



# **China's Interest and Activity in Africa's Construction and Infrastructure Sectors**

**A research undertaking evaluating China's  
involvement in Africa's construction and  
infrastructure sector prepared for DFID China**

**Centre for Chinese Studies  
Stellenbosch University**

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## Contents



	Page
List of Acronyms	4
List of Figures	6
Executive Summary	7
Introduction	8
China's Construction Industry	9
Angola	15
Sierra Leone	34
Tanzania	45
Zambia	61
Cross-Cutting Trends	73
Conclusion	88
Appendix I: List of Chinese Companies	92
Appendix II: China – Africa Trade Analysis Graphs	97
Appendix III: CCS and Researcher Profiles	103
Appendix IV: A Note on Methodology	106

## List of Acronyms

ANIP	National Agency for Private Investment (Angola)
CBMI	China Building Materials Construction Tangshan Installation Engineering Company
CCCCA	Chamber of Commerce for Chinese Companies in Angola
CCS	Centre for Chinese Studies
CEIEC	China National Electronics Import and Export Corporation
CMEC	China Equipment and Export Corporation
COVEC	Chinese Overseas Engineering Company
CRBC	China Road and Bridge Corporation
CRC	China Railway Construction
CSSC	China State Shipbuilding Corporation
DFID	Department for International Development
EADB	East African Development Bank
EC/ACP	European Community/Africa, Caribbean and Pacific Grouping of States
EU	European Union
FAZ	Football Association of Zambia
FIFA	Federation of International Football Association
FOCAC	Forum on China – Africa Co-operation
GDP	Gross Domestic Product
HIPC	Highly Indebted Poor Countries
IFI	International Financial Institutions
ILO	International Labour Organization
IMF	International Monetary Foundation
INEA	National Road Institute
LCD	Least – Developed Countries
MMD	Movement for Multi-party Democracy
MPLA	The Popular Movement for the Liberation of Angola
MOFERT	Chinese Ministry of Foreign Relations and Trade
MOFTEC	Chinese Ministry of Foreign Trade and Economic Cooperation
NCC	National Council for Construction
NGO	non-governmental organisation
OAU	Organization for African Unity
OSH	Occupational Safety and Health
PF	Patriotic Front
PRC	People's Republic of China
PRGF	Poverty Reduction and Growth Faculty
SLPP	Sierra Leone's Peoples Party
SAFE	State Administration of Foreign Affairs
SAR	Special Administrative Region

SASAC	State Assets Supervisory and Administration Commission
SAT	State Administration of Tax
SLPP	Sierra Leone's People's Party
SME	Small and Medium Enterprises
SPTT	Special Preferential Tariff Treatment
SSI	Sonangol-Sinopec International
SOE	State-Owned Enterprise
Sonangol	National Society for Combustibles
TANROADS	Tanzania National Roads Agency
Tralac	Trade Law Centre of Southern Africa
UAE	United Arab Emirates
UK	United Kingdom
UNAMSIL	United Nations Mission in Sierra Leone
UNCTAD	United Nations Conference on Trade and Development
UNIP	United National Independence Party
UNITA	National Union for the Total Independence of Angola
US	United States
ZESCO	Zambia Electricity Supply Company
ZTE	Zhong Xing Telecommunication Equipments Company Limited

## List of Figures

	Pg
Figure 1: China-Africa Trade Statistics (1995 – 2005)	13
Figure 2: Angola's GDP by Sector (2004)	16
Figure 3: Angola's Exports to China (1995 – 2005)	20
Figure 4: China's Exports to Angola (1995 – 2005)	21
Figure 5: Angola's Oil Exports to China as a Percentage of Total Exports to China (1995- 2005)	22
Figure 6: A map of Angola indicating Chinese involvement in reconstruction of Major roads and railways	24
Figure 7: Classification of the Registration of Contractors in Sierra Leone	36
Figure 8: China's Exports to Sierra Leone (1995 – 2005)	38
Figure 9: Sierra Leone's Exports to China (1995 – 2005)	39
Figure10: Tanzania's GDP by Sector (2001)	46
Figure 11: Value of Registered Projects in Tanzania (2006)	48
Figure 12: Tanzania's Exports to China (1995 – 2005)	52
Figure 13: China's Exports to Tanzania (1995 – 2005)	52
Figure 14: Zambia's GDP by Sector (2004)	62
Figure 15: Classification of Contractors in Zambia	63
Figure 16: China's Exports to Zambia (1995 – 2005)	65
Figure 17: Zambia's Exports to China (1995 – 2005)	65
Figure 18: Monthly Average Exchange Rate: Zambian Kwacha to US Dollar	71
Figure 19: List of Tenders for A School in Zambia (August, 2006)	75
Figure 20: Transparency International Corruption Perception Index (2006)	83
Figure 21: Angola's Exports to China (by Sector) (1995 – 2005)	97
Figure 22: China's Exports to Angola (by Sector) (1995 – 2005)	97
Figure 23: Sierra Leone's Exports to China (by Sector) (1995 – 2005)	98
Figure 24: China's Exports to Sierra Leone (by Sector) (1995 – 2005)	98
Figure 25: Tanzania's Exports to China (by Sector) (1995 – 2005)	99
Figure 26: China's Exports to Tanzania (by Sector) (1995 – 2005)	99
Figure 27: Zambia's Exports to China (by Sector) (1995 – 2005)	100
Figure 28: China's Exports to Zambia (by Sector) (1995 – 2005)	100
Figure 29 SADC Exports to China (by Sector) (1995 – 2005)	101
Figure 30: China's Exports to SADC (by Sector) (1995 – 2005)	101
Figure 31: COMESA Exports to China (by Sector) (1995 – 2005)	102
Figure 32: China's Exports to COMESA (by Sector) (1995 – 2005)	102

## Executive Summary

The People's Republic of China (PRC) has become an important and influential player in Africa and is increasingly a source of political and financial support for many African governments, particularly in countries with economies that are resource-endowed. A number of incentives drive China's commercial engagement with Africa. Principal among these is China's increasing need for energy sources and raw materials to fuel its rapidly growing economy.

Another motivation has been the need to develop new markets for Chinese goods. Except for the relatively small number of resource-rich countries such as Angola and Zambia, the majority of African economies have mounting trade deficits with China. The Chinese have sought to offset these deficits with more favourable terms of trade for African products and the provision of aid in the form of infrastructure development.

China's involvement in Africa's construction and infrastructure sectors has proved most effective in building relations with African governments - increasing influence and expanding access to natural resources on the continent. Chinese state-owned and private companies are making strategic inroads into the construction and infrastructure sectors in many African economies at the expense of European and South African companies. Naturally, the traditional actors are alarmed by this phenomenon with concerns that China's politically determined business models do little to build local capacity.

The Centre for Chinese Studies conducted a four-country research study that evaluated the market entry models of Chinese construction firms in Angola, Sierra Leone, Tanzania and Zambia. Particular attention was paid to their methods of engagement and impact on the local construction industries. Chinese activity in the four case studies was examined and compared across five areas: 1) tendering, 2) access to capital, 3) labour, 4) procurement, and 5) quality of workmanship. The business environment, in terms of governmental bilateral relations, aid, trade and investment profiles between China and the countries concerned were also taken into consideration.

The success of China's companies, particularly state-owned enterprises (SOEs), can be attributed to several factors: cost competitiveness in overall bidding price; access to cheap capital through Chinese state-owned banks; access to skilled low cost labour; access to cheap building materials through supply chains from China; and political support from the Chinese government channelled through Chinese embassies and Economic and Commercial Counsels in the respective African countries.

Chinese companies were found to rarely compete with indigenous construction companies, which usually lack the capacity for large scale construction projects, in the initial stage of their engagement in an African country. They were also usually found to employ large numbers of local labour. Despite the potential benefits in terms of skill and technology transfer, the Chinese have shown only limited interest in collaborative ventures with local construction companies due to their low levels of human capital, technological proficiency and problems with the finance and management. Instead, foreign firms were found to be the preferred partners for joint-ventures and are also attractive candidates for sub-contracts on contracts won by Chinese companies.

While political support from the Chinese government has undoubtedly played a critical role in facilitating the entry of Chinese companies, it was found that they faced the same challenges as other construction players: corruption, lack of infrastructure, poor quality of local labour, communication and political instability.

Despite widespread perceptions that their quality of work is inferior, the study showed that when building codes and regulations are in place and effectively enforced, the standard of work done by the Chinese was reported by the majority of stakeholders to be very high. However, where quality controls are not properly enforced, especially in less developed markets such as Sierra Leone, standards are often low.

The contribution of Chinese companies to the development and rebuilding of infrastructure in Africa is considerable; however, to maximize these benefits improved monitoring and evaluation mechanisms are required. As China increases its profile in Africa, further dialogue on these issues involving all stakeholders is crucial.



## Introduction



The People's Republic of China (PRC) has become an important and influential player in Africa.

It is increasingly a source of political and financial support for many African governments, particularly in resourced-endowed economies.

Chinese state-owned and private companies are making strategic inroads into African economies' construction and infrastructure sectors.

China's state-owned enterprises (SOEs) in the construction sector are active in almost every African economy.

While the construction and infrastructure sectors in Africa have traditionally been dominated by European and South African companies, Chinese SOEs are now playing a prominent role.

This report examines the factors driving China's recent and rapid commercial engagement in Africa, the competitiveness of these companies and the Chinese government's efforts to build and nurture political relationships in Africa.

In consultation with stake-holders, the countries of Angola, Tanzania, Zambia and Sierra Leone were selected as case studies.

In evaluating the market entry models of Chinese SOEs, this report also addresses concerns over China's politically determined business models and a perceived reluctance to build local capacity and collaborate with local and foreign companies.

This report had several key research objectives:

-  Examine the **key investments and commercial arrangements** of Chinese SOEs in Africa's construction and infrastructure sectors;
-  Understand their **market entry strategies** in these sectors when planning investments in specific African states;
-  Derive the **drivers of competitiveness** of Chinese SOEs;
-  Evaluate the Chinese SOEs' **market entry impact on local and traditional players** in the construction industry;
-  Uncover **market entry experiences** of Chinese SOEs;
-  **Distinguish cross-cutting market trends** amongst all case studies in terms of Chinese SOE engagement;
-  Explore Chinese SOEs **views on collaboration** and evaluate possible examples of co-operation with Africa private sector companies and
-  Detail **recommendations** for greater co-operation between China's SOEs with local partner firms in the construction sector



## China's Construction Industry



... while the construction industry accounted for only 7% of Chinese GDP in 2004; the sector's corollary industries drove 50% of the country's economic activities.

In order to appreciate the involvement of China in Africa's construction Industries, it is important to briefly examine the context of China's domestic construction industry, its development and strategic importance in terms of the country's foreign policy.

The construction industry has been one of China's economic backbones. After a century of war and colonization by Europe and Japan, the Peoples Republic of China (PRC) was established in 1949.

The government made rebuilding the nation a priority, focussing on establishing infrastructure such as hydro-electricity, water control, bridges, roads and heavy industry.

Until relatively recently, the majority of construction companies in China were state-owned. The privatization of many state-owned enterprises (SOEs) and the rise of private companies have diversified the market.

Rapid economic expansion has provided continuous momentum for construction in China which currently has the largest construction market in the world.

However, with such rapid growth, demand continues to be a challenge especially in terms of the capacity of the construction companies and the availability of materials.

Since 1999, the construction industry in China has achieved annual growth rates of 20 percent. In 2003, there were 48,688 construction enterprises in China, employing 24.14 million people.<sup>1</sup>

According to the PRC Ministry of Construction, while the construction industry accounted for only 7 percent of Chinese GDP in 2004, the sector's corollary industries<sup>2</sup> drove 50 percent of the country's economic activities.

By the end of 2004, China's accomplished business volume through contracted overseas engineering projects totalled US\$114.03 billion while total volume of contracts stood at US\$156.29 billion.<sup>3</sup>

SOEs in the past were often overstaffed, with poor management, insufficient capital and out-dated technology.<sup>4</sup>

The PRC government has since recognized the need for reform of the industry in terms of shorter construction times, improved quality, increased returns of profits and the introduction of a public tendering system.

Chinese construction companies did not traditionally have their own research and development (R&D) departments. These were instead administered by the line ministries or provincial and municipal governments. Consequently research and development received very little attention in China until recently, representing 0.6 percent of the country's GDP in 2000.<sup>5</sup>

Since their exposure to the global market Chinese companies have recognized the importance of R&D. By 2005, the R&D portion of China's GDP had increased to 1.5 percent, ranking China as one of the top R&D investors in the world.<sup>6</sup>

## Going Global





In August 1979 China's State Council introduced legislation permitting specialized Chinese companies to operate overseas.


Prior to this, Chinese companies operating overseas were restricted to projects that provided economic and technical aid with funds provided by the Chinese government.

This exposure enabled Chinese companies to gain international market experience that was to their benefit following the Chinese government's adoption of an open-door policy.

