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Introduction: China's Focus on Africa

China's development assistance to Africa in the form of infrastructure boasts a long history, dating back to the Tanzam railway, completed and handed over to the Zambian government in 1976. During the Cold War, such projects, under Mao Zedong were distinctly more ideological in purpose. The Tanzam railway for instance was intended to provide a transport corridor to African nations that circumvented the need to enter imperialist Apartheid South Africa. China's current engagement in Africa, while more commercial in nature, has no less of a focus on infrastructure development and rehabilitation.

Chinese relations with Africa have grown exponentially over the past decade. During the 1990s Sino-African trade grew by 700 percent³ and many high-level visits occurred from 1995. The Forum for China Africa Co-operation was established in 2000, the culmination being the release of China's African Policy Paper in January 2006. The Africa Policy Paper emphasised infrastructure as one of ten key sectors for economic collaboration.⁴

More recently, the Beijing Action Plan⁵ (2007- 2009) makes specific reference to co-operation in the construction and infrastructure sectors. Indeed, many Chinese companies, particularly state-owned enterprises (SOEs) have recently invested heavily in the continent's road and railway rehabilitation, as well as in several other large infrastructure projects.

It is not coincidental that some of the most extensive infrastructure operations are in the more resource-endowed African countries, such as Angola and Zambia. Indeed, critics have commented on China's newfound mercantilist attitude toward Africa, in the global race for energy security and in the procurement of raw materials to fuel China's burgeoning economy. Nevertheless, it is worth noting that it is often the most resource-rich states that are in dire need of infrastructure development and support.

Recent events further confirm the growing intended role of China in rebuilding Africa, albeit on its own terms. Significantly, the annual meeting of the African Development Bank was held in May 2007, in Shanghai, only the second such meeting to take place outside of the African continent. Following this meeting, the Chinese State Council approved the creation of US\$ 5 billion China-Africa Development Fund, to be administered by the China Development Bank. The investments of the fund are to be targeted at providing capital for Chinese enterprises engaged in development, investment, economic and trade activities in Africa. The fund is also to provide support for African countries' agricultural, manufacturing and energy sectors, as well as support for urban

infrastructure and the extractive industries. Furthermore, China Exim Bank's Vice President Li Jun announced, that US\$ 20 billion would be committed to refurbishing infrastructure in Africa over 3 years. 9

This paper will trace the rise of Chinese construction companies in Africa, drawing on field work conducted in Angola, Sierra Leone, Tanzania, Zambia and China. The prospects for China's role in developing Africa's infrastructure will be explored framed within the context of China's strategic engagement with Africa.

Chinese Construction Companies in Africa

By the end of 2006, it was estimated that 800 Chinese companies were active on the African continent, engaged in a variety of sectors. ¹⁰ Construction and infrastructure is possibly the sector in which China has made its largest commercial footprint in Africa. China's Africa focus is undoubtedly geared towards resource-rich countries such as Angola, Nigeria, Sudan and Zambia. The PRC is however expanding its presence across the African continent relatively quickly, with an established market presence in many African countries. A case in point is that of Zambia and Tanzania where Chinese construction companies, over a period of five to ten years, rapidly gained approximately 30 and 40 percent of the respective markets.

Infrastructure projects undertaken by Chinese companies are often financed by soft loans from the Chinese government, on the condition that they are carried out by Chinese companies. This is in line with the "go out" strategy — driven by the Chinese government to promote the internationalization of Chinese companies. Chinese government concessional loans are disbursed by China Exim Bank, currently one of the largest such institutions in the world. According to World Bank estimates, China Exim has disbursed over US\$ 12.5 billion for large-scale infrastructural projects in Sub-Saharan African alone although China Exim Bank's official reported figures are much less. More than 80 percent of these in terms of value were to resource-rich African countries, such as Angola, Nigeria, Zimbabwe and Sudan. According to the China Exim Bank's concessional loan requirements, Chinese contractors must be awarded the infrastructure contract financed by the loan. Furthermore, in principle no less than 50 percent of the contract's procurement in terms of equipments, materials, technology or services must come from China.

