What is the Role of Chinese Investment in Infrastructure in the East African Northern Corridor?

Alvaro Valverde

MA Globalisation and Development

Institute of Development Studies, University of Sussex

1. Introduction

In the increasingly interconnected and continuously changing global order, it is crucial to understand the role of developing countries like India, Brazil or China. These big players and the ways in which they interact with other countries, especially with those situated at the bottom of the pyramid, will shape the future of development and the global economy. Special attention must be paid to China, which was listed as the second largest economy of the world by the New York Times on August 15, 2010 (Barboza: 2010).

The rapidly increasing engagement of China with Africa has fed the fears of western countries in recent years and challenged the assumptions and conditions imposed by traditional donors. The Chinese non-intervention policy, the lack of conditionality of Chinese aid, and the ideas of mutual respect, equality, and mutual benefit provides Africa with an opportunity for South-South cooperation in a win-win situation.

One of the main problems faced by Sub-Saharan Africa is the lack of infrastructure and the bad maintenance of the existing infrastructure. This situation is especially acute in East Africa, where the landlocked countries of the area are the most affected. The lack of financing makes it necessary to promote foreign investment in infrastructure within the region. The Chinese financial reserves and the importance given by the Chinese to infrastructure investment pose an opportunity for an effective Sino-African cooperation in the region.

This essay will analyse the opportunities, challenges, and requirements for Chinese investment in infrastructure in landlocked countries of the East African northern corridor. It will first describe the Sino-African relationship and then explain its differences as compared to the Western-African relationship. Second, it will describe the motivations and characteristics of Chinese investment in infrastructure in Africa. Third, it will analyse the need for infrastructure in Africa and the financial requirements. Fourth, it will explain the challenges faced by East African landlocked countries. Finally it will study the cases of Uganda and Kenya and it will explain the relationship between these two countries and China, focusing on how this relationship and the recent discovery of oil in Uganda will shape the future of development of the region.

2. China, Africa and the West.

By 2008 China was the second largest trading partner of Africa, behind the United States and ahead of France and Britain, with a trade volume over US$ 106.8 billion (Lagerkvist: 2009), and nearly 900 Chinese companies investing in African countries by 2009 (Brautigam: 2009). The rapid growth of Chinese engagement with Africa and the increasing role of countries like Angola as China's oil supplier has fed the fears of western countries in recent years. Myths and critiques have appeared, such as the Chinese are only targeting countries with rich natural resources or that China is a rouge donor that operates outside the rules and makes governance worse (Brautigam: 2009). Furthermore, some critics consider China's Africa policies as neo-colonialist (Timberg: 2007, as cited in Liangxiang: 2007). But the Sino-African relationship is not that simple and should not be judged that easily, for that reason it is necessary to understand the complexity of this relationship first.

As argued by Liangxiang, the Sino-African relationship should be considered both historically and within the context of globalisation (2007). Chinese engagement with Africa formally began in 1956 with the opening of official ties with Egypt, and since then the Sino-African relationship has been shaped by ups and downs resulting in a twenty year period of rapid increase in economic and political engagement (Alden: 2007). It must be acknowledged that this increased engagement with Africa was due in great measure to the recognition of China in 1993 of their need to secure sources of energy and other critical supplies in order to support Chinese economic growth (Alden: 2007). It must also be kept in mind that even if this is an important way in which China is engaged with Africa, it is not the only one.

The Sino-African relationship is a four-dimensional engagement as described by the Chinese government: political; economic; education, which encompasses science, culture, health and social aspects; and peace and security. Where great importance is given to economic cooperation with the purpose of promoting economic growth, that could lead to a win-win situation. When pursuing economic growth there are ten areas of cooperation: trade, investment, financial cooperation, agricultural cooperation, infrastructure, resources cooperation, tourism cooperation, debt reduction and relief, economic assistance, multilateral cooperation (Government of China: 2006). Clearly, the Chinese engagement with Africa is broad and ranges from extraction of natural resources, to investment in infrastructure, to political cooperation.