Overseas contracts undertaken by Chinese companies can be categorised as follows:


 Projects funded through Chinese government loans or financial aid to developing countries;

 Projects funded by loans from the World Bank, African Development Bank, Islamic Development Bank and other such institutions;

 Projects obtained through governmental bilateral trade agreements;

 Projects won through international bidding;

 Projects obtained through local clients, and

 Projects obtained through local branch offices of Chinese enterprises.<sup>7</sup>

The intervening 20 years had seen a decided change in China's foreign investment strategy.

Industries considered economically or militarily strategic are often heavily subsidized.

According to a 2005 World Bank study, as of October 2004, approximately 40 percent of all SOEs were loss making.<sup>8</sup>

According to the United Nations Conference on Trade and Development, (UNCTAD), by the end of 2003, there were 7,400 Chinese enterprises investing in 160 countries internationally.

Collectively these enterprises held US\$33.2 billion in contracts. This was a spectacular increase from the 143 Chinese enterprises, worth US\$170 million, operating in 45 countries that was recorded in 1985. The intervening 20 years had seen a decided change in China's foreign investment strategy.

This began between 1985 and 1990 when the Ministry of Foreign Economic Relations and Trade moved to become a legal entity, with sufficient capital to officially encourage overseas expansion. By 1990, 620 Chinese enterprises, worth US\$860 million, operated in 90 countries.

In the 1990s, the government encouraged technological upgrades, propagating what was known as its "two resources, two markets" approach, encouraging the utilization of both the domestic and the international markets to strengthen the firms' commercial position.



Premier Wen Jia Bao visiting the Zambian National Stadium, June 2006

If a Chinese multinational, state-owned or otherwise, is earmarked as a 'flagship enterprise', it can also expect additional preferential treatment from the government.

At the 15<sup>th</sup> Party Congress in 1998, a further development ensued with the adoption of the "grasping the large, releasing the small" policy that allowed all but the largest state-owned enterprises, or those concerning national security interests, to be privatised. Despite the opening of the Chinese economy in 1978, the central government has continued to play a critical role in the management of multinationals.

By going global these enterprises enable China to have access to advanced technology, raw materials, foreign exchange and expanded export markets.

All of these are essential for maintaining China's economic momentum and are seen as crucial to the Chinese Communist Party's national interest. Significantly of the top 500 Chinese firms in 2000, 28 were owned by collectives and only one was private.<sup>9</sup>

China's centrally-planned "going global"<sup>10</sup> or "go-out" strategy targeted 28 special economic sectors. The strategy included increasing access to international markets, competitiveness through global competition, and expanding Chinese exports.

According to Li Rongrong of the State Assets Supervisory and Administration Commission (SASAC), this body closely supervises the 28 selected economic sectors, in an effort to improve corporate governance, internal controls and risk management.

State Administration of Foreign Affairs (SAFE) and State Administration of Tax (SAT) have also introduced incentives, with the latter body raising first tier foreign exchange access from RMB 3 million (US\$ 380,000) to RMB 10 million (US\$ 1.26 million).

If a Chinese multinational, state-owned or otherwise, is earmarked as a 'flagship enterprise', it can also expect additional preferential treatment from the government. SASAC has compiled a list of 166 such companies. Several, including the China Overseas Engineering Corporation (COVEC), China Roads and Bridges Corporation (CRBC) and China Railway Construction (CRC), are active in the African countries under study.

Often bids that would be deemed too costly by global competition standards, but considered strategically important by the Chinese government, are pursued by Chinese multinationals which then receive additional public sector backing.

## Motivation


Chinese corporations, have a number of motivations to expand into international markets.<sup>11</sup> These are:


**Resources** - In spite of China's wealth of natural resources, by global standards and per capita, these resources are thinly spread, especially in terms of energy, forestry and fisheries. Energy, in particular, is required to fuel China's burgeoning economy. China's rapid growth almost doubled


The majority of the larger Chinese construction firms present in the four case studies examined in this report are state-owned.


domestic oil consumption in the last 10 years such that the country's demand outstripped supply even though in the 1990s there were signs of the industry reaching near self-sufficiency.

As a result in 2004 China became the second largest oil importer after the US.<sup>12</sup> It is noteworthy that the largest Chinese multinationals are not only state-owned, but also energy-related.

 **Technology** - To develop its industries, the Chinese government has made the acquisition of new technologies from the west a priority, actively encouraging technology upgrades in multinationals.<sup>13</sup>

 **Markets** – China suffers from industrial over-production and market saturation in a variety of sectors, including textiles, footwear and electronics. This has necessitated entry into new markets. In addition, following the opening up of the domestic market, Chinese companies no longer have the market monopoly they once enjoyed and now need to expand into new markets.

 **Diversification** – Before 1985, SOEs had exclusive rights to import-export and foreign exchange, maintaining strict sector-dictated mandates. But with the relaxation of these laws, enterprises need to diversify their role in the economy. Expansion into international markets offers this opportunity.

 **Strategic Assets** – As they become part of the global economy, the necessity for strategic assets, particularly in the energy sector has arisen. As noted earlier, with the Chinese government offering substantial subsidies and soft loans, many enterprises are able to purchase ailing ventures in strategic locations without the burden of being cost-efficient. This is evident in Africa with regards to energy purchases.

Chinese construction companies discovered that most of these goals can be attained by expanding into new African markets.

The majority of the larger Chinese construction firms present in the four case studies examined in this report are state-owned.

This is largely because SOEs have more experience in the international market, having been allowed to operate in the global arena for longer than the few private companies that may have existed.

It is also due to a more structurally entrenched government access and the preferential assistance afforded by the Chinese government to the SOEs that have been ear-marked as more likely to be successful pioneers of China's "going global" or "go out" strategy.

This does not however, mean that only Chinese SOEs operate in the African construction market.

Many companies which are considered private do have a presence in Africa. It is important to note however, that especially with the ongoing restructuring and privatization of SOEs undertaken by the Chinese government, the exact shareholder structure of these companies is difficult to ascertain. For the purposes of this study, SOEs are companies in which the PRC government has a majority stake-holding.

### China's Focus on Africa



Premier Wen Jia Bao with Tanzanian President Jakaya Kikwete

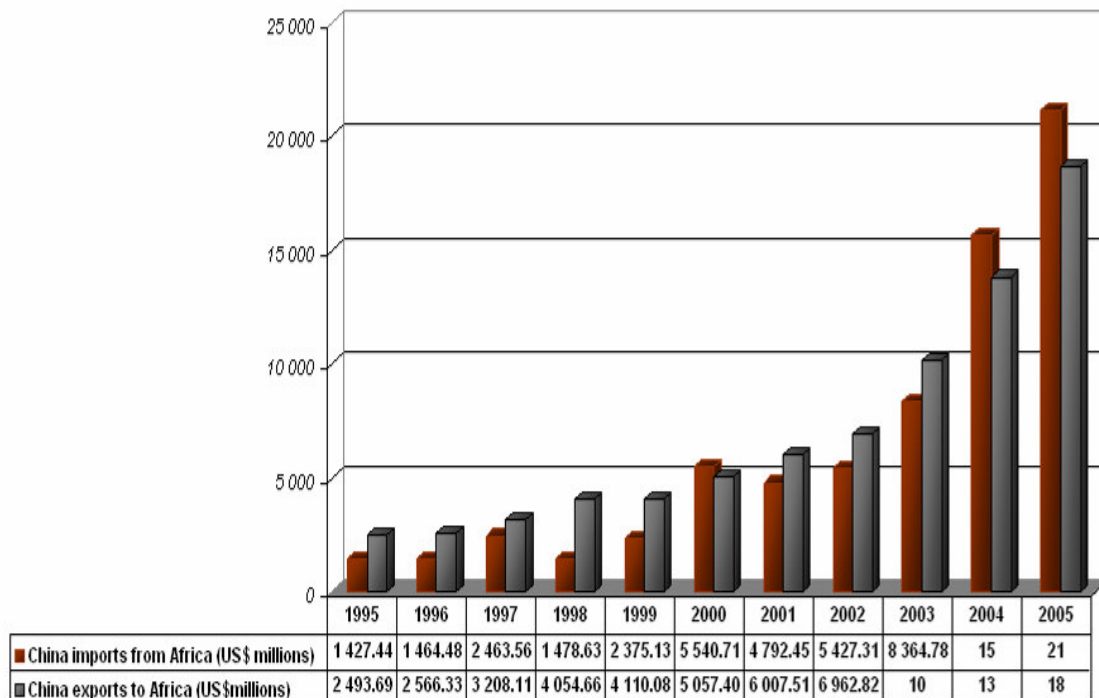
China's contemporary engagement with Africa can be traced back to the 1955 Bandung Conference where Asian and African states re-enforced non-alignment and sought to promote Afro-Asian economic and cultural co-operation.

This was followed by Chinese Premier Zhou Enlai's tour of 10 African countries between 1963 and 1964 offering support to Africa's people and leaders to counter diplomatic recognition of Taiwan and to compete with the West and Soviet Union for spheres of influence. During the 1960s and 1970s Chinese aid focused on infrastructure and development, such as the turn-key Tanzam railway project between Tanzania and Zambia.

Following the political turmoil resulting from the death of Mao Zedong in September 1976, the PRC Government turned inward throughout the 1980s and into the early 1990s when the economic reforms initiated under the leadership of Deng Xiaoping began to produce results.

Chinese relations with Africa have grown exponentially over the past decade. During the 1990s Sino-African trade grew by 700 percent<sup>14</sup> 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 reiterated China's declared policy of respect for national sovereignty and non-interference in internal affairs of other states.

Figure 1: China-Africa Trade Statistics 1995-2005



Source: World Atlas Trade Data, Tralac Analysis



As might be expected, the Africa policy paper has been well received by African heads of state.

The African policy paper confirms high-level rhetoric dating back to President Jiang Zemin's declaration in 1996 that the five cornerstones of China's Africa policy are "sincere friendship, equality, unity and co-operation, common development, and looking to the future."

This foundation has been re-iterated, affirmed and expanded upon by the current Chinese President, Hu Jintao, who has declared that six pillars guide Sino-African relations.

These are: non-interference, African ownership in dealing with problems, mutual trust and co-operation, the increase of economic assistance with limited political conditions, lobbying for the international community to pay more attention to Africa, and the promotion of an international environment more conducive to Africa's development.<sup>15</sup>

This policy outline contrasts with Western donors' policies of conditional assistance. As might be expected, the Africa policy paper has been well received by African heads of state. China's current stance is identical to US policy a century ago as it tried to penetrate China which had already been carved up by European powers.

African governments are just beginning to appreciate the strength of their position in the new scramble for the continent's resources. China presents Africa with an alternative to the West.

In the words of Tanzania's President Jakaya Kikwete: "China and India shouldn't be viewed as competitors or clients, but as contributors to Africa's development."<sup>16</sup>

In May 2005, there were 674 officially registered Chinese companies active in Africa<sup>17</sup>. Properly managed, these companies clearly do have the potential to boost African development.



# Angola



Source: Sepoangol

## Introduction

Angola, a former Portuguese colony, has a population of approximately 14 million, almost half of whom live in the capital city, Luanda. Between 80-90 percent of all economic activity in the country is concentrated in Luanda.

The country recently emerged from a civil war lasting 27 years. The relative political stabilisation which followed the signing of the peace accord has increased the potential for Angola's economic growth trajectory.

Angola is a country rich in natural resources. Oil production accounts for 52 percent of the country's US\$24 billion economy. Oil exports accounted for over 80 percent of fiscal receipts in 2005.<sup>18</sup>

While the oil industry's contribution to GDP is expected to increase by 37.2 percent in 2006 according to Angola's Ministry of Finance, the oil industry itself can provide only a fraction of the jobs in a country where unemployment is widespread.

Sociedade Nacional de Combustiveis de Angola (Sonangol), the state-owned oil company, employs approximately 7,000 Angolans out of a total labour force of 5.1 million people.

The unemployment rate is estimated to be 30.6 percent of the economically active population.

The primary sector accounts for 85 percent of the employed workforce, with the remaining 15 percent employed in the service industry; agriculture represents no more than 8 percent of the country's GDP.

Extractive industries, diamonds and oil account for 95 percent of Angolan exports and 57 percent of GDP, but employs only one percent of the Angolan work-force.<sup>19</sup>

Predictions for Angola's 2006 GDP growth rate vary between 14 and 15 percent, according to the International Monetary Fund (IMF) and the World Bank (WB) respectively.

This is compared to the Angolan Ministry of Finance's own predicted overall GDP growth rate of 27.9 percent.<sup>20</sup> Angola's GDP grew 14.7 percent in 2005, principally on the back of high oil prices. Angola's non-oil economy is expected to grow 11.9 percent in 2006, reflecting Angola's efforts to diversify away from oil related activities.<sup>21</sup>

Public spending for 2006 was initially budgeted at US\$7.9 billion, five times the figure for 2005. According to the National Agency for Private Investment in Angola (ANIP), however, a revision of the state budget indicates that US\$7 billion dollars have been set aside for public investment in the road, railway and marine sectors alone.

