO before examining different consolidation and harmonisation models in Europe, North America, and Latin America, and then exploring potential new approaches to simplification, harmonisation, and consolidation of RoO. It finishes by identifying issues needing further study. <http://bit.ly/2nDCiy3>



How China's Farm Policy Reforms Could Affect Trade and Markets: A Focus on Grains and Cotton – ICTSD – March 2017

This paper examines five important agricultural commodities in China: rice, wheat, maize, soybeans and cotton. It discusses recent developments in prices, production, consumption, and trade for these farm products, in the context of China's evolving farm policy framework – including most recent policy changes – and global market trends, and looks at the implications of a number of possible policy scenarios on both domestic and international markets. <http://bit.ly/2nwO1eu>



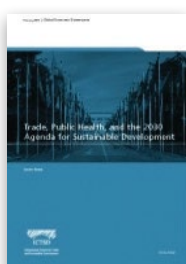
WTO Trade Facilitation Agreement and its Implementation in Southern Africa – TRALAC – March 2017

The WTO's Trade Facilitation Agreement (TFA) entered into force on 22 February 2017. However, out of the 15 member states of the Southern African Development Community (SADC), only eight have to date ratified and accepted the agreement. Notable by their absence are Angola and South Africa. This trade brief considers some of the major challenges and inefficiencies in cross-border trade in the southern Africa region and the benefits that implementation of the WTO's TFA could bring for SADC countries. <http://bit.ly/2nsptWD>



Technical Note: Next steps upon the entry into force of the WTO Agreement on Trade Facilitation – UNCTAD – February 2017

The WTO's Trade Facilitation Agreement (TFA) contains provisions for expediting the import, export, and transit procedures to reduce trade-related costs. It also sets forth ground-breaking rules on special and differential treatment, linking implementation by developing and least developed countries (LDCs) to their acquisition of technical assistance and capacity building. This technical note provides guidelines to countries for actions to be taken following the entry into force of the WTO's TFA. <http://bit.ly/2nKGwR6>



Trade, Public Health, and the 2030 Agenda for Sustainable Development – ICTSD – February 2017

This think piece focuses on two broad public health objectives that would benefit from action in the area of trade policy and trade rules as a contribution to the health-related targets of the 2030 Agenda. These two objectives are health innovation and access to health products of assured quality. The paper outlines how action and reform of relevant WTO agreements could contribute to enhancing innovation and access, and it discusses the role of bilateral and plurilateral agreements in achieving the mentioned targets. <http://bit.ly/2n0NNfs>



Realising the Potential of Services SMEs in Developing Economies – ICTSD – February 2017

Small and medium-sized enterprises (SMEs) play a key role in the development of services sectors in least developed countries (LDCs) and low-income countries (LICs). This paper examines this critical role, investigates the primary supply-side constraints which limit SMEs increased participation in the economies of LDCs and LICs, and proposes a set policy options which could boost SME participation, productivity, and competitiveness in the services sectors of the world's most vulnerable economies. <http://bit.ly/2nKj3PM>



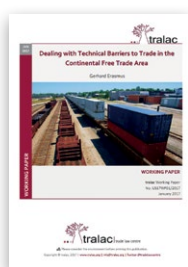
G20 Guiding Principles for Global Investment Policymaking: A Stepping Stone for Multilateral Rules on Investment - E15 Initiative – February 2017

This paper introduces the G20 Guiding Principles for Global Investment Policymaking, beginning with a background review of their crafting and various attempts at devising guiding principles on international investment, and identifying some of the guidelines that have paved the way for the Principles. It also outlines the objectives, scope and content of the G20 Guiding Principles and considers their potential impact on policymaking at the domestic and international levels. <http://bit.ly/2lPvo4B>



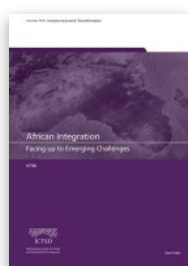
The Role of Development Banks in Promoting Growth and Sustainable Development in the South – UNCTAD – February 2017

This report argues that development banks at all levels can play a critical role towards the achievement of the Sustainable Development Goals. It first details the rationale for national development banks. It then discusses the role of regional and subregional banks, in particular in supporting smaller countries facing greater obstacles in setting up development banks at the national level. Finally, it discusses the recently created Southern banks, both regional and cross-regional. <http://bit.ly/2ky9f93>



Dealing with Technical Barriers to Trade in the Continental Free Trade Area – TRALAC – February 2017

In order to shape the CFTA as a comprehensive legal framework suitable for 21st century challenges, numerous issues need to be addressed, including customs procedures, tariffs, non-tariff measures, corruption, trade facilitation, trade remedies, dispute settlement, finances, transport, corridors, as well as investment, industrialisation, and the movement of capital and persons across borders. This paper discusses one of the practical issues now on the agenda: Technical Barriers to Trade. <http://bit.ly/2l8pFGQ>



African Integration: Facing up to Emerging Challenges – ICTSD – December 2016

This paper examines the key elements bearing upon regional integration in Africa. It argues that integration should be conceived as a means to respond to the development aspirations of societies across the continent starting with concerns around poverty alleviation, food security, and access to essential services. The paper presents the key motivations for deepened integration in Africa, provides a comprehensive overview of experiences to date at the continental level, and on the back of this analysis advances forward-looking options. <http://bit.ly/2ljzVye>



Regional Integration and High Potential Value Chains in West Africa – ICTSD – December 2016

This paper aims to provide an understanding of West Africa's potential for participation in GVCs. Upgrading strategies require identifying value chains in which West Africa has existing capabilities and that also offer (i) dynamic markets, (ii) potential to support Sustainable Development Goals (SDGs), and (iii) concrete upgrading opportunities in the near term. Through this approach, the paper identifies the value chains with the highest potential in the region. <http://bit.ly/2kq0Pp1>

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