The role of Chinese aid is also complex and has challenged the rules and conditions imposed by western donors. In the 1980s with the creation of the Washington consensus, a group of donors were established with a clear set of ideas about economic policy that cemented the foundations of the aid regime worldwide. However since then, most of the established donor aid has failed to address the developing countries' need for aid and investment (Woods: 2008). The main alternative to these donor agencies came from emerging economies like China, whose role as a donor has increased during recent decades. Nevertheless, China's foreign aid is difficult to quantify due to the lack of transparency in the Chinese government (Lagerkvist: 2009), despite that Brautigam has estimated the Chinese commitment with Africa at $ 2.5 billion (2009).

Chinese aid mainly differs from western aid in its lack of conditionality, the provision of aid through concessional loans, and the emphasis of investment in infrastructure (Lancaster: 2007). Premier Zhou Enlai established eight principles for China's aid to foreign countries after his visit to Africa in 1964, where special emphasis was given to sovereignty, equality, mutual respect, and mutual benefit (Woods: 2008). These principles have been held over the time by successive generations of Chinese leaders.

> We respect the right of the people of all countries to independently choose their own development path. We will never interfere in the internal affairs of other countries or impose our own will on them (China's President Hu Jintao: 2007).

Furthermore, China acknowledges that each country is different and context dependent and consequently it is difficult to apply a universal development model to all of them (Lagerkvist: 2009). Chinese engagement with each African country is unique, making it necessary to analyse specific regions, countries, and sectors to better understand the complexity of the Sino-African relationship.

3. Chinese Investment in African Infrastructure.

Chinese aid gives a special emphasis to investment in infrastructure, a high priority for poor countries, but something that western aid donors have been reluctant to fund for a long time (Lancaster: 2007). This kind of investment promotes Chinese interests on the continent and offers an opportunity for Africa's poor and vulnerable countries to access improved service delivery (Corkin: 2007). Chinese investment in infrastructure is not new and has a historical and ideological origin. The Chinese say: 'to end poverty, build a road' and the origin for this thought lies in the Four Modernizations launched by Deng Xiaoping in the 1970s (Brautigam: 2009). More recently the Beijing Action Plan (2007-2009) has made specific reference to Sino-African cooperation in construction and infrastructure sectors (FOCAC: 2006).

Chinese construction and telecommunications companies offer Africa a cheap access to the essential infrastructure needed for economic growth. The products and services offered by these companies are considerably cheaper than those offered by European or South African firms (Corkin: 2007). Moreover, Chinese projects can be offered at a price discount of 25 to 50 per cent as compared to foreign investors without sacrificing quality. The reason for this discount comes from a combination of factors: lower margins, access to cheap capital, access to low paid employment, use of Chinese materials, use of standard designs, less attention to environmental impacts, access to a hard currency premium paid by the Chinese government, and access to overseas establishment subsidies (Kaplinsky et al.: 2007). African countries clearly benefit from the discounted price of infrastructure projects promoted by Chinese companies.

China is currently engaged with at least 35 African countries in infrastructure finance deals, Nigeria, Angola, Ethiopia and Sudan being the biggest recipients. The size distribution of the projects is skewed towards a large number of small projects, each less than US$ 50 million, nevertheless there are a few projects valued at more than US$ 1 billion. Regarding the distribution by sector, Chinese investment in infrastructure projects is divided into electricity, transport, telecom, and general projects, with a particular focus on hydropower generation and railways (Foster et al.: 2009).

The infrastructure financial assistance provided by China differs from the assistance provided by traditional donors and forms part of a new phenomenon of South-South economic cooperation. Chinese infrastructure finance is not provided through a development agency but through the China Export-Import Bank (Ex-Im), which accounts for the vast majority of their infrastructure investment commitment in Sub-Saharan Africa. The main goal of the Ex-Im Bank is to carry out foreign economic and trade policies, state industrial policies, and diplomatic policies. As well, the bank is devoted to providing export seller's and buyer's credits to support trade, and it is the only Chinese institution empowered to provide concessional lending to overseas projects (Foster et al.: 2009). The Ex-Im Bank's concessional loans require a sovereign guarantee but in the case of some African countries, the creditworthiness of the government can be an issue. In these cases, the repayment of the infrastructure development loan can be made in natural resources, known as the 'Angola mode' or 'resources for infrastructure'. The terms and conditions of the loans are always agreed on a bilateral basis and depend on the nature of the project (Foster et al.: 2009).