With access to such substantial liquidity, it is no surprise therefore that Chinese SOEs are at the forefront of China's engagement with Africa. Thus, while the size and capacity of private companies is growing rapidly, SOEs still dominate China's construction market and continue to win the majority of these international contracts. The Chinese government regularly commissions SOEs for infrastructural aid projects in countries where it wishes to expand its sphere of influence. The government selects construction companies for these projects through a competitive tendering process conducted in China open to local firms. Provincial governments, primary shareholders in

many of the larger state-owned construction companies, partake in lobbying activities in Beijing in attempts to influence project allocation decisions.

Winning a tender for a government-endorsed contract enables the Chinese company to secure low-lost capital from China's central banks to deal with the expensive start-up costs associated with moving the necessary equipment into place. Before leaving China, these companies regularly engage a host of private Chinese sub-contactors specializing in different areas of construction such as plumbing, electrical engineering and air-conditioning. Once the project is undertaken within the respective country, the company will use the opportunity to gain first-hand knowledge and experience of the local environment in an attempt to identify additional opportunities. Due to intense competition in the home market, project profitability is mostly higher in the recipient African economy than in the Chinese economy.

Once established in a specific locality, Chinese enterprises often seek to expand the scope of their operations, both geographically and in terms of the types of projects undertaken. For instance, many Chinese companies look for opportunities within regional contexts - as observed through the Nigerian and Guinean based firms expanding their presence into surrounding countries, such as Sierra Leone, as demand for construction grows. Similarly, while seeking large-scale government projects the companies will also engage in small scale private projects. This operational flexibility has been important in allowing Chinese companies to flourish on the African continent.

The sub-contractors and individual employees also seek opportunities toward establishing their own businesses in host economies. This is often done through personal networks where assistance from friends or family members brought out from China serve as a platform to set up small enterprises either in the service sector or manufacturing with small scale assembly plants. This is a phenomenon similar to that observed amongst Indian labour brought out by the British to East Africa as well as in other parts of the British Empire during the colonial period. ¹⁶ In so far as the emergence of small scale Chinese traders have enabled African consumers to gain access to new products and services that were previously either unaffordable or inaccessible, these Chinese enterprises have also served to promote Chinese entrepreneurship in Africa, more especially its presence amongst the informal sector through the establishment of new markets.

China's Edge in the Infrastructure Sector

Given the rapid inroads that they have made in Africa's construction industries in a short period of time, it is evident that Chinese companies have a degree of competitive advantage over other market players. The most important factors are access to capital, supply-chain costs and labour productivity.

One of their biggest advantages however is the facilitation of their access to capital, often through PRC Government concessional loans. Chinese companies, predominantly SOEs can secure the necessary funds for advance payment and performance bonds from their head offices in China and make full use of their access to competitively priced capital from Chinese banks. ¹⁷ They and other smaller private companies can also secure loans at flexible rates from Chinese banks such as the Bank of China, the China Development Bank and the China Exim Bank. ¹⁸

This has significant implications for the companies' overheads. Thus, while local and foreign construction companies operate on profit margins of 15-25 percent, Chinese companies usually operate on margins of under 10 percent, thereby making them extremely competitive on price. An executive representative of a large SOE interviewed in Tanzania (and speaking on condition of anonymity) disclosed that his company and many other SOEs operate on profit margins as low as five percent. There have also been reports of a large Chinese SOE in Ethiopia slicing projected profit margins to as low as three percent. ¹⁹

Chinese companies may occasionally undercut competitors by up to 50 percent on the price of the overall bid. ²⁰ While this may not be a hard a fast rule, it is clear that Chinese companies' entry into Africa's construction sectors has intensified market competition.

Competition with Traditional Players in Africa's Construction Sector

The initial arrival of Chinese construction companies has had an enormous impact on the local industry. The other foreign companies, mainly from Europe and South Africa, which had traditionally dominated the construction sector, were the first to experience this competition. A case in point is that of Zambia and Tanzania where Chinese construction companies, over a period of five to ten years, rapidly acquired approximately 30-40 percent of the respective markets.²¹

Though the Chinese presence continues to grow incrementally, these markets have since adjusted to Chinese competition and have begun to stabilize. Chinese firms have only just entered Angola and are expanding rapidly causing considerable alarm as many of the traditional players find themselves unable to compete.