### ANGOLA: BASIC DATA, 2005 (CURRENCY IN US\$)

Area	1,246,700 sq km
Population	approx. 14 million
Life expectancy	38.62 years
Infant mortality	185.36 per 1,000 births
GDP	US\$ 45.93 billion
GDP per capita	US\$ 3,200
GDP Growth	19.1%
Gov Budget	US\$8.5 billion

## Angola's Construction Industry

There is the perception by China's competitors however, that Chinese companies have an unfair advantage due to the extensive support offered by the PRC government.

At the beginning of 2004, following two years of peace, Angola slowly began the process of reconstruction.

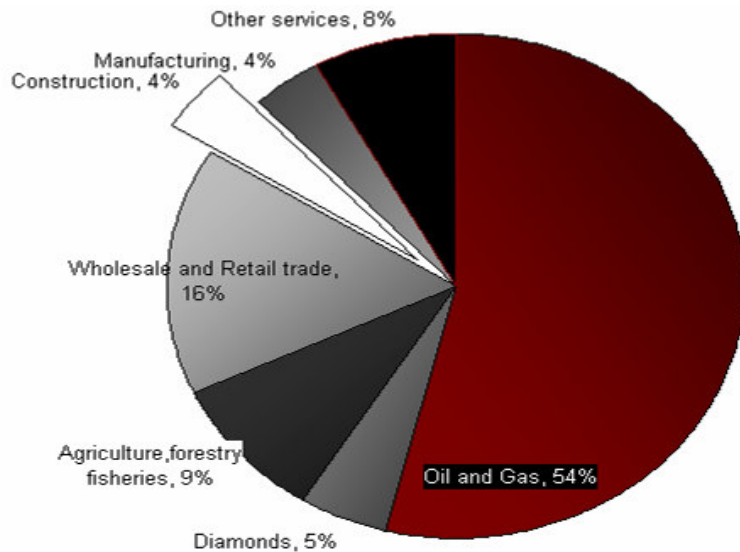
Prior to the entry of the Chinese construction contractors towards the end of 2004, Angola's construction sector was dominated by corporates like Teixeira Duarte, Mota Engil and Soares da Costa from Portugal,<sup>22</sup> the Brazilian company Oderbrecht and the South African firms of Grinaker LTA, Group 5 and Murray and Roberts.

Portugal and Brazil, whose companies have been long-time players in the Angolan construction environment, have historically extended oil-backed loans to the Angolan government. This has been done with the understanding that the loans would be used to contract Portuguese or Brazilian construction firms.

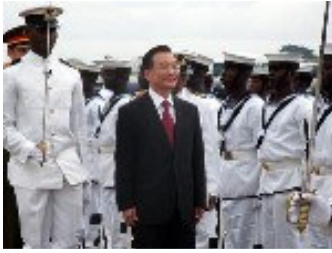
The loans have amounted to some US\$300- 500 million. China's entry into the Angolan construction market has somewhat displaced the traditional commercial interests of Portugal and Brazil.

Private investment in Angola reached US\$ 2.8 billion between 2003 and 2006; 76 percent of this investment was in the civil construction sector.<sup>23</sup> The more well-established Portuguese firms continue to receive contracts. It is suspected, however, that the Angolan government still owes these foreign-based firms (such as Soares da Costa) a considerable amount of money and will therefore still award contracts to these companies to keep their creditors at bay.<sup>24</sup>

Figure 2: Angola's GDP by Sector (2004)



Source: African Development Bank



*President Hu Jintao on an official Visit to Angola (Source: Xinhua)*

Many of the South African firms, in contrast, such as Murray and Roberts and Group 5, have lost market share as a result of the Chinese companies' entry into the Angolan market.

Angolan government officials and investment agencies generally view Chinese commercial engagement in a very favourable light when compared to the traditional foreign investors. They welcome the fact that China is willing to inject large amounts of capital into the Angolan economy, albeit as a loan and not necessarily as direct investment.

This is in direct contrast to other investors who are not willing to run the risk of investing such capital. It was found that there is a particular negativity towards the South African corporate investor.

There is the perception by China's competitors however, that Chinese companies have an unfair advantage due to the extensive support offered by the PRC government.

According to a South African construction firm<sup>25</sup>, construction firms usually needed an incubation period of several years in Angola before their efforts come to full fruition. This is due to the civil war having interrupted normal commercial relations.

This notwithstanding, within 18 months of entry from the end of 2004, Chinese firms had established a considerable presence in the Angolan market. In March 2006, following the rapid increase of the Chinese commercial presence in Angola, the Chamber of Commerce for Chinese Companies in Angola (CCCCA) was established. Based in Luanda, the chamber currently has 26 members.

Its leading members include the China National Machinery & Equipment Import & Export Corporation (CMEC), Jiangsu International, China International Water & Electric Corp, ZTE Corporation, Huawei, Sinosteel Corporation, China Petroleum & Chemical Corporation (Sinopec), China National Overseas Engineering Corporation (COVEC) and China State Shipbuilding Corporation (CSSC).

The Chamber, according to a representative<sup>26</sup> from the PRC Embassy Economic Councillor's desk, was established to facilitate an interchange of ideas between Chinese and local companies, but any outcomes from its establishment have yet to clearly emerge.

## **China - Angola Relations**

Although the People's Republic of China and the Republic of Angola established official diplomatic ties on January 12, 1983, China and Angola have had a long political association.

In addition to the ideological solidarity expressed in the anti-colonialist movements of the early twentieth century, the socialist tendencies of the ruling party Movimento Popular para a Libertação de Angola (MPLA) provided the basis for a natural alliance with the Chinese Communist Party.

This was despite the latter's short-term support for Jonas Savimbi's opposition União Nacional para a Independência Total

Many now see renewed relations between Angola and China as “the resuscitation of an old relationship, both moral and material, that has now come to fruition”.

de Angola (UNITA) during the civil war. This was due to Cold War tensions between Beijing and Moscow, with the latter supporting the MPLA.

Many now see renewed relations between Angola and China as “the resuscitation of an old relationship, both moral and material, that has now come to fruition”.<sup>27</sup> The governments of China and Angola signed a trade agreement in 1984 and set up a Mixed Economic and Trade Commission in 1988.

The Angolan government considered establishing diplomatic relations with Taiwan in the early 1990s, sending several ministers to the island, but recognition did not materialise.


This is possibly due to diplomatic efforts by the PRC, especially as it was around this time that oil imports became one of China’s economic imperatives.<sup>28</sup>

With increased commercial co-operation between Angola and China, Taiwanese diplomatic efforts have disappeared.


### China – Angola Aid


Since the 2002 peace accord, Angola has received loans totalling US\$5.5 billion of which China has contributed 58 percent.


Since the 2002 peace accord, Angola has received loans totalling US\$5.5 billion. China has contributed 58 percent of this amount. Nine new co-operation agreements were signed in 2004 by China and Angola as a result of a visit to Angola of the Chinese Vice Premier, Zeng Peiyang. They include:


 Two co-operation agreements in the fields of energy, mineral resources and infrastructure;


 An economic and technical co-operation agreement;

 An interest-free loan agreement for funding Angolan projects, amounting to approximately US\$6.3 million;

 A co-operation agreement between the Angolan Ministries of Oil, Geology and Mining and the National Commission for China’s Development and Reform;

 A business-related agreement covering the supply of oil by Sonangol to China Petroleum and Chemical Corporation (Sinopec);

 Two memoranda of understanding concerning a joint study of oil concession Block 3 to be undertaken by Sonangol and Sinopec;

 A phone networking agreement between Chinese Group ZTE Corporation International and the Angolan Mundo Startel, worth US\$69 million.<sup>29</sup>


In 2005, the Angolan government and China Export Import Bank (China Exim Bank) signed 12 individual accords of credit, with regards to a US\$2 billion loan.


The agreements, destined to support the projects in the fields of agriculture, energy and water, education and mass media, were signed by the Angolan Minister of Finance, Jose Pedro de Morais,




*Construction at Futunga, Angola  
Sonangol Project*

and by the China Exim Bank's deputy chairperson Su Zohong. US\$1 billion of the credit has already been spent on various projects, such as:<sup>30</sup>

 Acquisition of vehicles to compensate Angolan nationals who lost their vehicles during the civil war;


 Acquisition of construction equipment for use in projects embarked upon by Chinese construction companies;

 Expansion of the electricity network in Luanda province;

 Road repairs;

 Construction and refurbishment of schools;

 Rehabilitation of hospitals and health centres;

 Rehabilitation and modernisation of irrigation areas; and

 Rehabilitation of energy and water infrastructures.

The most important of these construction projects will be expanded upon in this chapter.

The government of China also donated 960 tonnes of mainly agricultural products such as hoes and handles, axes, scythes, ploughs and machetes to Malanje province. This donation was estimated to be worth about US\$1 million.

US\$100 million of the credit-line from China was also designated for upgrading health sector facilities in Huambo province. The money went towards rehabilitating and equipping the regional hospital in Huambo city as well as constructing two district hospitals.

Mundo Startel, the Angolan fixed line telecommunications utility, signed a framework agreement with the Chinese company, ZTE Corporation International, for the purchase of telecommunications equipment. ZTE Corporation International is to invest US\$400 million into the Angolan telecommunications industry.

This investment will be used for the construction of Angola Telecom's network, the upgrading of Angola's military telecommunications system; the construction of a mobile phone factory; the creation of a telecommunications institute for the training of Angolan staff and the creation of a telecommunications research laboratory. Mundo Startel began constructing the physical infrastructure for its network, launched in 2006.

As a direct result of China's involvement in the reconstruction and rehabilitation of Angolan infrastructure, the number of Chinese nationals resident in Angola is increasing – they are currently the largest immigrant group in Cabinda province, Angola's richest province in terms of natural resource deposits. It is expected that Angola will soon house the largest expatriate Chinese community in Africa.<sup>31</sup>

According to Huang Zequan, a lecturer in African Studies at Peking University and adviser to Chinese companies entering the Angolan market, 10,000 Chinese businessmen have visited Angola.<sup>32</sup>

The actual number of Chinese nationals living in Angola is not known.<sup>33</sup> Credible reports estimate, however, that between 20,000 and 30,000 Chinese nationals reside in Angola, with expectations that numbers may increase by as much as 10,000 by the end of 2006. This would rival the resident Portuguese population of some 47,000.<sup>34</sup>

### China – Angola Trade and Investment

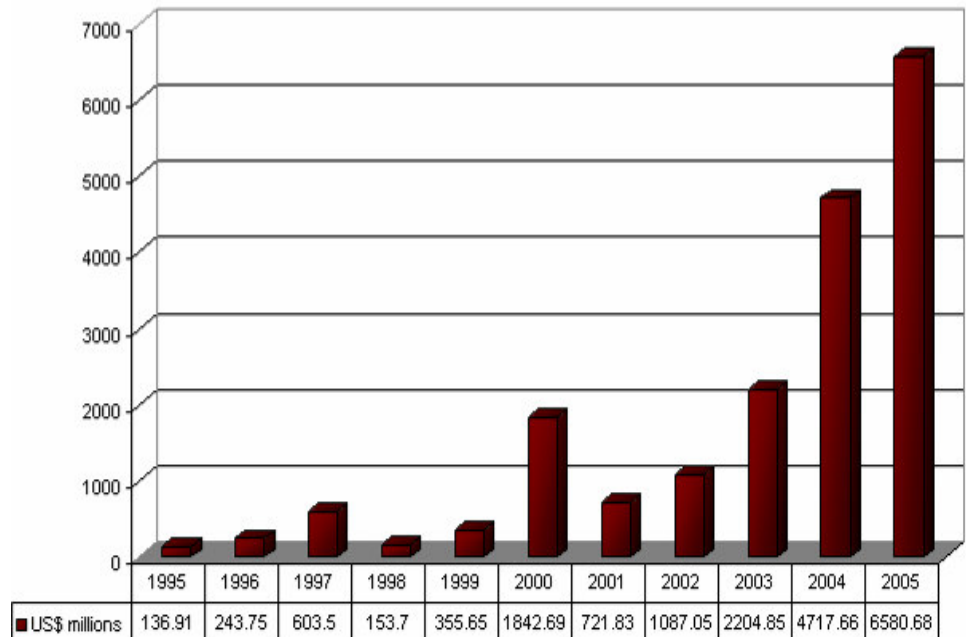
The volume of trade between Angola and China in 2002 was US\$1.148 billion; China's exports to Angola were US\$61.30 million, while Angola exported US\$ 1.087 billion to China.<sup>35</sup>

Bilateral trade has recently seen a significant increase of 41.6 percent to US\$6.95 billion in 2005. China's exports to Angola reached US\$372 million in 2005, representing an increase of 91.18 percent between 2004 and 2005 alone.<sup>36</sup>

Angolan exports to China, primarily oil, totalled US\$6.58 billion, making Angola China's largest African trading partner.<sup>37</sup> Despite the leap in Chinese exports, China continues to run a considerable trade deficit with Angola, due to the rapidly rising rate of oil importation from Angola.

In January 2005, as mentioned above, the China Exim Bank extended an oil-backed US\$1 billion credit line to the Angolan government, later doubled and then further increased to US\$ 3 billion in March 2006, rendering China the biggest player in Angola's post-war reconstruction process.