4. The Need for Infrastructure in Africa

During the 1950s and 1960s the World Bank was heavily biased towards infrastructure investment in Africa, putting special emphasis on road construction as an effective tool to bring development to remote areas. This situation changed in the late 1970s as the result of some field studies that suggested a limited impact of rural transport on poverty reduction (Bryceson et al.: 2008). At the beginning of the 1990s investment in infrastructure in Africa started to be viewed as a key ingredient for economic development. Moreover, infrastructure development, under the right conditions, is now believed to promote growth, increase equity, and help reduce poverty (Calderón and Servén: 2010).

Less than 40 per cent of the African population has access to electricity; only one third of the rural population has access to roads; five per cent of the agriculture is irrigated; and the ICT sub-sector is characterized by extreme differences across specific services (African Development Bank: 2010). Furthermore, the infrastructure deficit is more acute in the low-income countries than in the middle-income countries. This limited availability of infrastructure services tends to make services more costly than those available in other regions; as indirect production costs increase, export competitiveness is reduced, contributing to Africa's poor performance in terms of economic growth (Foster et al.: 2009).

Nowadays the World Bank recognizes that Africa accounts for major development challenges, including a major infrastructure deficit with large investment needed and an associated financial gap (Foster et al., 2009). In the same way, the African Development Bank (ADB) reinforces the idea that there are huge investment opportunities in infrastructure in Africa that could lead to an improvement in its competitiveness and trade performance that could help it to integrate into the global economy. Furthermore, the ADB estimates the annual finance requirements of Africa at US$ 93 billion until 2020, and it highlights the importance of attracting new investors (2010).

The ADB acknowledges that public infrastructure financing is significantly lower than Africa's infrastructure needs and argues that aid alone cannot close the gap, so it is necessary to broaden the sources of finance and improve the allocation of public sources

(2010). As a consequence, the African continent gives special attention to China, which has accumulated substantial financial reserves and has become a leading global supplier of construction services with expertise in civil works for infrastructure development (Foster et al.: 2009). Consequently, the South-South cooperation is an open door of hope for Africa to address the infrastructure needs of the continent.

5. Landlocked Countries and Transport Costs.

Professor Paul Collier argues that there are four main traps keeping African countries stagnated in poverty, and one of them is being landlocked with bad neighbours (2008). As discussed in the previous section, low-income countries usually have a higher infrastructure deficit, and in the case of landlocked countries its high dependence on transit countries' infrastructure is one of the main components of their trap. Nevertheless there are other factors affecting landlocked countries as well, like dependence on political relations with neighbours, peace and stability with transit neighbours, and administrative processes in transit (Faye et al.: 2004).

Weak infrastructure in the country or in neighbouring transit countries imposes direct costs on trade, thus limiting the ability of landlocked countries to compete in the global economy. This has a severe impact on the least developed landlocked countries, as they tend to export mainly primary commodities with low value related to cost ratios (Faye et al.: 2004). In the same line, Collier argues that manufacturing has been the most reliable driver of rapid development, but this driver cannot support the development of those landlocked countries with poor transport links to ports that are beyond their control (2008).

Landlocked countries have three different ways to manage inland transport when sending their products to maritime ports. Originally this transport was done by rail or inland waterways, but it is increasingly done by road. Ports, railways and roads have all suffered from insufficient investment and poor management (Pedersen: 2000). When analysing the situation of African landlocked countries it can be affirmed that East Africa is the area worst affected by poor investment and management of transit infrastructure; the transport costs of landlocked countries in the area nearly double that of the maritime countries (Faye et al.: 2004).

Acknowledging the infrastructure problems in East Africa, USAID produced a report that reflected the transportation costs in the region related to domestic and transit traffic. The study concluded that these transit costs are not only a function of distance, but a combination of inadequate transport facilities, unreliable communications between ports and landlocked countries, inefficient transport management, complicated customs and document procedures, and many other official and unofficial costs related to the use of roads. Indirect costs can be identified as well, such as the political relations between landlocked and transit countries or security aspects and development priorities (Anyango: 1997).