Very few local industries in African countries have the capacity for large-scale projects required for Africa's infrastructural rejuvenation to and rarely find themselves competing with Chinese companies in the early stages of the latter's market penetration. Many Western companies maintain a slight competitive edge over the Chinese when it comes to specialized or technical areas of construction, in finishing and reliability as well as quality and timeliness, which enables them to secure work and access finance, especially from local sources. But it would appear that the gap is closing.

China-on-China Competition

Competition between Chinese companies is fierce and the diversity of Chinese construction companies operating in Africa is enormous, ranging from multi-billion dollar SOEs from mainland China to small single-person operations established by Chinese nationals living in-country.

The majority of Chinese companies in the initial phase of Chinese companies' market entry were SOEs. This is particularly as several had experience in an African context due to the turn-key aid projects that were carried out by Chinese SOEs in Africa during the Cold War. Prior to 1979, state-owned construction enterprises were among the few Chinese institutions permitted to leave the Mainland and engage the outside world. The experience of these companies in the construction of large-scale infrastructural projects, often in extremely isolated areas, has proved invaluable in the current context.

However, the number of private Chinese construction companies is growing rapidly. While SOEs receive greater assistance from the Chinese government, in terms of access to African governments and information on the market tenders, the private construction companies seem to be more efficient in project implementation.²²

The geographic origin of a company in China also has a bearing on the company's competitiveness. The bigger Chinese companies originating along China's more developed eastern seaboard have access to advanced technology and equipment. Others, especially the smaller companies from China's less advanced interior regions, continue to employ rudimentary techniques. Chinese companies based along the coastal areas and southern parts of China also have a distinct advantage over northern Chinese companies as result of their proximity to Hong Kong's dynamic economy and the more advanced nature of Hong Kong's integration into the global economy. The more developed infrastructure in this region of China also facilitates the speed with which they may mobilize their procurement strategies.²³

In situations where competition among Chinese companies is low, such as in Sierra Leone, Chinese communities appear very close-knit. They regularly share information and equipment. Such co-operation is less common in the more developed markets of Zambia and Tanzania where there was some degree of co-operation in the private sector but little to none in the more lucrative areas of civil construction.

Where Chinese construction companies are properly established, the only serious competition they face is from one another. Such competition serves to streamline operations, reduce costs and improve quality, although this may potentially drive down quality due to cost cutting. Yet the incredibly small profit margins are obviously unsustainable, thereby exposing them to a range of risks including currency fluctuations and rising energy, transport and commodity prices. It was suggested by a senior executive at one Chinese company that low profits were maintained in order to increase market share at the expense of local, international and other Chinese companies, with the

hope that less viable companies will be pushed out and only the most effective companies will remain. This has been the experience in Ethiopia where the Chinese construction companies have already pushed out the majority of the foreign competitors. Prices tendered by Chinese firms are now reportedly in line with expected market prices.²⁵

The demand for construction and infrastructural refurbishment will continue to increase following the unprecedented economic growth in many African countries, resulting partly from China's increased demand for oil and other commodities. Chinese companies will be well positioned to take advantage of this, especially in the absence of any viable competition and the strong support of African governments such as Angola.

Quality and Standards

The quality of work by Chinese construction companies is widely perceived to be inferior, but in some cases, very little distinguishes the quality and standards of Chinese construction companies from the other firms, whether local or foreign. As with the price of the overall bid, the level of standards among Chinese companies varies. Therefore project management supervision is of importance. Non-compliance or irregularities in the procurement of materials and problems in workmanship can only be the result of poor supervision and/or collusion between the contractor and the consultant. This is true of both Chinese, western and African firms.

Thus, while there are instances of Chinese companies completing work of substandard quality, they have clearly proved themselves capable of achieving extremely high quality work, as demonstrated in Zambia. ²⁶ This underlines the importance of supervision with regards to quality and standards. In countries such as Sierra Leone and Angola where the government authorities lack the capacity or political will to enforce building codes, structures of sub-standard quality are more common than in countries where the authorities effectively enforce the law.

Procurement of Materials

There is a general trend of construction companies, both Chinese and others, buying materials imported from China due to the cheaper prices. Although opinions on the quality of these Chinese materials vary, the majority of respondents agreed that quality is improving rapidly, if not already having reached international standard.