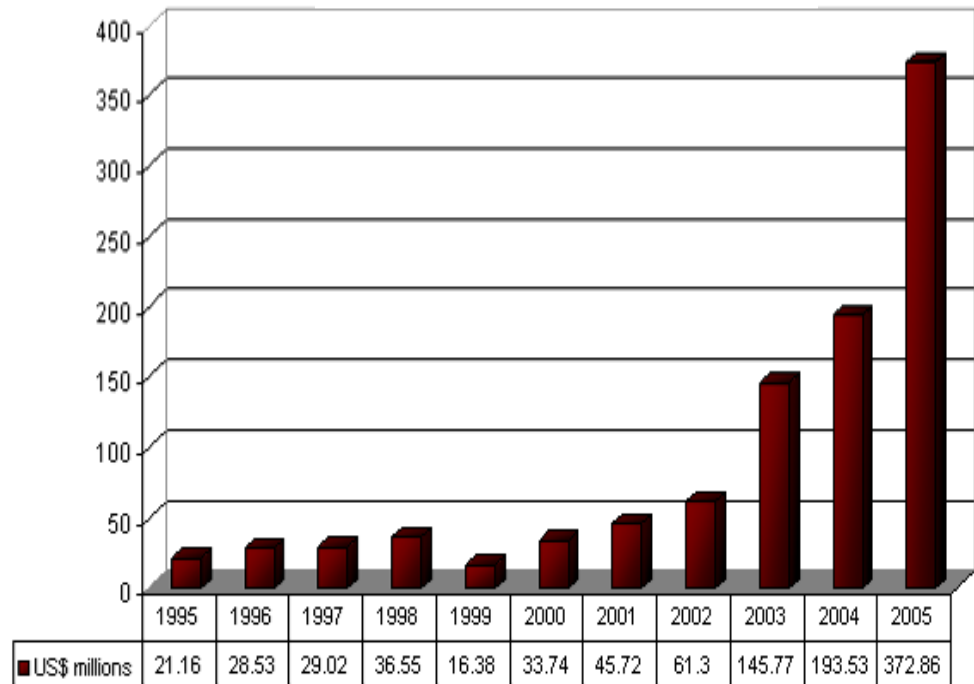
**Figure 3: Angola's Exports to China (1995-2005)**



Source: World Atlas Trade Data, Tralac Analysis



**Figure 4: China's Exports to Angola  
(1995-2005)**



Source: World Atlas Trade Data, Tralac Analysis

The loan – payable at 1.7 percent over 17 years – is intended to assist in the rebuilding of vital infrastructure. It is managed by the Angolan government. In exchange, Angola is to provide China with 10,000 barrels of oil per day. This agreement is significant, particularly because Angola had, at the time of the agreement's conclusion, been experiencing difficulties in securing capital from international financial institutions such as the Paris Club and the IMF.

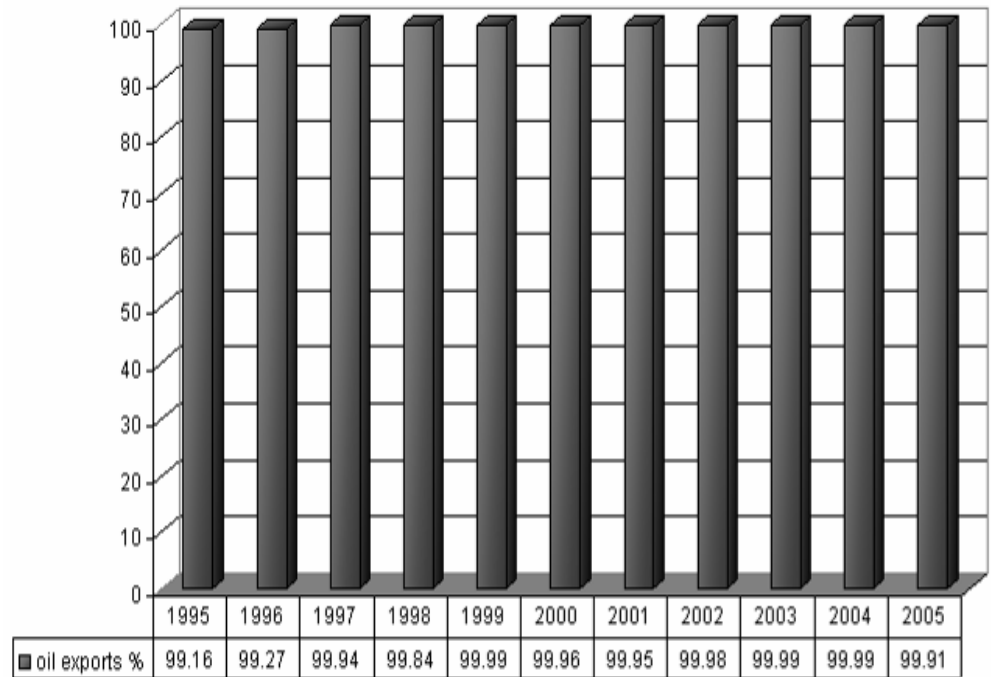
China has increased the oil-backed loan to Angola several times. The US\$3 billion as of March 2006 refers only to the section of the loan managed by the Angolan Ministry of Finance.

Further projects fall under the auspices of the National Construction Office, headed by General Helder Vieira Dias "Kopelipa", who is also Minister in Chief of the Presidency.

The PRC loan is thus very centrally controlled by the Angolan government executive. In addition, the non-governmental organisation Global Witness has raised concerns about the transparency of the procurement process of construction tenders managed by the National Office for Reconstruction.<sup>38</sup>

While official figures put the total amount currently loaned by the Chinese government at US\$6 billion currently, independent financial estimations, according to a senior executive at Standard Bank in Angola, put the amount at more than US\$9 billion.

**Figure 5: Angola's Oil Exports to China as a Percentage of Total Exports (1995-2005)**



*Source: World Atlas Trade Data, Tralac Analysis*

Perhaps reflecting this, Angola's 2006 budget allows total external debt to increase from US\$9 billion to US\$ 30 billion. In addition, the interest on the China Exim Bank loan has been lowered to 0.25 percent, from a previous rate of 1.7 percent,<sup>39</sup> effectively pricing other financial institutions out of the market.

Tied to the loan, is the agreement that the public tenders for the construction and civil engineering contracts tabled for Angola's reconstruction will be awarded primarily (70 percent) to Chinese enterprises approved by the Chinese government. Of the tenders, 30 percent have been allocated to the Angolan private sector to encourage Angolan participation in the tender process. As the China – Angola financial agreement takes the form of an oil-backed loan, China's involvement in the Angolan economy does not constitute direct investment in the traditional sense.

However, a representative from the Angolan Chamber of Commerce and Industry suggests that the oil-backed loan still involves capital risk through the potential for loan defaulting since it is a sizeable sum for a developing African country.

The loan also provides the means and momentum for Angola to finance the rebuilding of its infrastructure, which can be seen as a long-term investment in terms of business facilitation, especially where improvement in transport networks are concerned.

As indicated above, Chinese loan money has also been used for the upgrading of health and water sanitation facilities, providing real benefit to the Angolan population at large. China is also the only country to make such amounts of money available to the Angolan government. The traditional sources of loans, the World

Bank and the IMF, have been less than forthcoming with large-scale long-term loans.



*Road Rehabilitation in Luanda, Angola*

This is because the Angolan government has not fulfilled loan prerequisites in terms of transparency and good governance. Angola is still struggling to implement such governance practices, deemed necessary by the Western donors, before such loans can be granted.

Chinese preferential loans are allocated without these traditional conditionalities. China requires only the recognition of the PRC, as opposed to Taiwan, in line with the “One-China” policy and, in Angola’s case, the awarding of 70 percent of contracts funded with the loan money to Chinese construction companies.

The emergence of China as an alternative source of funding has consequently been particularly welcomed considering the paucity of options available to the Angolan government<sup>40</sup> and the urgency with which such funds are required for the reconstruction of the economy and the country’s infrastructure.

In this way China is beginning to encroach on the international financial institutions’ (IFIs) traditional domain of influence and their potential control of the domestic policy and affairs of debtor nations. It is the nature of the loan, with its very low loan interest rate and policy of domestic non-interference that makes the Chinese attractive lenders. This has implications for the donor community and diminishing leverage they have on enforcing policies of governmental transparency.

### **Key SOE Projects**

Listed below are several of the more prominent projects in Angola in which Chinese construction companies are involved.

#### **Lobito Oil refinery**

The most important and tangible form of co-operation and investment is a joint-venture between the Chinese oil company Sinopec and the Angolan company Sonangol to form Sonangol-Sinopec International (SSI).

The joint-venture, announced in March 2006, involves the development of a new refinery at Lobito, Sonaref, requiring a total investment of US\$3 billion. It was initially reported in March that Sonangol held 70 percent of the joint-venture while Sinopec held the remaining 30 percent. By May 2006, a report stated that Sonangol held 45 percent and Sinopec 55 percent indicating that Sinopec had increased its share of the joint-venture by 20 percent in one month.<sup>41</sup>

Work on the oil refinery, Angola’s second, will begin before the end of 2007 and is estimated to have a total capacity of approximately 240,000 barrels per day; 80 percent of which will be for the general export market.

SSI plans to take on the entire capital of each of the new concessions and proposes to drill 10 test wells. The initial phase will produce 120,000 barrels a day, which is still almost double the capacity of the existing refinery in Luanda.

The joint-venture is also tendering for oil exploration and already owns 20 percent of Angola's block 15 (estimated reserves of 200,000 barrels).

### Road and Bridge Infrastructure

China has granted Angola a US\$ 211 million loan to finance the first stage of a project to rebuild roads destroyed in the 1975-2002 civil war.

The first such project is a 371km stretch between the capital Luanda and the northern agricultural and mining province of Uige connecting the Angolan localities of Kifangondo (Luanda), Caxito (Bengo), Uije and Negage (Uije).

The China Road and Bridge Corporation (CRBC), contracted to undertake the project, has invested at least US\$30 million in the purchase of equipment for the construction work which will take two years to complete.

The work includes the repair of 12 bridges on the road. Ten of the bridges are new, with the project involving the repair and construction of 200 aqueducts.

**Figure 6: A map of Angola indicating Chinese involvement on reconstruction of major roads and railways**



©Centre for Chinese Studies

More than 3,000 Angolan and Chinese workers will be involved in the project according to ANIP. The project, commissioned by the National Road Institute (INEA), is being supervised by the German firm Galf Engineering.

CRBC is also rebuilding a 172-kilometer stretch of road between the towns of Ondjiva and Huambo.

The project includes re-laying the road's surface, widening the embankments, drainage works and protection against erosion, road signage; and the construction of new aqueducts and small bridges representing an investment of US\$47 million.

The project will be completed by the end of 2006. The rebuilding of the road which is part of the Government's national reconstruction program, is considered important as it provides a link between Luanda and the provinces of Kwanza Sul, Huíla, Benguela, Huambo, and Cunene as far as Namibe.

CRBC also won the tender to build a concrete bridge over the River Dande in Angola. The bridge, which will be over 100 meters long and 12 metres wide, will be built alongside the current metal bridge. It will have a capacity of over 60 tons.

#### **Railways Rehabilitation**

Repairs to the Benguela Railway line, almost completely destroyed during the civil war, began in January 2006.

The project, which is being funded and undertaken by the China International Fund Ltd, a Hong Kong based construction firm at a cost of US\$300 million, will reconnect the eastern part of the country to the west.

The railway line, on restoration, will run 1,300 km from Benguela to Luau, on the border with the Democratic Republic of Congo. The project, estimated to take 20 months, will be completed in August 2007.

The railway also has a link to Lobito, 700 km south of Luanda. This is significant as there is a strong possibility that extensions to Uige and Zambia maybe be envisaged, providing a direct line of transport from the Zambian copper mines to the Angolan ports.

Up to US\$2 billion is also to be spent rehabilitating and modernising the Moçamedes Railway. The railway stretches from the southern Angolan port of Namibe to Menongue, which is approximately 856 km, and more than halfway to the Zambian border. This four-year project began in March 2006.

#### **Bom Jesus Airport**

A new international airport has been planned as an alternative to the existing 4 de Fevereiro Airport in Luanda. The first stage of the new airport, to be situated 40 kilometres north-east of Luanda, is estimated to cost US\$ 450 million, and will be led by the National Reconstruction Office, under the supervision of the Presidency. The work is reported to be contracted to the Brazilian construction firm Oderbrecht and a consortium of Chinese companies.

### Luanda General Hospital



*Justice palace under construction, Luanda*

In February 2006, the Luanda General Hospital was completed by the Chinese Overseas Engineering Company (COVEC). The hospital, located in Luanda's Kilamba Kiaxi district, occupies 800,000 square metres on some five acres of land.