There are two main challenges faced when addressing the landlocked trap. One is to overcome the difference in the objectives between landlocked countries and transit countries. The landlocked countries want to minimize their transport costs and maintain alternate routes to be more competitive in the global economy while the transit countries want to increase their earnings and minimise their infrastructure costs. The second challenge is how to promote private investment in infrastructure that focuses on regional transport corridors, this being something that the landlocked countries need to increase their economic growth (Anyango: 1997). In order to better understand these challenges and analyse how Chinese infrastructure investment can help to address them, it is helpful to analyse two case studies from East Africa.

6. Uganda - Kenya and the Northern Corridor.

East Africa is one of the poorest areas in the world and is provably one of the most affected ones by the lack of infrastructure and bad maintenance. This situation is especially acute in the case of landlocked countries, which find themselves constrained not only by their missing infrastructure but also their neighbouring countries shoddy transit infrastructure. Two main groups of landlocked countries can be identified in East Africa: Burundi – Rwanda – Uganda with ocean access via Kenya or Tanzania, and Ethiopia with ocean access via Djibouti. These two groups differ in the transport corridors they use to connect with maritime ports. Chinese firms already play an active role in investment activities in Ethiopia, especially in infrastructure, accounting for 60 per cent of road work in the country (Geda and Meskel: 2009). The situation in the other group of East African landlocked countries is substantially different, where the Chinese have had minimal involvement, thus making this particular group more relevant to this study.

Burundi, Rwanda, Uganda and Kenya are closely linked by the region's 'umbilical cord', the northern transit corridor that serves as the primary transit route connecting these countries to the port of Mombasa in Kenya. An alternative route for these countries is the central corridor, which connects them with the port of Dar es Salaam in Tanzania and offers a shorter distance to the sea, shorter transit time and lower transit tariffs. However the roads of the central corridor are in a bad state of repair and the northern corridor is still the preferred transit corridor for Burundi, Rwanda and Uganda (Faye et al.: 2004). The export to GDP ratios of countries along the northern corridor rise as the challenges of these countries fall: for Burundi, 6 per cent; for Rwanda, 9 per cent; for Uganda, 12 per cent; and for Kenya, 26 per cent (UNDP: 2003 as cited in Faye et al.: 2004). The reason for these decreasing export to GDP ratios moving inwards along the corridor is due to a clear infrastructure bottleneck located between Uganda and Kenya. For this reason and the recent discovery of oil in Uganda this paper will analyse the role of Chinese infrastructure investment in both countries as a key player in the future development of the northern corridor.

Uganda

Uganda is considered one of the low-income Sub-Saharan countries, placing 143 out of the total 169 countries in the Human Development Index (UNDP: 2010). Even if the country has favourable environmental conditions for agriculture, which constitutes the backbone of the economy (UN: 2004), it faces important challenges when exporting its products to the global markets. Uganda is well endowed with roads compared to other countries in the region but a large proportion are unpaved and their condition is poor (WB: 2001). Furthermore, Ugandan products incur additional high transport costs along Kenyan roads (Collier: 2008), making these products less competitive in the global market. The Government of Uganda recognizes the severity of this problem and the need for investment in maintenance, improvement, and extension of the country's infrastructure (WB: 2001). In the same way it recognizes the necessity to attract the private sector to invest in infrastructure (Musisi: 2007). Moreover, through incentive packages Uganda encourages foreign direct investment in the country (Obwona: 2001).

The diplomatic relations between China and Uganda began after the independence, and since then Uganda has played an important role supporting China, especially in the UN sphere (Obwona et al.: 2007). China started its commercial activities in Uganda in 1991 and the number of activities has increased over time, especially in the last few years. In 2006 the Government of Uganda and the Chinese Premier Wen Jiabao outlined the priority of investment opportunities in transport, energy, mineral transport, fruit processing, textiles and tourism (Obwoma et al.: 2007). In the same line the Chinese Government encourages and supports Chinese enterprises' investment and business in Uganda through the provision of preferential loans and buyer credits to Chinese entrepreneurs. In 2007 China accounted for 26 per cent of the overall FDI of Uganda (Uganda Investment Authority 2007, as cited in Obwoma: 2007).