In smaller markets such as Sierra Leone only lower quality materials are available. This has led to a situation where lower-end quality Chinese goods have pushed out many foreign competitors while high quality Chinese products are simply not readily available. Although several knowledgeable respondents insisted that a market for better quality materials exists, albeit at higher prices, the market appears to judge otherwise.

Chinese companies in each of the countries surveyed have been granted tax breaks on the importation of construction materials. Sometimes this falls under the host countries' general framework of inceptives for private investment, but if the project is a large-scale public work that the government has made a national priority, these incentives are used to facilitate completion. There were however widespread reports that these tax breaks are being abused. For example consumer goods such as clothes and electrical items for local distribution are being smuggled in along with construction materials. Such allegations remain difficult to verify.

Labour

Labour has been an extremely contentious issue in all the countries surveyed. The general perception is that Chinese companies not only bring in their own labour but underpay the local labour they do employ. On closer examination, this is not necessarily the case.

While predominantly employed as unskilled casual laborers, there were many instances of locals employed in administration and managerial positions. This is a trend that was more common in companies with a longer in-country presence such as Tanzania and Zambia as opposed to Sierra Leone, and more especially Angola, that had very few local employees. A mitigating factor is often the language barrier. According to the majority of Chinese companies canvassed, one of the biggest challenges in operating in the Angolan market is the language barrier. The problem of the language barrier appears to have been underestimated by Chinese SOEs. According to a report in a local Angolan newspaper Angolans, who are often employed as the site workers have overseers that cannot speak Portuguese, and are not provided with a translator. While still a challenge, the language barrier in Anglophone Africa is not as problematic. This is because English is more widely spoken among the Chinese than French, Portuguese or local African languages.

Chinese worksites are usually highly organized and all the personnel, from the executive down, invariably live and work on the site full time. This "hands on" style of management saves considerable time and provides management with a profound understanding of the project and the ability to handle challenges as they occur. ²⁸

Chinese workers often live on-site in basic accommodation. Chinese managers, engineers and laborers usually live together with little visible difference between them. This facilitates understanding and communication, drastically reducing costs. A number of Chinese managers interviewed suggested that the low cost of labour was the main advantage they had over other foreign companies that paid expatriate engineers exorbitant salaries and provided them each with their own housing and transport. Without exception, all the Chinese construction companies commented on the lack of skills and extremely high turn-over of the local workforce.

Chinese workers are well trained and considered skilled. The skills level of Chinese workers is recognized across the industry. They usually undergo an intensive training programme, prior to expatriation. In addition, Chinese workers are multi-skilled and will be involved in each section of construction. Whereas it is normal practice to employ tiered hierarchies of workers, it has been found that Chinese artisans can also double up as manual laborers and participate in manual labour as well as the more skilled undertakings of an artisan. Thus one Chinese worker will dig the foundations, lay the cables and orchestrate the electrics of a construction site. Such a *modus operandi* drastically reduces the number of workers required on a site.

In addition, the 'hot bed' shift strategy employed by some Chinese companies ensures that workers can be on site around the clock. In some compounds, there is a 'one bed, two workers' policy whereby a night-shift worker and a day-shift worker share the same bed, ensuring double shift productivity.

The rate of absenteeism of Chinese construction workers is very low. The majority of contractors using local labour reported that absenteeism to rarely be less than 20 percent. This effectively increases labour costs by one fifth. Chinese workers by contrast have absentee rates of practically nil.²⁹

Aside from countries like Angola and Gabon, where the price of local labour is already relatively high, Chinese companies in the other three countries surveyed appear to be gradually increasing salaries to retain "good" employees.

The labour dynamic that exists within China must, however, be examined in order to understand current trends as regards Chinese construction firms operating in Africa. Salaries for unskilled laborers in China vary enormously, generally approximately US\$3 a day depending on location, ownership of the company and the legal status of the workers. There are around 100 million migrant workers from rural areas in Chinese cities without work permits supplying approximately 80 percent of China's construction labour. The conditions are usually poor and underpaid by global labour standards.