It has the capacity to hospitalize 100 patients and can attend to 800 patients per day. According to statements released by the

Angolan government, COVEC completed the US\$8 million dollar project within 15 months. Some 90 percent of the workforce reportedly consisted of indigenous labour. The money used to build the hospital was reportedly an interest-free loan from the PRC government.<sup>42</sup>

### Justice Palace

The construction company China Jiangsu International has been contracted to complete the construction of the Palace of Justice building in Luanda. The contract, reportedly valued at US\$41 million, was tendered by the Angolan Ministry of Public Works and ratified by the Angolan cabinet. China Jiangsu International is also completing renovations on the provincial government buildings in Luanda.

### Housing Projects

In March 2006, China International Fund Ltd was contracted to build forty-four 15 storey buildings, with 5,000 apartments in total, within Cabinda City in Cabinda Province. This is reportedly part of an initiative by the Angolan government to provide 200,000 residences country-wide by 2008. Funded by the Chinese government, the operations are to be coordinated by the Angolan National Reconstruction Department. The Cabinda urbanization project is to employ 4,000 Angolans and 1,000 Chinese workers over a period of 30 months.

### Water Infrastructure

In May 2006, China National Electronics Import and Export Corp. (CEIEC) won the tender for the renovation and widening of the water distribution network in Caxito, Bengo province. The work, which began in February 2006, will take approximately 18 months to complete at a cost of US\$4 million. An additional US\$3 million is to be used to upgrade the Dande district by the same company.

### Ministry of Finance Building

Golden Nest International Group was contracted to build the Ministry of Finance building in Luanda. The building has been completed and was commended for the quality of the work by the South African consulting firm, Africon, which oversaw the project.

## Chinese Companies in Angola

Chinese investment in Angola is primarily located in the transport infrastructure and extractive industry sectors, particularly oil.

In the Angolan context, this is seen principally through the joint-venture partnership SSI. This joint-venture is the largest and



Only two Chinese firms are officially registered with ANIP. This suggests that while numerous Chinese construction companies are active in Angola, they are mostly state-owned or state-invested with few private Chinese companies operating in Angola.

clearest example of direct foreign investment as most of the Chinese construction companies that win tenders have yet to carry out their expressed intentions to establish joint-ventures with local partners. It is possible that the current Angolan skills base is too low for joint ventures with Chinese firms, and is thus not a viable proposal over the short term.

Aside from the refinery, the largest projects involve road and rail rehabilitation. Such basic infrastructure is urgently needed in Angola for it to recover from the ravages of the civil war.

It will also expedite more efficient transportation of Angola's oil as well as Zambia's copper to the Angolan ports.

Only two Chinese firms are officially registered with ANIP. This suggests that while numerous Chinese construction companies are active in Angola, they are mostly state-owned or state-invested with few private Chinese companies operating in Angola.

A possible reason is that the majority of the contracts undertaken by the Chinese construction companies are financed through the loan provided by the PRC government.

This is the traditional arena for SOEs, which have been undertaking large-scale international aid projects since the 1960s, thus providing a natural comparative advantage over private firms.

## Tendering

The PRC's Ministry of Commerce has a list of 35 selected Chinese construction companies that have been pre-approved to tender for contracts in Angola.

According to Huang Zuquan, the previously cited lecturer of African Studies at Peking University and adviser to Chinese companies entering the Angolan market, the selection criteria included "*a positive track record in finalizing contracts within the deadline and on budget...whether they in fact have the machines, personnel and financial capacity to carry the project through*".<sup>43</sup>

When the Angolan government wishes to launch a tender for a construction project, this is communicated to the Chinese government which then launches the tender in China. According to regulations stipulated by the Angolan government, the Chinese government, although it only releases the tender to the 35 pre-approved Chinese companies, must allow at least three different companies to tender for the same bid.

The Angolan government then selects the winning tender from those submitted.

From the end of 2004 to mid-2006, Chinese enterprises secured more than US\$3 billion worth of construction contracts.

Tied to the Chinese oil-backed credit line, the majority of these contracts are for government buildings and general national infrastructure. Angola's desperate need for infrastructure is being satisfied by the speed with which Chinese companies can deliver upon their projects.

## Securing Capital

The oil-backed line of credit extended by the China Exim Bank has spear-headed Chinese companies' entry into the Angolan market.

Within the context of the Angolan construction industry, support from the PRC government has been instrumental in establishing market entry for Chinese SOEs.<sup>44</sup> The oil-backed line of credit extended by the China Exim Bank has spear-headed their entry.

The PRC loan, as previously mentioned, is primarily intended for use in the reconstruction and rebuilding of Angola's infrastructure. It is monitored and managed by the Angolan Ministry of Finance and the Office of National Reconstruction.

Thus, heavily aided by the Chinese government through political co-operation in the form of a bilateral government agreement between Angola and China, Chinese companies, especially in the civil construction industry, have secured 70 percent of all contracts financed by the Chinese credit-line.

As stated above, 35 selected companies that were pre-approved by the PRC government were able to tender for contracts in the Angolan construction industry which were funded through the Chinese oil-backed credit loan.

Inclusion in the list thus results in entry into the Angolan construction market. It is seen as an avenue through which Chinese companies, sanctioned by the Chinese government, may tender for government contracts and gain market access in Angola.

When questioned as to the desirability of Chinese contractors employing Chinese nationals as opposed to local labour, a representative of the Angolan Chamber for Commerce and Industry replied that China, as a populous country, also struggled with unemployment problems.

Once a presence has been established in the market, it is anticipated by Chinese firms interviewed that they will secure further contracts.<sup>45</sup> Interestingly however, this list does not only include state-owned enterprises. The Guangsha Group, the largest non-state-owned construction company in China,<sup>46</sup> was included in this list.

This Group has several member companies and is the holding company for several more, one of which, Guangsha Chongqing First Construction (Group) Company Ltd. (GCS International Co. Ltd.), has a presence in Angola.

The Chinese companies also appear to receive rapid project approval from the Angolan government which has reportedly been easing the way for approval and inspection of the work carried out by the Chinese companies.<sup>47</sup> This is due to the contractual advantages being offered in financing the work via the Chinese credit line and the pressure the Angolan government is under to expedite post-war reconstruction.

## Labour

Chinese firms often import Chinese labour to work on a contractual basis on infrastructure projects.

When questioned as to the desirability of Chinese contractors employing Chinese nationals as opposed to local labour, a representative of the Angolan Chamber for Commerce and Industry replied that China, as a populous country, also struggled with unemployment problems. Also it was "natural" that this trend

would develop, especially as other foreign-based companies also employed such practices.



*Construction workers on site outside Luanda*

This seems to infer that Angolan officials are not willing to jeopardise their relationship with the Chinese government, and the resultant benefits for national infrastructure, over issues of local recruitment.

It is also implied that with time, Chinese companies will start to employ locals as other foreign companies now do.

Whether engaged in local recruitment or not, Chinese state-owned companies pay state-determined salaries that are sometimes not in line with the market determined price for labour in the Angolan construction industry.

As wages are often a large expense in the construction industry, this provides Chinese companies with a decidedly competitive advantage.

Chinese companies typically provide food and housing compounds for their workers as well as a daily stipend of US\$1 per Chinese worker.

The latter underscores the competitive advantage that Chinese companies have over other companies who are obliged to pay between US\$3-4 per day for Angolan labourers. Similarly, Chinese engineers are paid approximately US\$130 per month, one sixth of what European construction firms pay Angolan engineers.<sup>48</sup>

This is also in stark contrast with the expatriate salaries paid by other foreign-based companies to their skilled employees. Where local labour is used, it is generally for low-skilled construction site jobs and not necessarily for executive or management positions.

Procurement strategies are particularly important for Chinese companies that choose to import all their materials and equipment from China.

Due to the speed with which the projects are completed, a number of Chinese companies have not deemed it necessary to establish a permanent office in Angola. This is unless they have secured several large and extended contracts, for example the Angolan railway lines' refurbishment. This further reduces the likelihood of their employing locals in their operations.

GCS International Company Limited, for instance, is contracted to a project constructing office space in 11 Angolan provinces. The company has only been in Angola since the beginning of 2005. Expectations are that project involvement will be completed by 2007 after which the company will leave, unless they secure another contract. At the moment the company only has six administrative overseers in Luanda all of whom are Chinese nationals on working visas.

## **Procurement of Materials**

Procurement strategies are particularly important for Chinese companies that choose to import all their materials and equipment from China.

In terms of material procurement the Chinese companies enjoy a substantial advantage. A 50 kg bag of Angolan-made cement costs US\$10, while China's imported cement costs US\$4.<sup>49</sup>



Unloading Chinese-imported cement  
at the Luandan Port

Perhaps as a result of the disparity in materials prices, Chinese companies' cost per square meter of construction is reportedly a fourth of that of European companies.

### Standard of Workmanship

It seems that both Chinese firms and their competitors agree that there is a degree of variability in the quality of workmanship displayed by Chinese companies. A representative from Africon<sup>50</sup> stated that Chinese firms, although known to cut corners on cost, were consistent in adhering to the level of quality, if clearly stipulated by the civil engineering consultancy firm working on the project.

In addition, Chinese companies have a good reputation in terms of attitude and work ethic. South African investors are by contrast perceived to be arrogant and there have been several instances of bad corporate practice involving South African construction firms.

Group 5 has been involved in several contracts, including a government contract issued in 2001 for the Nova Vida housing project worth US\$135 million. The company was forced to issue a cautionary announcement on 8 June 2006 concerning their operations in Angola, where they declared that "...at least some basis appeared to exist for reasonable suspicion that irregular activities had taken place".<sup>51</sup>

In addition, according to Africon, a South African consulting firm with experience in the Angolan market, South African construction companies are currently some of the most expensive in the industry. This is due in part to the strength of the South African rand.

With current market conditions, it was estimated that South African firms could only hope to be competitive if the currency rate dropped to R8.00 to the US\$.<sup>52</sup> This must be seen against the ability of Chinese firms to substantially undercut the closest competitor in terms of overall bid value, with much shorter completion timeframes.

According to some traditional construction players, contracts have in some instances been dissolved and re-awarded to Chinese companies. Contract dissolution was due to an inability on the original contractor's part to comply with contractual specifications. An example of this was a South African company, which was contracted to build corporate headquarters for an Angolan firm at a cost of US\$126 million. When it could not source the components and finishes specified by the Chinese-based design firm, who had been appointed by the Angolan client, the contract was re-awarded to a Chinese company which was able to source the materials in China.

## Challenges

### 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.

Few Chinese speak Portuguese and knowledge of Mandarin amongst Angolans is almost non-existent. Some companies have tried to remedy this by recruiting from the Chinese diaspora.

There has also been a natural inclination to recruit Chinese from Macau, a former Portuguese colony. Macau is now one of China's special administrative regions (SAR). Their knowledge of Portuguese may have facilitated the entry of Chinese firms into the Angolan market.

Chinese international workers, however, are more likely to have chosen English as their second language. While it is evident that the more educated Angolans speak French and some English, this is not wide-spread enough to remedy the language problem which remains an obstacle to on-site communication and hence productivity.

The problem of the language barrier appears to have been underestimated by Chinese SOEs.

According to a report in a local Angolan newspaper<sup>53</sup>, Angolans, who are often employed as the site workers have overseers that cannot speak Portuguese, and are not provided with a translator.

### Lack of Local Skills

In addition, lack of education manifests itself as a problem especially in terms of specialized skills. Absentee rates among local workers are also notoriously high.<sup>54</sup>

This is the rationale offered by most of the Chinese companies when questioned about their lack of local recruitment.

It was unanimously agreed by respondents from Chinese companies that local labour was sub-standard. In addition, as much of the technology and equipment used by Chinese construction companies is imported from China, Chinese engineers and operators, familiar with such technology, are thus also required.

### Logistics

According to the experience of the Chinese companies in Luanda, the project cycle is the most challenging aspect of construction in Angola.

There are only three operational ports in Angola: Luanda, Benguela and Cabinda. This contributes to project concentration in and around these three areas, although all three ports have other strategic importance.<sup>55</sup>



*Construction site in Luanda sporting signboards of Portuguese construction companies*

According to the experience of the Chinese companies in Luanda, the project cycle is the most challenging aspect of construction in Angola.

An additional challenge is the question of whether the Angolan government has ownership of the reconstruction process.

Of the three, Luanda is the political capital and consequently the location of the majority of the national government contracts. As Chinese companies import most of their equipment, materials and labour from China these ports play an integral role in the Chinese supply chain. In addition to the length of time required to receive goods in Angola shipped from China, materials and equipment can be retained in these ports for as long as 2-3 months.

Goods procured consequently often arrive later than the prescribed 30-day mobilization period. Some Chinese companies claim that their projects would be completed in a matter of months without such delays, but are now forced to take 1-2 years to complete the project.

### Payment

Another problem experienced by some Chinese contractors has been the issue of payment. One Chinese company noted that this problem was countered by demanding payment upfront. Where this was not possible, namely with government contracts, the experience was that payment from the National Office for Reconstruction was eventually delivered, although it was often delayed.

### Conclusion

The entry of the Chinese construction companies into Angola, albeit controversial, has marked a period of rapid infrastructural regeneration.

For Angola, a country only recently emerging from civil war, the rehabilitation of vital roads and railways, and the general development of infrastructure are of national priority to sustain economic growth and encourage investment.

Chinese companies have made a broadly positive contribution in this regard.