In terms of infrastructure, China has recently increased its engagement in transportation, ICT, water, electricity, and other infrastructure. For a long time Chinese investment in infrastructure in Uganda was very limited, with the exception of telecommunications (Obwoma et al.: 2007), but in October 2006 the course of history changed, when Uganda confirmed the discovery of oil after 80 years of official suspicion (Kavuma: 2009). This new discovery changed the relations between China and Uganda. Only one month after the confirmed report of oil in Uganda, the Governor of the China Development Bank disclosed that the Chinese bank was ready to engage with the East African Development Bank and Uganda Development Bank in terms of financing for energy, transport, irrigation, manufacturing and mining sectors (Centre for Chinese Studies: 2010). Furthermore, the Chinese Government announced that month the construction of a US$ 120 million fibre-optic backbone, a US$ 10 million grant to expand the Parliament Chambers in addition to other projects (The Monitor: 2006 as cited in Chan-Fishel and Lawson: 2007). Moreover, trade between China and Uganda increased from US$ 156 million in 2006 to US$ 247 million in 2008, representing a 58.3 per cent increase (Centre for Chinese Studies: 2010).

In January 2009 a large discovery of oil was announced in the lake Albert area of Uganda, in what could possibly be the largest onshore discovery in Sub-Saharan Africa (Pagnamenta: 2009). In the same month the Chinese Foreign Minister issued a US$ 10 million loan to finance the road and sanitation project in central Kampala, and agreed to start the second phase of the fibre-optic backbone project (Centre for Chinese Studies: 2010). One month later two of the three biggest Chinese state-owned oil companies were among the ten companies shortlisted to partner with European firm Tullow Oil for oil exploration in the area. In June the chairman of the Industrial and Commercial Bank of China stated the interest of the Chinese bank in investing in oil refining, pipeline construction, and infrastructure projects in Uganda (Centre for Chinese Studies: 2010). The discovery of oil in the country offers a great opportunity to Uganda, which is entering in a new era of its relationship with China. The main challenge that Uganda is currently facing in this relationship is to develop its own capacities to sustain its infrastructure while looking further to issues like environment or human rights (AERC: 2010).

Kenya

The improvement of Kenyan infrastructure has contributed to the annual growth of the country by one per cent annually in recent years, most of the boost has been due to Kenya's ICT revolution, while the poor state of roads has withheld growth (AICD: 2010). The Africa Infrastructure Country Diagnostic (AICD) has identified three major infrastructure challenges faced by Kenya: one is the bottleneck posed by the capacity of Mombasa port, the second is the need to strengthen the road and rail interfaces, and third to improve the overall efficiency of operations. The main findings include that the actual length of the trunk network is adequate, but the country faces a huge rehabilitation backlog before the trunk network can be considered to be in a maintainable condition. Similarly, it was found that the port of Mombasa has some capacity constraints that need substantial investments to increase its crane productivity and reduce bottlenecks (AICD: 2010).

The trade relations between Kenya and China started with the Ming Dynasty, but the official diplomatic relations were established in 1963. Since then the relations have gone through different phases, resulting in a situation of current diplomatic cooperation that covers several areas. Kenya has become a key focus of China's trade and economic strategy in Africa; it is seen as a politically stable, war-free gateway to the region. Furthermore, it is considered an ideal regional base for Chinese investors to expand their business into other African countries (Onjala: 2008). This belief can be seen in the increased presence of Chinese firms in services such as imports or exports and the increasing investment in sectors like transport, construction, power plants, and telecommunications.