Chinese workers can expect a salary increase in the order of 30 and 400 percent as an incentive to work overseas.³¹ Chinese employees interviewed also explained that working in their company's overseas operations provides an opportunity to broaden the scope of their responsibilities, such as the management or supervision of local employees, enabling them to work on a single project from beginning to end.

Several respondents also pointed out that working overseas enables them to look for opportunities to establish their own business as traders or restaurateurs. There are, however, exceptions to this kind of enthusiasm: one senior manager of a prominent SOE suggested that working overseas was detrimental to his career development because in his company's Africa operations, he was not exposed to the higher technology construction environment utilized in building practices in China.

With regard to Chinese companies' employment of skilled local labour, Chinese companies rely more heavily on certificates and professional papers to evaluate the capability of potential employees. Few construction workers in Africa possess formal training and qualifications, thereby putting them at a disadvantage for recruitment. It has been European companies have suggested that due to their longer presence and better knowledge of the market, they are more thorough and able to identify capable local personnel.

There are widespread rumors of Chinese construction companies in all countries surveyed using Chinese prison labour. We found no evidence to support these rumors. It must also be borne in mind that the respondents who provided the information were not independent observers, having been put at a disadvantage due to Chinese companies' entry into the both the market and the political arena concerning the countries where these rumors occurred.

Capacity building

Where there is a lack of skilled labour and local procurement sources, forcing the majority of the Chinese companies import all their requirements in terms of materials and labour directly from China, the Chinese construction companies claim that they provide employees with on-the-job training, focusing particularly on machine operation. ³²

Several local construction engineers also reported that they often learnt new techniques on visiting Chinese sites along with consultants and suppliers who are also exposed to new work practices and developments in the industry introduced by the Chinese.

Another important area in need of development cited by several respondents, including Sierra Leone's Minister for Housing and the President of the Chinese-Sierra Leone Friendship Society, is the transfer of work practices and discipline.³³ Local workers in each of the four countries examined have a markedly different set of work ethics to the Chinese, who take pride in working hard.

Environmental Issues

In a recent report published by the World Bank, 16 out of the 20 most polluted cities in the world are located in China. As the Chinese Government tackles this issue we can expect to heavily polluting industries to move off shore to regions such as Africa where environmental regulations are no so rigorous or adequately enforced. There have been no reports of Chinese companies dumping toxic waste in Africa; however Chinese companies do not have a good reputation in terms of environmental standards. Attempts have been made to correct this. For instance, following concerns over Sinopec's seismic

activities in Gabon's Loango National Park, negotiations between World Bank, the Wildlife Conservation Society, Sinopec and the Chinese and Gabonese governments produced results.³⁶

A US\$200-million Chinese manganese mine was closed down in Zambia as it emitted air pollution beyond the statutory limits affecting both workers and nearby residents. Such issues can be expected to increase as the Chinese establish more manufacturing plants, smelters and other such factories in Africa.

This is particularly because rising pollution levels in China have caused the Chinese Government to encourage such plants' construction in external markets to mitigate the pollution production.³⁷ Furthermore, Africa is in need of value-adding processes for its imports, and perhaps with the exception of South Africa, is currently prioritizing economic development over environmental concerns.

Many business groups have accused Chinese companies of low labour and environmental standards in their protests against Chinese companies' market entry. These allegations are often dismissed by the African host government as hypocritical. Particularly as there are numerous examples of substandard environmental practices on the part of these multinational companies, such complaints are not taken seriously by the host government, thus damaging a potentially effective lobby for important issues.

While Chinese companies are not known for their strong compliance to international environmental norms, there is the recognition that this must change in order to cultivate and retain a good international image for Chinese companies. Steps have been taken to address this issue.

In November 2006, China's State Council issued "Nine Principles" to "Encourage and Standardize Enterprises' Overseas Investment". ³⁸ The China Exim Bank adopted a code of environmental conduct for the Chinese companies undertaking projects financed by the bank and released it publicly in April 2007. ³⁹ While this may not necessarily guarantee adherence to the code, it provides a platform for local and international NGOs to engage China Exim Bank, as the financier of such projects on this issue.