Of concern, however, are the challenges posed by a lack of institutional framework and government capacity to monitor and encourage direct investment in terms of local skills development and technology transfer.

Linked to this is the issue of whether enough is being done to cultivate and harness the development of local companies and/or small and medium enterprises (SMEs).

An additional challenge is the question of whether the Angolan government has ownership of the reconstruction process. This is in view of the fact that at least 70 percent of the contracts funded by the loan money goes to Chinese companies, in addition to the original loan, which will also be paid back to China.

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 for the continued upkeep of the project or the project is handed over to the local authorities at the risk of its falling into disuse over time through lack of funds, skills and technological know-how.



The question also needs to be posed whether the Angolan government is investing the revenue it receives from oil receipts into viable projects that help to diversify the economy into manufacturing and services.

One of the drawbacks of being an oil rich country is that Angola could become a victim of Dutch Disease.<sup>56</sup> This is where the ownership issue becomes critical and where Chinese aid can be more sustainable.

The National Office for Reconstruction, the Chamber of Commerce and Industry, and ANIP need to reinforce the promotion of joint-ventures and the development of corporate responsibility among firms active in Angola. This will ensure that the positive contribution of the rapidly increasing construction industry has sustained socio-economic benefits through maintainable health, sanitation and transport infrastructures, economic diversification and local skills development.

## Sierra Leone



SIERRA LEONE: BASIC DATA, 2005  
(CURRENCY IN US\$)

Area	71740 sq km
Population	6 million
Life expectancy	40 years
Infant mortality	160 per 1,000 births
GDP	\$4.921billion
GDP per capita	US\$ 900
GDP growth	6.3%
Gov Budget	US\$96 million

## Introduction

Sierra Leone was named in 1462 by the Portuguese sailor Pedro da Cintra after the range of mountains that form the peninsula where Freetown is today located - Serra Lyoa (Lion Range).

Positioned on the west coast of Africa along the Atlantic Ocean between Guinea and Liberia, Sierra Leone was ruled by chiefs, kings and warriors and heavily influenced by migrants and conquerors from the neighbouring West African Empires.

The relatively cosmopolitan population is comprised of approximately twenty tribal groups. The two largest groups, the Mende and Temne, each represent approximately 30 percent of the population; the Creole approximately 10 percent and the remaining smaller tribes constitute the remaining 30 percent.

There are also relatively small, but economically significant, numbers of Lebanese, Indians, Pakistanis, and Europeans and large numbers of refugees from neighbouring countries.

With 60 percent of the population Muslim, 10 percent Christian and 30 percent animist, political divisions are socio-economic rather than ethnic or religious.

Sierra Leone gained independence from Britain in April 1961 and adopted a multiparty parliamentary system. After a series of military coups, Siaka Stevens came to power in 1968.

Stevens introduced a single-party political system and in 1985 handed power to Major General Joseph Saidu Momoh.

The rebel war that started in Liberia in 1989 spilled into Sierra Leone in early 1991. Momoh re-established a multi-party system later in 1991 before being overthrown in a military coup the following year.

Elections were held in April 1996 and Ahmad Tejan Kabbah of the Sierra Leone's Peoples Party (SLPP) was elected president.

Kabbah was ousted from office for 10 months but reinstated in early 1998. The 1999 Lomé Peace Agreement facilitated the deployment of the United Nations Mission in Sierra Leone (UNAMSIL) which eventually restored peace to the country by March 2002.

President Kabbah of SLPP is now in the final stretch of his second five-year term and must step aside before the May 2007 elections.

In spite of the country's abundant natural resources, foreign investment in Sierra Leone is extremely low with the government relying heavily on donor funds which currently support over 65 percent of the budget.



*A sign for the renovated Bintumani Hotel*

The Sierra Leone government is actively working to improve the economy with the implementation of policies to increase trade and investment. However, the challenges are enormous.

The vast majority of Sierra Leone's infrastructure was destroyed during the civil war, Corruption is rampant and with only a 30 percent national literacy rate, the quality of the workforce is extremely low.

Unemployment is estimated to be in the range of 35-40 percent according to recent World Bank research, though other sources put it closer to 60 percent.

The World Bank attributes the country's "robust" economic performance to the post-war recovery in agriculture and mining.<sup>57</sup>

Sierra Leone's primary exports are diamonds, gold and timber in addition to rice, coffee, cocoa, palm kernels and palm oil.

The major imports are foodstuffs, machinery and equipment, chemicals, fuels and lubricants. Sierra Leone's main trading partners are Belgium, Germany, Ivory Coast, United Kingdom (UK), United States (US), China and South Africa.

### **Sierra Leone's Construction Industry**

In the 1970s and early 1980s Sierra Leone's construction industry was dominated by a handful of locally-based Lebanese companies.

Chinese contractors started to enter the market through the 1980s and early 1990s. The outbreak of civil war in 1991 brought practically all economic activity in the country to a halt. Immediately after the end of the civil war in 2002, Sierra Leone's construction industry grew rapidly as a result of donor funds and capital repatriated from the diaspora.

Although continuing to grow, the pace has already begun to decline as the mammoth UN peace-keeping operation, UNAMSIL, is being scaled down as donor fatigue sets in.

Today the industry is dominated by half a dozen large local companies, three or four locally-based Lebanese companies, and half a dozen foreign companies from Italy, Germany, Senegal, Ghana and China.

Skilled labour in the past came from Guinea. The situation has improved slightly with more skilled and experienced local workers. However, the country continues to suffer a serious "brain drain" of qualified engineers and very little is being done to replace the current generation of engineers.

The small scale of the local construction industry and the failure of foreign companies to recognize local engineers have seen many qualified tradesman and engineers leave the country.

As many as 90 percent of local engineers who graduated from University of Sierra Leone in the late 1980s reside outside of Sierra Leone.<sup>58</sup>

Before the war companies were often expected to completely finish construction projects before being paid but settlements were regularly delayed.<sup>59</sup>

Relations between China and Sierra Leone have remained very strong with a constant stream of high- level visits between the two countries.

This prevented smaller local companies that were unable to raise the necessary capital from entering the market. It is only recently that companies are being paid portions in advance. This enables them to take on larger projects and gradually develop capacity for large-scale projects.

**Figure 7: Classification for the Registration of Contractor in Sierra Leone**

Designated Class	Project Value
Premier Class	above \$333,000
Class 1	\$167,000 – \$333,000
Class 2	\$100,000 – \$200,000
Class 3	\$50,000 – \$117,000
Class 4	Below \$60,000

*Source: Ministry of Works, Housing and Technical Maintenance, Sierra Leone, July 2006*

The registration of construction companies is undertaken by the Ministry of Works, Housing and Technical Maintenance. Companies are classified into one of five classes according to the company's technical ability, materials, financial resources and experience.

Only premier class companies are permitted to engage in projects larger than US\$333,000.

According to one senior official at the Ministry of Works, Housing and Technical Maintenance, companies should not engage in projects outside the values designated by their class designation; however, companies frequently flaunt the lower limits and engage in projects below their minimum designation.

Building codes in Sierra Leone are based on British codes, but these are irregularly applied. The government has made efforts to improve the regulation of standards in the construction industry. Progress has however been slow due to a serious lack of capacity and, according to observers, limited political will.

The country is still recovering from the ravages of the war and much remains in disarray. A Parliamentary Act passed in 2000 stipulated that all contractors in Sierra Leone must be registered with the Engineering Board, but many companies are yet to register, and the Board has no practical way of enforcing such regulations.

### **China – Sierra Leone Relations**

Relations between China and Sierra Leone were established in July 1971. Siaka Stevens' government was non-aligned and manipulated Cold War tensions to extract assistance where he could.



China shipped a substantial amount of military equipment to Sierra Leone in 1973 and 1987, followed by a more modest amount in 1997.<sup>60</sup>

The government of China has regenerated a number of the original agricultural demonstration farms and is currently focused on rice production.

However, China's interest in Sierra Leone increased in 1989 when Samuel Doe's government in Liberia broke diplomatic relations with Beijing to accept Taiwan's offer of US\$200 million in aid for education and infrastructure in exchange for the latter's diplomatic recognition.

Relations between China and Sierra Leone have remained very strong with a constant stream of high-level visits between the two countries. Sierra Leone is also believed to have played a key role in having Liberia switch recognition back from Taiwan to the PRC in October 2003.

Chinese construction companies started to return to Sierra Leone with the renovation of the Bintumani Hotel even before the civil war ended in January 2001.

### **China – Sierra Leone Aid**

After establishing relations, the Chinese built a number of key public buildings in Sierra Leone, amongst them the Youyi (friendship) Building which houses a number of key government ministries and the National Stadium, both of which were renovated by the Chinese three years ago. The Chinese also built the Parliament building, Police Headquarters, Military Headquarters, sections of the Sierra Leone University, a series of important dams, hydroelectric schemes, bridges and over 12 agricultural promotion stations across the country.

The government of China has regenerated a number of the original agricultural demonstration farms and is currently focused on rice production.

On October 1, 2005, the Chinese Ambassador to Sierra Leone announced that China was looking to provide a soft loan to construct a new building for the Sierra Leonean Ministry of Foreign Affairs at Hill Station. This is near the site of the U.S. Embassy building, currently under construction.

Earlier this year a team of 10-15 Chinese engineers visited Sierra Leone for a month to conduct feasibility studies on a broad range of projects including another smaller stadium and a hospital in the southern town of Bo.

The Chinese are interested in constructing a dam in the Gulah Forest on the Mano River which forms the border between Sierra Leone and Liberia. The dam would supply hydro-electric power to both countries.

The initial survey was recently completed although the project has evidently attracted some resistance, ostensibly over concerns for the impact it would have on the environment and local agricultural production. It was suggested by several observers that these concerns are being played up by unnamed third countries wishing to stem the growth of Chinese investment in the Sierra Leone.

## China - Sierra Leone Trade and Investment

Chinese exports to Sierra Leone, consisting of machinery, electronic equipment, cement, iron, steel, textiles, footwear, cement, pharmaceuticals, and food stuffs have grown steadily since 2000. Chinese exports reached almost US\$31 million in 2005.<sup>61</sup>

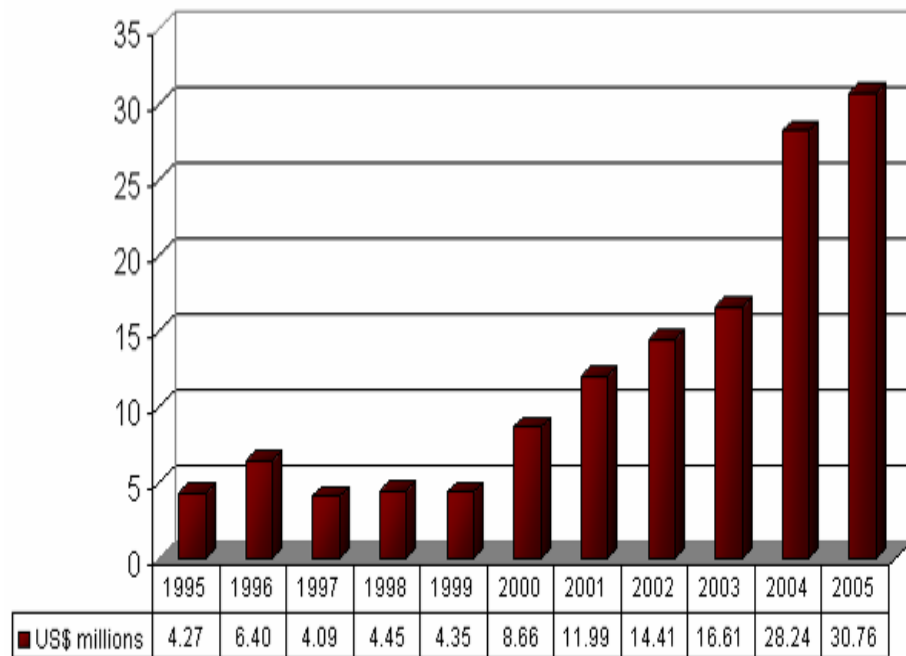
Sierra Leone registered zero exports to China in 2003 and only US\$1.61 million in 2004 - consisting entirely of ores.<sup>62</sup>

This figure dropped to US\$1.49 million in 2005, clearly reflecting the extremely poor state of the country's economy which depends almost entirely on diamonds.

The country is in desperate need of investment and to date China is the only country to demonstrate any serious interest.

A range of Chinese companies are moving into Sierra Leone. In June 2004 one company registered plans to establish a US\$200,000 tractor assembly plant at the former brick factory in the eastern section of Freetown and a growing number of small Chinese enterprises such as restaurants and health centres are springing up.