China gives monetary and non-monetary aid to Kenya, of which 19 per cent is dedicated to physical infrastructure projects (UNDP: 2005 as cited in Onjala: 2008); the physical infrastructure projects are mainly divided between road construction, power distribution, ICT, water, and rural electrification (Onjala: 2008). In 2006 the estimated number of Chinese firms operating in Kenya was 44 and the Kenyan Ministry of Trade and Industry estimated that completed engineering and construction projects by Chinese companies in 2006 accounted for US$ 870 million. The most successful Chinese construction company so far is China Road and Bridge Company, which entered Kenya in 1985 and since then has built more than 1000 kilometres of trunk roads (Chege: 2008). Its most ambitious construction project has been part of the Nairobi-Mombasa road whose quality is well proclaimed.

Chinese investments in Kenyan infrastructure have been increasing during the last few years. In 2006 the Chinese Wu Yi Construction Company secured a US$ 37.2 million bid for the first phase of the modernization of the Jomo Kenyatta International Airport in Nairobi (Chege: 2008). The second phase of this project is being carried out by China

National Aero-Technology International Engineering Company (Mungai: 2010). The Chinese Shengli Engineering Construction Corporation was the main contractor for the Mombasa Road-City Centre-Gigiri road upgrade project (Mungai: 2010). Furthermore, the Thika-Nairobi superhighway is valued in US$ 330 million (Mungai: 2010) and is being constructed by the Chinese Wu Yi Company, Synohydro Corporation Ltd and Shengli Engineering Construction (Construction Kenya: 2010).

More recently, in May 2010 the Kenyan President Mwai Kibaki made a state visit to China, where he agreed with the host President Hu Jintao that the construction of a second port at Lamu could benefit its landlocked northern neighbours, Ethiopia and Southern Sudan (Africa Research Bulletin: 2010). One of the motivations for the project could be the construction of an oil refinery at Lamu that could process oil from Southern Sudan before shipping it to regional and global markets (Gathanju: 2010).

Since the recent discovery of oil in Uganda, special attention must be paid to the oil pipeline infrastructure in Kenya. In 1973 as an alternative to reduce the number of fuel trucks on the country's roads, the state owned Kenya Pipeline Co Ltd, invested in a 900 km pipeline system that connected Mombasa, Nairobi, the west of the country and subsequently the neighbouring countries (Telvent: 2010). Kenya Pipeline Co Ltd and the Indian Bharat Petroleum are undertaking the extension of the pipeline to Uganda, while a 325 km parallel pipeline from Nairobi to Eldoret is being built by China Petroleum Pipeline Engineering Corp (China Daily: 2010). The possibility that Uganda could build a new oil refinery makes necessary and extremely strategic the construction of new pipelines and the improvement of the existing ones in Kenya. Industry experts explain that the extension of the oil pipelines could benefit the regional economies by reducing transport costs and time of oil, reducing production costs and eventually the cost of goods and services in the region (Pipeline Magazine: 2010).

Prior to 2006 Chinese engagement within the northern corridor was remarkably low, with the exception of Kenya, which is considered a strategic location for Chinese companies to do business in the region. But the recent discovery of oil in Uganda will shape the future and has already raised the interest of China in the region. Acknowledging the infrastructure needs of Uganda and the existing transport bottleneck between Uganda and Kenya, China has already increased its engagement in infrastructure investment in both countries. Furthermore, in the near future China could possibly offer to apply the Angola model in Uganda, increasing the investment in infrastructure in exchange of natural resources. In this way China would benefit from better access to natural resources while Burundi, Rwanda, Uganda and Kenya would benefit from improvement in the infrastructure of the corridor. This would result in a reduction in transport costs, an improvement of the competitiveness of their products in the global market, an increase in their economic growth, and poverty reduction within the countries situated along the corridor. However all these ideas or possibilities are merely speculations given the recent timing of these events. Additionally the lack of transparency surrounding Chinese government activities makes it difficult to predict their future level of engagement in the northern corridor.

7. Conclusion

East Africa is considered one of the poorest areas in the world. One of the main challenges faced by this region is the lack of infrastructure and the bad state of repair of its existing infrastructure. This situation is especially acute in the case of landlocked countries, which find themselves trapped by extremely high transport costs that in turn make their products uncompetitive in the global market. The need for infrastructure investment in the region is widely proclaimed by the ADB, which acknowledges that aid alone cannot close the financial gap and reinforces the idea of attracting new investors to finance investment in infrastructure. The Chinese financial reserves offer East Africa the perfect opportunity to establish a solid South-South cooperation that could help to improve the infrastructure of the region and promote economic growth and poverty reduction.