The Rise of African Special Economic Zones

China's involvement in the reconstruction of Africa's infrastructure promises significant benefits for African countries. Transport costs will be reduced, leading to a potential boost in regional trade and integration. China, however also stands to benefit significantly. This is not least because Africa's mineral resources will only be unlocked with substantial infrastructural investment.

In November 2006 at the Forum on China Africa Co-operation (FOCAC) summit held in Beijing, Chinese President Hu Jintao committed to establishing three to five

special economic zones (SEZ) in Africa within the next three years. ⁴⁰ The Chinese government has approached various African states seeking investment concessions in order to establish these zones.

China is going about establishing designated special economic zones across the continent that are set to become Africa's new economic growth nodes. Africa is set to receive a transnational infrastructure network as China's commercial strategy toward Africa also involves linking these SEZs by building infrastructure corridors across the respective regions.

Though historic and ideological ties provided the base for China's initial relations with the continent, this engagement has become increasingly dependent on economic imperatives.

Amongst the extractive industries, oil and minerals are beyond doubt the primary interest. This has informed where these special economic zones will be placed.

China's first SEZ in Africa, announced in February 2007 was established in Chambishi, Zambia's copper belt region. The Chinese Government has committed US\$800 million in investment credit for Chinese firms to tap into. The zone's anchor investment will be a US\$200 million copper smelter for local beneficiation. It is claimed that up to 60,000 jobs will be created in the SEZ that will enjoy duty and tax incentives for Chinese firms. China's strategic supply line of copper will be secured through the investment. Other commodities that Chinese mining firms seek to secure in the region are cobalt, diamonds, tin, and uranium.

It is therefore no coincidence that Chinese companies are constructing and refurbishing two strategic railroads that branch outwards from Zambia to Africa's West and East cost; respectively the Benguela and Tazara Railway lines.

The Benguela Railway line, an important transport artery, built by the British Government in 1899 was almost completely destroyed during the civil war. Currently only the 150 km section between the towns of Lobito and Cubal is operational. In January 2006, a project commenced to refurbish at a cost of US\$300 million. The project is being financed and undertaken by the China International Fund Ltd, a Hong Kong-based fund management company. The railway line, following restoration, will run 1,300 km from Benguela to Luau, on the border with the Democratic Republic of Congo. The railway also has a link to Lobito, 700 km south of Luanda. This is significant as there is a strong possibility that Luanshya, Zambia maybe be envisaged, providing a direct line of transport from the Zambian copper mines to the Angolan ports. The project, while also restoring an important transport backbone to Angola, will also thus facilitate the access to Angola's ports for Zambia's extracted copper.⁴⁴

The Tanzam or Tazara Railway, linking Kapri Mposhi in Zambia to Tanzania's Dar es Salaam was built by the Chinese Railway Engineering Corporation between 1970 and 1976, when it was handed over to the Zambian Government. Constructed at the height of the Cold War hostilities with an interest-free loan of US\$ 500 million in Africa,

the railroad was the Chinese Government's largest turn-key foreign aid project at the time and was of vital strategic importance for land-locked Zambia. ⁴⁵ Chinese investors have since shown interest in the rehabilitation of the historic railway. Together the Tanzam and Benguela lines bisect sub-Saharan Africa. The intent is to reduce supply-side risk for resource extraction.

While Zambia is the only Chinese SEZ that has been officially announced, speculation abounds as to where the others will be established. There is a strong possibility that the third SEZ could be located in Dar es Salaam, Tanzania. Beginning in the copper belt region, the Tazara Railway line ends in the coastal Tanzanian capital city. An SEZ strategically centered around Dar es Salaam would be a trans-shipment hub for commodities mined in the Zambian Copperbelt.