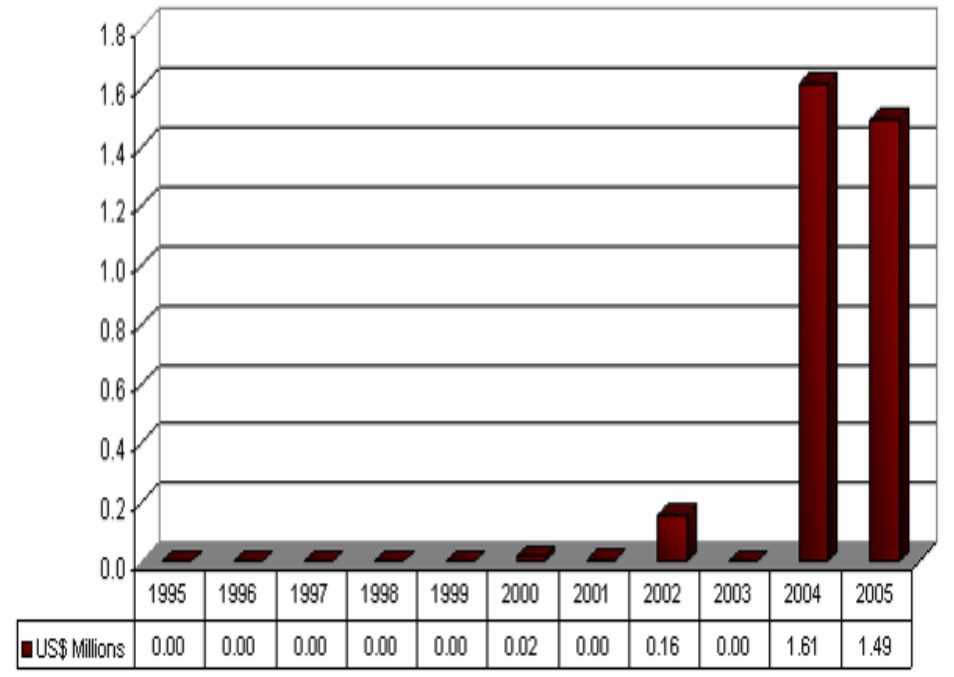
Figure 8: China's Exports to Sierra Leone (1995-2005)



Source: World Atlas Trade Data, Tralac Analysis



Figure 9: Sierra Leone's Exports to China (1995-2005)



Source: World Atlas Trade Data, Tralac Analysis

## Key SOE Project

### Magabass Sugar Complex

Originally established with funding from China in the 1980s, the Magabass Sugar Complex is the only sugar producing enterprise in Sierra Leone.

At that time, the complex produced 6,000 tonnes of sugar annually, equal to 25 percent of Sierra Leone's sugar imports. The by-product of the complex was 500,000 litres of spirit.

Following the civil war, the China National Complete Plant Import & Export Corporation signed a lease contract on Magabass Sugar Complex with the government of Sierra Leone in January 2003. The company renovated the sugar cane farm and the sugar mill: production reached 8,000 tonnes last year. One senior government official expressed serious doubt over the direct economic contribution of Magbass - which exports its sugar while the country continues to import sugar for domestic consumption.

He also pointed out that the company's plans to gradually increase the level of production have raised environmental concerns associated with deforestation.

## Chinese Construction Companies in Sierra Leone

Following the series of public construction projects described above, several large Chinese companies such as the China State

Enterprise Construction company remained active in Sierra Leone through the late 1980s into the 1990s.

Though obviously interested in short term profit, they were very competitive and started to displace the Lebanese companies. All of the Chinese companies left during the war.

Many respondents suggested that the Chinese contractors that have come this time appear to have adopted a decidedly more long-term approach, which allows them to be considered as serious investors in the country.

The Chinese presence in Sierra Leone remains limited because of the small market. However Chinese companies in neighbouring countries such as Guinea are constantly monitoring Sierra Leone's market and waiting for opportunities.



There are currently only three Chinese construction companies in Sierra Leone.

Two are registered with the Ministry of Works and actively seeking work. The third company, Anhui Foreign Economic Construction Corporation, is currently engaged in the renovation of the Chinese Embassy and will soon begin work on the construction of a new embassy building at Hill Station.

Once completed, the present Embassy building, currently under renovation, will become the new Economic and Trade Counsel.

It is noteworthy that Anhui Construction is from Anhui Province in eastern China, the capital of which (Hefei) became a sister-city of Freetown in 1984.

### Chinese Construction Companies Operating in Sierra Leone

-  Global Trading
-  Henan Guoji
-  Anhui Construction

The two other companies are Henan Guoji Industry and Development Corporation and Global Trading, a subsidiary of Beijing Urban Construction Group.

Global Trading is registered as a premier class construction company and entered into an agreement with the Sierra Leone government in 2001 to renovate the government-owned Bintumani Hotel named after the 1,948m Mount Bintumani in the north of the country.

The rehabilitation was completed by December 2002 and the hotel began operating in January 2003. The total structure is 2,000 square meters and the property covers an area of 11 acres in Aberdeen, a popular beach area on the outskirts of Freetown. The company spent US\$10 million renovating the hotel and, in return, will manage the hotel for 10 years with first rights to renew the lease at the end of the term.

Besides running the hotel, Global Trading also has a construction arm currently involved in five small scale projects as they position themselves for yet larger projects.



A sign for the Chinese Chamber of Commerce in Sierra Leone

All of the Chinese companies left during the war. Many respondents suggested that the Chinese contractors that have come this time appear to have adopted a decidedly more long-term approach which allows them to be considered serious investors in the country.



*Site for the proposed Henan Guoji property development, Sierra Leone*

Henan Guoji, a subsidiary of the Henan Guoji Group, is a private company that first arrived in Sierra Leone in 2003. Classified as an investor, the company is not liable to pay import duties for five years. The first term will expire in 2008 and, according to one government official in the Ministry of Finance, is likely to be extended for another five years.

According to the company representative interviewed, the company had originally intended to establish operations in Sudan, but was unable to follow through with their plans and switched to Sierra Leone at the last moment.

The company consists of two sections, one focused on trade and the other on manufacturing. Henan Guoji established a trade zone comprised of a processing zone, bonded warehouses and an exhibition centre at the former National Workshop in Cline Town on the edge of Freetown.

The company is also registered as a premier class company and although the managers interviewed denied any involvement in construction, several local staff members explained that the company engages in small scale construction projects. Approximately 19 Chinese factories are to be located in the zone.

At present little or no manufacturing or processing is being undertaken and they are focused almost exclusively on trade.

Henan Guoji is currently exploring the possibility of constructing a large-scale development comprised of a hotel, conference centres, sports facilities, a housing estate and a promenade along Lumley Beach on the outskirts of Freetown.

The controversial project involves draining wetlands, attracting serious environmental concerns, and raised questions concerning effects on public access to the area.

The company has already down-sized the investment of US\$250 million to US\$100 million and is waiting for government clearance before work can begin.

## **Tendering**

The World Bank provided substantial support to the development of the Public Procurement Act passed in December 2004.

However, the Public Procurement authority lacks capacity and to date has proven to be little more than a rubber stamp entity.

With limited expertise in construction, it continues to refer back to the Ministry of Works, Housing and Technical Maintenance on construction issues following precisely the same the procedure observed before it was established.

The head of one large local company however described the tendering process as “seemingly transparent” as the majority of construction industry professionals interviewed concurred.

A senior official in the Ministry of Works, Housing and Technical Maintenance explained that the government favours local construction companies in evaluating tenders, all other factors

The local banks expressed serious reservations over the majority of local construction companies citing problems with their financial management.

being equal, in an attempt to boost the local industry; however, a number of individuals in the private sector disputed this.

The same government official criticized the World Bank for not supporting local industry, a claim World Bank Country Director James Sackey refuted.<sup>63</sup> Sackey explained that the World Bank's evaluation and selection process does favour local companies, but only when they have the necessary experience and capital.

### **Securing Capital**

The local banks expressed serious reservations over the majority of local construction companies, citing problems with their financial management.

They have good impressions of Lebanese and other foreign contractors although their experience with Chinese companies remains limited.

The Chinese construction companies in Sierra Leone regularly seek funds from the African Development Bank, World Bank and Islamic Development Bank.

### **Labour**

The shortage of skilled labour is a serious problem for all the construction companies operating in Sierra Leone.

The Chinese companies reportedly pay very low salaries with occupational safety standards rarely followed and never enforced. The manager of one Chinese company stated that they rely on 'their own people' and only require unskilled labour.

Sierra Leone, they had increased payments in an attempt to retain competent labour in the face of increasing competition.

All the labour used by Anhui Construction on the Chinese Embassy project is reportedly Chinese.

He explained that while the quality of unskilled labour is very poor in Even though trade unions in Sierra Leone are extremely weak and disorganized, they do discuss the working conditions of their members employed by the 10-12 main construction companies operating in the country.

### **Procurement of Materials**

Apart from cement, very little is available in Sierra Leone and almost all construction materials must be imported.

A large amount of material is sourced from China and is clearly increasing in volume.

Complaints from consumers were widespread regarding the lack of high-quality construction materials in the country - commonly attributed to the rapid influx of poor quality Chinese products.

The Chinese today are, in fact, capable of manufacturing very high quality products at exceptionally competitive rates, but these are not found in Sierra Leone.

A large amount of material is sourced from China and is clearly increasing in volume.

Civil society institutions also expressed concern over the lack of transparency by the government of Sierra Leone in dealing with the Chinese companies and suggested the existence of high levels of corruption.

The market is simply too small. Henan Guoji has made a significant impact supplying a large number of construction materials although several respondents claimed these products are not particularly competitive in terms of price or quality.

They explained that many construction materials continue to come from India, Europe, the U.S., South Africa and neighbouring Guinea.

### **Standard of Workmanship**

Assessments on the quality of work done by Chinese companies in Sierra Leone are mixed.

The majority of respondents who had used Chinese companies for small-scale construction projects, such as houses, were satisfied and definitely preferred Chinese or Lebanese companies over local contractors.

This is because of the latter's reputation for mismanaging finances, substandard work and running behind schedules.

One local consulting company cited dealings with a Chinese company on a US\$3 million project funded by the Islamic Development Bank in the mid 1980s and detailed how the Chinese company mobilized local political support to pressure them to sign off on sub-standard materials.

They suggested that the situation has improved, but only marginally.

Another prominent consulting company initially engaged to monitor the recent renovation of the Parliamentary building claimed that the Chinese contractors wanted to use asbestos in the ceiling despite the internationally acknowledged health risks associated with this material.

After complaining about this and other poor work practices, the services of the Sierra Leonean consulting firm were terminated.

Several other respondents reported sub-standard work by Chinese companies involved in public projects. It is obvious that where monitoring and controls are lax, construction companies will get away with whatever they can. Chinese construction companies are no different to other companies operating in this sector.

### **Challenges**

The lack of building materials, poor quality of labour, high levels of crime and absence of infrastructure are challenges faced by all construction companies operating in Sierra Leone.

Civil society institutions also expressed concern over the lack of transparency by the government of Sierra Leone in dealing with the Chinese companies and suggested the existence of high levels of corruption.

Several respondents involved in the construction industry complained that the building plans are written in Chinese, not only making it difficult to work with the Chinese contractors but also



*A sign advertising construction equipment sales and repairs, Freetown*

guaranteeing the continued involvement of Chinese companies in maintenance and repairs.

Surprisingly, few of the people interviewed commented on difficulties in verbal communication with the Chinese, though this is probably because the number of Chinese remains small and there is as yet little interaction with them.

Several Chinese respondents employed in the construction industry complained that Chinese nationals are often perceived as soft targets for petty extortion by government officials.

One stated that they are heavily scrutinized on entry by immigration officials and regularly required to pay bribes to enter the country: It costs US\$10 to enter Sierra Leone and US\$20 to enter Guinea. He queried if Europeans were subject to such intimidation.

Even though opportunities in the construction sector in Sierra Leone are still modest, Chinese companies are clearly positioning themselves to take advantage of any developments.

The Chinese government representation in Sierra Leone provides a convenient listening post for this.

## **Conclusion**

Still recovering from the devastation of civil war, Sierra Leone is desperate for foreign investment. While labour-intensive agriculture projects would be most suitable for the country's development, construction is certainly beneficial.

Sierra Leone presents an interesting exception to the other countries included in this study.

With the exception of roads, local companies are actively engaged in all levels of the country's construction industry. The relatively small size of Sierra Leone's market has offered a degree of protection from the influx of Chinese companies observed elsewhere on the continent.

The traditional actors in the country's construction market should use this opportunity to consolidate and develop the industry before the Chinese presence increases.

The high levels of corruption and minimal enforcement of building regulations present an enormous challenge.

If the country is to make maximum use of investment in this sector, and others, these two issues must be dealt with.

While concentrating on resource-rich and larger stable economies, the Chinese are rolling out across the continent relatively evenly, positioning themselves in countries such as Sierra Leone with comparatively virginal markets and less rigid government control that presumably permit them to realize higher profits.



## Tanzania



## Introduction

Situated on the east coast of Africa just below the equator, Tanzania shares borders with Kenya, Uganda, Rwanda, Burundi, Zambia and Mozambique.

Tanganyika was a German colony from 1884 until it was ceded to Britain in 1919 before gaining independence in 1961. Zanzibar became a British protectorate in 1890 and gained independence in 1963. In 1964, the two merged to form Tanzania.