The recent discovery of oil in Uganda has accelerated Chinese investment in infrastructure in the northern corridor, which connects Burundi, Rwanda, Uganda and Kenya. In the near future China could possibly try to implement the Angola model in Uganda, and increase the investment in infrastructure in the country in exchange for oil. Nevertheless this investment should be accompanied by extensive investment in the improvement of Kenyan infrastructure, as the poor state of this infrastructure is one of the biggest challenges faced by Uganda. The future Chinese investment in Kenya should focus on substantially increasing the capacity of the port of Mombasa, improving its operations, and strengthening the rail and the road interfaces in the country. In this case China could benefit from better and cheaper access to oil, while its investment in infrastructure would help reduce the existing bottleneck in the northern corridor and consequently help promote economic growth and poverty reduction in the region.

The Sino-African relationship 'is based on sincerity and equality, and contributes to the Chinese strategy to achieve a mutual benefit and a win-win situation as part of its peaceful development ambition' (China's Vice President Xi Jinping: 2010).

Bibliography

AERC (2010), 'The Impact of China-Africa Trade Relations: The Case of Uganda', *Policy Brief, Issue 10, November 2010*, AERC Collaborative Research China – Africa Project.

African Development Bank (2010), 'Infrastructure Deficit and Opportunities in Africa', *Economic Brief, Volume 1, Issue September 2010*, The African Development Bank Group, Chief Economist Complex.

Africa Research Bulletin (2010), *Kenya-China Infrastructure Projects Targeted*, Africa Research Bulletin, 18657, April 16th-May 15th 2010.

AICD (2010), 'Kenya's Infrastructure: A Continental Perspective', *Kenya's Country Report*, The World Bank.

Alden, C. (2007), *China in Africa*, Ch.1, pp. 8-36, London: Zed Books.

Anyango, G. (1997), 'Comparative Transportation Cost Analysis in East Africa', *SD Publication Series, Technical Paper No. 22*, USAID.

Barboza, D. (2010), 'China Passes Japan as Second-Largest Economy', *The New York Times, August 15, 2010.*

Brautigam, D. (2009), *The Dragon's Gift*, Oxford University Press.

Bryceson, D., Bradbury, A. and Bradbury, T. (2008), 'Roads to Poverty Reduction? Exploring Rural Roads' Impact on Mobility in Africa and Asia', *Development Policy Review, 26 (4): 459-482*, Overseas Development Institute.

Calderón, C. and Servén, L. (2010), 'Infrastructure and Economic Development in Sub-Saharan Africa', *Journal of African Economies, Volume 19, AERC Supplement 1: i13-i87*, Centre for the Study of African Economies.

Centre for Chinese Studies (2010), *Evaluating China's FOCAC commitments to Africa and mapping the way ahead*, University of Stellenbosch.

Chan-Fishel, M. and Lawson, R. (2007), 'Quid Pro Quo? China's Investment-for-Resource Swaps in Africa', *Development 2007, 50 (3), 63-68*, Society for International Development.

Chege, M. (2008), *Economic Relations between Kenya and China, 1963-2007*, Center for Strategic and International Studies.

China Daily (2010), 'Open for business in every sector', *S8 Kenya Special, China Daily, May 3, 2010.*

Collier, P. (2008), *The Bottom Billion*, Oxford University Press.

Construction Kenya (2010), *Thika Road Construction Design*, Nairobi, August 18, 2010. http://www.constructionkenya.com/1678/thika-road-expansion-pushing-up-land-prices/ (Accessed on December 20, 2010).

Corkin, L. (2007), 'China's Contribution to the Development of African Infrastructure through Investment in the Extractive Industries', *AFRODAD Occasional Papers, Issue: 8*.

Faye, M., McArthur, J., Sachs, J. and Snow, T. (2004), 'The Challenges Facing Landlocked Developing Countries', *Journal of Human Development, Vol. 5, No. 1*, UNDP.