Of further interest, however, is the US\$ 5 billion loan China Exim bank announced with the Democratic Republic of Congo (DRC) in September 2007. 46 Informal sources suggest that Chinese investment in the DRC might already be several times higher than this figure. 47 Anecdotal evidence suggests US\$ 3 billion of the aid package will be directed towards a 3,200 km railway link between 3,200km between Sakania, in resource-rich Katanga Province, near the Zambian border, to Matadi. Part of the financing will also fund road link of 3,500km linking Kisangani, north-east of Lubumbashi, the capital of Katanga province, Kasumbalesa. Significantly, Lubumbashi will also be connected to Lobito port in Angola, once the rehabilitation of the Benguela railway is complete. The DRC's mineral wealth lies in deposits of cobalt, gold, uranium, diamonds, tantalum, copper and tin. 48

In March 2007, the Mauritian government announced its approval for a consortium of Chinese companies to establish a business park on the island. The US\$500 million manufacturing zone is to house 40 Chinese businesses, creating 5,000 jobs for locals and 8,000 for Chinese contractors. Manufacturers in the zone will enjoy market access to the COMESA area as well as export opportunities for their goods to South Asian markets. China's strategic presence in the Indian Ocean rim will be boosted. According to Economic Counselor Wang Zhangsheng, this strategic investment is among the official Chinese SEZs established in Africa.

China's SEZ strategy is lifted from its own economic reform experience. Indeed, the Chinese learnt from the European colonialists who carved out free trade concessions in China in the 19th century. These capitalist enclaves became the trading hubs of the region and to this day are still the wealthiest cities in China – Hong Kong, Guangzhou, Macao and Shanghai. China is now re-employing in Africa what it learnt from those colonists in Africa. It worked for China. Will Dar es Salaam, Port Louis, and Lagos be Africa's leading cities in the future?

Coalition Investment Projects

The Chinese Government adopts a long-term view of its business forays in Africa. This longer term vision of commercial engagement also quantifies risk in a different manner to traditional investors. Chinese companies are often perceived to be less cognizant of risk when investing in Africa compared to other foreign invested; however, this is not necessarily true. Chinese state-supported investors are simply afforded a longer time-period in order to allow their investment to be realized. China's "state capital" approach to engagement through the likes of China Exim Bank is answerable to political stakeholders, and to far lesser extent private or institutional shareholders.

The state-directed nature of Chinese engagement in Africa results in "coalition investment" across various sectors. This very evident in several African countries where Chinese companies work on projects spanning construction and extractive industries, such as in Angola, Gabon and Zambia. This endows China Inc. with a competitive advantage that its traditional competitors do not enjoy, particularly if financed by Chinese government concessional loans.

The development of transport infrastructure will also assist with a wider market distribution of Chinese imported goods. Thus, Chinese investment in road and railway systems such as the Benguela, Tazara and Belinga railways is of strategic importance in providing Chinese products market access. In addition, heavy investment by Chinese companies in the telecommunications infrastructure in countries as Angola and Uganda, oil pipe lines from southern Sudan to Port Sudan on the Red Sea coast, electric power lines, massive irrigation and hydroelectric power systems, along with procurement, supply and distribution networks across the continent can be expected to have a significant impact in reducing the cost of producing and transporting products.

The competitive landscape of Africa is thus being transformed by China's commercial engagement. African economies are clear beneficiaries of this emerging trend, but this is likely to come at the expense of traditional investors and donors on the continent.

Conclusion

China's interests in Africa are guided primarily by economic imperatives. In this respect, Chinese engagement is little different from multinationals. It is rather the scale of Chinese operations, combined with the condition of the African state and its inability to monitor and manage such large inflows of investment and foreign economic activity that has caused concern amongst many of the traditional actors.

The Chinese government and companies have a longer time-frame than other players in terms of strategic considerations, focusing on areas where they perceive medium to long-term benefit, prompting them to pursue strong relations with countries such as Angola, Zambia, and Sudan. In addition, the emphasis is on cultivating a 'win-win' relationship⁵¹; in order distinguish their relations from the generally lop-sided interaction between Africa and the more traditional Western actors.

It is important to note that considerable variation exists in terms of the size, capacity and capability of Chinese interests entering Africa. The determining factors are methods of operation, the capital and technology at their disposal, previous experience in operating overseas and even their geographical origins in China itself. The bigger SOEs and state-directed initiatives generally have more experience, improved equipment and technology and greater access to capital. On the other hand private companies, though still small in number, and small-scale entrepreneurs are slowly finding their niche. The success of the Chinese firms which have entered Africa through concessional loan agreements however, while instrumental in the rapid development of Africa's essential infrastructure, is also at the expense of local fledgling industries which cannot compete.

There are also concerns arising from the lack of an institutional framework and government capacity to monitor and encourage direct investment. An additional problem in some cases is the questionable transparency of government-to-government loan arrangements. This kind of action will require considerable political will. Government bodies, investment promotion agencies and donors need to reinforce the promotion of joint-ventures and the development of corporate responsibility among firms across Africa. This will ensure that the positive contribution of the rapidly increasing construction industry has sustained socio-economic benefits.

The key lies in the hands of African policy-makers to take advantage of this opportunity to boost economic growth. Generally speaking Africa lacks institutional regulatory frameworks and government capacity to monitor and encourage direct investment in terms of local skills development and technology transfer.

This would include such initiatives as developing and enforcing a regulatory support structure for their construction industries. It could also include appointing independent consultants to manage the level of quality of construction projects. With the creation of a level-playing field, the competitiveness of the Chinese companies can be a positive attribute. Furthermore, the establishment of networks between engineers and civil servants across the region and the continent to improve dialogue and information exchanges concerning Chinese engagement in Africa could be explored. Utilizing existing regional networks to share and exchange information about Chinese market entry into the construction industry would be a start. Countries such as Zambia, where a Chinese presence is more established, could provide valuable insights for countries such as Sierra Leone.

Many African states, particularly resource-endowed states, are finding themselves in stronger positions vis-à-vis the latest scramble for Africa. Countries such as Angola, which therefore have greater leverage to negotiate with the PRC government, can demand that foreign companies must establish joint ventures with local firms, share

research and development and procure local materials. The conditions under which foreign companies enter African markets should be re-examined in order to cultivate and harness the development of local companies and/or small and medium enterprises (SMEs), while they can still play the natural resources card.

An additional challenge is the question of whether the African Governments have ownership of the infrastructure development process. This is in view of the fact that at least 50 percent of the contracts funded by the loan money must go to Chinese companies. Furthermore, once these large-scale projects have been completed, the question of their maintenance arises. Either the Chinese companies must be kept on at additional expense or the project is handed over to the local authorities with the risk of it falling into disuse over time through a lack of funds and/or skills and technological know-how.

Though neglected until the late 1980's, the contribution of infrastructural development to broader economic and social development is now widely acknowledged. Despite the enormous challenges the Chinese face concerning their own development, China's focus on infrastructural development with the construction of roads, bridges, hydroelectric and irrigation schemes, schools, hospitals, health centers and an array of government building has made a clear and definite contribution to improving the lives of people across Africa.

China's aspirant multinationals' engagement in Africa has the potential to benefit both African countries and Chinese commercial interests. Africa will benefit by receiving cheaper goods and services than it would from traditional market players, as well as the possibility of technology transfer. The advantage for Chinese companies is that they can realize their global aspirations in Africa. However, there are several issues, discussed above, which will need to be resolved in order for this potential to be realized. If left unaddressed, these issues will cause Chinese firms to have their international reputations needlessly tarnished, and African economies will miss out on much needed infrastructural development.

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¹⁰ He, ""China- Africa Relations Moving into an Era of Rapid Development", Inside, pp. 6

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¹⁷ Until 1979, one bank, the People's Bank of China, fulfilled the function of both a central and a commercial bank. During Deng's reforms, within 5 years this bank had ceded its commercial responsibilities to several other newly created sector-specific institutions, known as China's 'big four': the China Construction Bank, the Bank of China, the Agricultural Bank and the Industrial and Commercial Bank. These banks remain state-owned and dominate roughly 60% of the industry, but have been transformed into modern financial enterprises handling currencies. Three state-owned policy banks, China Development Bank, Agricultural Development Bank of China, and China Export Import Bank, have since been set up to assume the previous policy-lending role of these banks.

¹⁸ According to *China Daily* (11 April 2004), with regards to overseas investments by Chinese firms, People's Bank of China benchmark rate for one-year RMB loans was lifted to 5.58 per cent from 5.31 per cent and the rate on one-year deposits to 2.25 per cent from 1.98 per cent.

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⁵² According to Global Witness, 10 percent of Angola's oil revenues are unaccounted for, illustrating the corrupt nature of public finance in that country.

⁵³ World Bank, "World Development Report 1994: Infrastructure for Development" p 26