FOCAC (2006), *Beijing Action Plan (2007-2009),* Forum on China-Africa Cooperation.

Foster, V., Butterfield, W., Chen, C. and Pushak, N. (2009), 'Building Bridges, China's Growing Role as Infrastructure Financier for Sub-Saharan Africa', *Trends and Policy Options, No. 5*, The World Bank.

Gathanju, D. (2010), 'New oil pipeline to quench East African fuel thirst', *Pipeline Magazine, July 20, 2010*, http://www.pipelinecommunity.com/Features/new-oil-pipeline-to-quench-east-african-fuel-thirst.html (Accessed on December 20, 2010).

Geda, A. and Meskel, A. (2009), 'Impact of China-Africa Investment Relations: Case Study of Ethiopia', *African Economic Research Consortium. AERC, Nairobi*, Addis Ababa University.

Government of China (2006), *China's African Policy, January 2006*, http://www.gov.cn/misc/2006-01/12/content_156490.htm (Accessed on December 21, 2010).

Hu Jintao (2007), *17th Party Congress, October 24, 2007*, http://www.gov.cn/english/2007-10/24/content_785505_10.htm (Accessed on December 20, 2010).

Kaplinsky, R., McCormick, D. and Morris, M. (2007), 'The Impact of China on Sub-Saharan Africa', *IDS Working Paper 291*, Institute of Development Studies.

Kavuma, R. (2009), 'Great expectations in Uganda over oil discovery', *The Guardian, December 2, 2009.*

Lagerkvist, J. (2009), 'Chinese eyes on Africa: Authoritarian flexibility versus democratic governance', *Journal of Contemporary African Studies, Vol. 27, No. 2, 119-134.* The Institute of Social and Economic Research.

Lancaster, C. (2007), 'The Chinese Aid System', *Center for Global Development.*

Liangxiang, J. (2007), 'China's Foreign Policy Towards Africa', *A Changing Global Order, Eastern African Perspectives*, Friedrich-Ebert-Stiftung Kenya.

Mungai, C. (2010), 'Reform-Focused, US agonizes over Chinese clout in EA', *The East African News, December 13-19, 2010.*

Musisi (2007), *Underinvestment in Public Infrastructure Capital and Private Sector Output and Productivity in Uganda*, Shaker Publishing.

Obwona, M. (2001), *Determinants of FDI and their Impact on Economic Growth in Uganda*, African Development Bank.

Obwona, Guloba, Nabiddo and Kilimani (2007), *China-Africa Economic Relations: The Case of Uganda*, Economic Policy Research Center.

Onjala, J. (2008), *A Scoping Study on China-Africa Economic Relations: The Case of Kenya*, African Economic Research Consortium.

Pagnamenta, R. (2009), 'Fresh Uganda oil find Africa's biggest', *The Sunday Times, January 14, 2009.*

Pedersen, P. (2000), 'The Changing Structure of Transport under Trade Liberalization and Globalization and its Impact on African Development', *Working Paper Subseries on Globalisation and Economic Restructuring in Africa, No. vii*, Centre for Development Research.

Telvent (2010), *Kenya Pipeline Company.* http://www.telvent.es/en/business_areas/oil_and_gas/documents/upload/CS_KenyaPipeline_EngUS.pdf (Accessed on December 22, 2010).

UN (2004), *Common Country Assessment of Uganda*, United Nations Uganda.

UNDP (2010), *Human Development Index 2010*, United Nations Development Programme.

WB (2001), 'Private solutions for Infrastructure: Opportunities for Uganda', *A Country Framework Report*, The World Bank.

Woods, N. (2008), 'Whose aid? Whose influence? China, emerging donors and the silent revolution in development assistance', *International Affairs 84: 6, 1205-1221*, The Royal Institute of International Affairs.

Xi Jinping (2010), *Chinese vice president commends contribution by Chinese enterprises to China-Africa cooperation, November 21, 2010*, http://www.gov.cn/english/2010-11/21/content_1749805.htm (Accessed on December 29, 2010).