A prominent member of the Non-Aligned Movement during that period, Tanzania actively supported liberation struggles across southern Africa and developed strong relations with both China and the USSR during the Cold War.

The first president of Tanzania, Julius Nyerere, experimented with socialism during the 1960-70s with the implementation of Ujamaa or "togetherness."

Over 80 percent of the rural population was relocated to collective villages in a program that proved economically disastrous, but is popularly perceived to be the primary reason for the uncommon unity of the country.

With more than 130 different tribes, Tanzania is culturally diverse. Another factor that contributed to this unity is the fact that none of the tribes is big enough to form a majority; the largest, the Sukuma, represents only 13 percent of the population.

During the period of German colonization, Kiswahili was introduced as the national language.

Although Zanzibar continues to experience sporadic tension concerning separation, Tanzania remains politically stable, especially compared to its neighbours.

Since 1986, the government implemented a broad range of policies to liberalize the economy and dismantle socialist economic controls to encourage the participation of the private sector and attract foreign and domestic private investment.

These policies included a reduction in the budget deficit; improved monetary control; floating the currency; liberalizing trade; a reduction in price controls; easing restrictions on the marketing of food crops; freeing interest rates, and restructuring the financial sector.

The ruling parties of Tanganyika and Zanzibar united in 1977 to form the Revolutionary Party of Tanzania which governed the single-party state until the country's first multi-party elections in 1995 when Benjamin Mkapa was elected president. Mkapa was re-elected for a second term in the 2000 elections which were widely perceived to be rigged, sparking civil unrest that killed 40 people.

The country had its third democratic elections in December 2005 when Jakaya Kikwete was elected as president. The elections were relatively peaceful.

### TANZANIA: BASIC DATA, 2005 (CURRENCY IN US\$)

Area	945,087 sq km
Population	37,445,392
Life expectancy	45.64 years
Infant mortality	96.48 per 1,000 births
GDP	US\$27.1 billion
GDP per capita	US\$ 700
GDP growth	6.8%
Gov Budget	US\$2.235 billion

Between 1999 and 2000 the Tanzanian construction sector averaged 8.5 percent growth while its contribution to GDP averaged 4.6 percent, increasing to over 5 percent in recent years.

Tanzania's growth rate, averaging over 6 percent, the government's stance on corruption and its willingness to institute meaningful development policies have endeared Tanzania to the international community. However, Tanzania remains one of the poorest countries in the world as demonstrated by crucial indicators.

Tanzania's main exports are coffee, cashew nuts, manufactures, cotton and gold. The country's economy is heavily dependent on agriculture which provides 85 percent of exports and employs 80 percent of the work force.

Mining is also an important sector and while current commercial operations are limited to the extraction of gold, diamonds and gemstones, recently identified potentially large deposits of nickel, tin, copper, platinum and cobalt are currently being explored. Imports are dominated by consumer and capital goods.

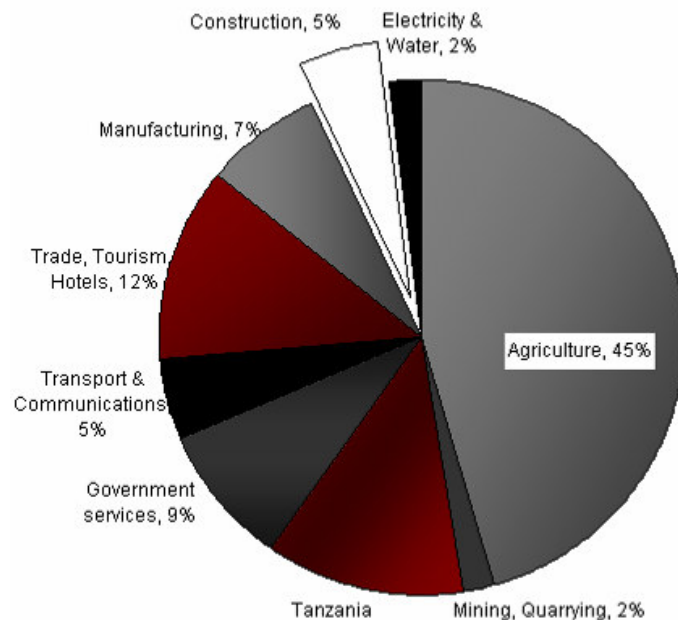
Tanzania's main trading partners are South Africa, China, India, Canada, United Arab Emirates (UAE), Netherlands, Kenya, Japan, UK, Zambia, Germany and Bahrain.

### Tanzania's Construction Industry

Tanzania's construction industry has demonstrated steady growth over the last two years. There are no apparent signs that this will change; however, the medium to long-term future in an industry fuelled by donor funds and speculative investment is far from certain.

Between 1999 and 2000 Tanzania's construction sector averaged 8.5 percent growth while its contribution to GDP averaged 4.6 percent, increasing to over 5 percent in recent years, and accounts for approximately 10 percent of total employment.

Figure 10: Tanzania's GDP by Sector (2001)



Source: African Development Bank

The construction industry in Tanzania is dominated by foreign companies. The government of Tanzania is committed to increasing the market share of local contractors, but a large percentage of the ever increasing number of civil and building contractors have no work as the industry becomes increasingly competitive.

The Contractors Registration Board was established in 1998 for the purpose of registering, regulating and developing contractors. The companies are divided into seven classes according to technical ability, materials, financial resources and experience.<sup>64</sup> There are currently 3,958 registered contractors in Tanzania.


Only 5 percent are in class one and 60 percent of these are foreign companies. The vast majority of local contractors do not even have a single project.


After three years of non-payment of registration fees, contractors are deleted off the registered contractor roll; more than 500 are deleted every year. However, due to increasing numbers of contractors registering every year, there is a net growth in the total number of registered contractors in Tanzania.

The major impediment to local construction companies is access to capital or collateral for bid bonds, advance payments and performance bonds.


These are valued at 2 percent, 10 percent and 10 percent respectively of the projects' total value.<sup>65</sup> It can be extremely difficult for small firms to raise capital for all of these; even larger firms face difficulties raising such capital for several projects simultaneously.


The challenges to the development of the construction industry were identified in 2003 by the Tanzanian Government Ministry of Works as:


 Low capacity and capability of the local contractors and consultants due to weak resource-base and inexperience;

 Inadequate and erratic work opportunities, inappropriate contract packaging of works that favour foreign firms in donor-funded projects, low public investment in infrastructure projects and over-dependence on donor funding;

 Inefficient and non-transparent procurement systems;





 Corruption and financial mismanagement in public/private sectors;

 Lack of supportive institutional mechanisms in terms of financial credit facilities, equipment for hire and professional development;

 Unfavourable donor conditionalities which tend to marginalize local construction enterprises;

 An unfavourable tax regime;

The government has launched a broad range of initiatives to enhance the development of the construction sector, establishing a National Construction Council in 1979 which pioneered the establishment of the Public Procurement Regulatory Board, Contractors Registration Board, and the Architects and Quantity Surveyors Registration Board to improve performance.

-  Poor working environment, including low standards of safety and occupational hazards on constructions sites;
-  Weak and non-facilitative policies and regulatory framework;
-  Low productivity and quality; and
-  Low technological base.<sup>66</sup>

**Figure 11: Value of Registered Projects in Tanzania (2006)**

	<b>Number of Projects Registered</b>	<b>Value of Projects Registered (US\$)</b>
Local Contractors	484	182,016,129
Foreign Contractors	34	433,629,023
Total	515	615,645,616

*Source: Contractors' Registration Board, Tanzania, Directory of Registered Contractors as of January 2006*

The government has launched a broad range of initiatives to enhance the development of the construction sector establishing a National Construction Council in 1979 which pioneered the establishment of the Public Procurement Regulatory Board, Contractors Registration Board, and the Architects and Quantity Surveyors' Registration Board to improve performance.

Other institutions established include a range of research agencies, vocational training centres, and a variety of regulatory institutions including the Engineers Registration Board, the Roads Fund and Roads Fund Board and executive agencies such as the Tanzania National Roads Agency (TANROADS).

### **China – Tanzania Relations**

Since the Tang Dynasty (AD 618-907), Chinese traders had been navigating the Indian Ocean and visiting the east coast of Africa while in the early 15th century, the famous Chinese explorer Admiral Zhèng Hé sailed down the coast of East Africa with a fleet of over 250 ships and 25,000 people.<sup>67</sup>

Shortly thereafter, China's exploration was severely curbed, but growing evidence suggests that China's trade with East Africa and, indeed, many parts of the world continued well into the 19th century.

China established diplomatic relations with Tanganyika and Zanzibar, as each state gained independence and then with Tanzania on 26 April 1964, the very day the two states were united.

Zanzibar was perceived at the time to be a communist bridge-head in the Indian Ocean.<sup>68</sup> Tanzania's first President Julius Nyerere was rather sympathetic to the socialist cause and though fiercely non-aligned, Tanzania successfully exploited Cold War rivalries, receiving assistance from both protagonists.

China's policy on non-interference in the domestic policies of other countries and the fact that Beijing imposed no conditions apart from insisting on the "one China policy" was particularly attractive to newly independent states such as Tanzania.

Following the union with Zanzibar, Dar es Salaam became the headquarters for several liberation movements recognized by the fledgling Organization of African Unity (OAU).<sup>69</sup>

As a major external supporter of these liberation struggles, China developed strong relations with Tanzania during the Cold War.

China's policy of non-interference in the domestic policies of other countries and the fact that Beijing imposed few conditions for assistance, apart from the "one China policy", was particularly attractive to newly independent states such as Tanzania.

Tanzania's first president, Julius Nyerere, was active in establishing political relations with China and visited the PRC five times during his presidency, with numerous other visits thereafter.

Tanzania also actively supported China's efforts to acquire a permanent seat on the UN Security Council. The two countries have maintained extensive political, economic, military, and cultural cooperative relations.

In June 1964 the two governments signed The Agreement on Economic and Technical Cooperation, according to which China agreed to provide economic and technical assistance to Tanzania in the form of equipment, goods and technical expertise to the value of \$US 28 million as an interest-free loan payable over 10 years with no conditions.

Sino-Tanzanian Joint Shipping Co., a joint shipping company was established to facilitate transport between the two countries.

In 1965, while visiting China, President Nyerere signed the Sino-Tanzanian Friendship Treaty and in 1976 the famous Tanzara Railway between Dar es Salaam and Kapiri Mposhi in Zambia was completed by the Chinese Civil Engineering Construction Company with Chinese finance.

Throughout the 1980s and early 1990s, relations between Tanzania and China were eclipsed by the World Bank and IMF support for structural adjustment programmes while China turned its focus inward.

However, by the early to mid 1990's China's economic reforms under Deng Xiaoping began to take effect and China began to re-engage with Africa.

Despite having poor mineral deposits in comparison to its neighbours, Tanzania has been China's largest aid recipient in Africa, having received over US\$2 billion in aid since the 1960s. Current trade between the two countries is surprisingly modest, but with a substantial trade surplus in China's favour.

Over the years the two countries have signed many agreements on a range of issues and high-level visits have been frequent.

Military exchanges and cooperation began in 1964 and continue to be an important part of Sino-Tanzanian relations.

Since the normalisation of relations there has been a steady exchange of high-ranking military personnel together with broad-based military co-operation between the two countries.


There were also substantial transfers of military equipment through the early 1970s that reduced through the 1980s with the exception of a large transfer in 1981.<sup>70</sup>


China and Tanzania signed two cultural cooperation agreements, one in 1962 and the second in 1992, to facilitate the exchange of students. Over 80 Tanzanian students have completed studies in China. Many of these students are fluent in Mandarin and are currently working with Chinese businesses, including construction companies in Tanzania.


Since the signing of an agreement on the dispatch of Chinese medical teams to Tanzania in 1967, 16 groups of medical personnel totalling more than 585 individuals have worked in hospitals and medical centres across Tanzania.<sup>71</sup> A number of the doctors involved in these exchanges have since established their own private practices in Tanzania.


During Chinese Premier Wen Jiabao's visit to seven African nations in June 2006, that included Tanzania, he signed five agreements boosting diplomatic relations between the two countries and assisting Tanzania's health, agriculture, transport and communications sectors.


#### **Bilateral agreements between China and Tanzania**


 The Agreement on Economic and Technical Cooperation between the People's Republic of China and the United Republic of Tanzania, June 1964.

 The Trade Agreement between the People's Republic of China and the United Republic of Tanzania, February 1965.

 The Agreement between the Government of the People's Republic of China and the Government of the United Republic of Tanzania and the Government of Republic of Zambia on the Construction of the Tanzania-Zambia Railway, September 1967.

 The Barter Trade Protocol between the People's Republic of China and the United Republic of Tanzania, March 1984.

 The Agreement between the Government of the People's Republic of China and the Government of the United Republic of Tanzania on the Establishment of a Joint Economic and Trade Commission, August 1985.

 The Framework Agreement between the Government of the People's Republic of China and the Government of the United Republic of Tanzania for the Provision of an Interest-Subsidized Preferential Credit by China to Tanzania, 1996 and 1997.

*Source: Ministry of Foreign Affairs of the People's Republic of China, Cited 28 July 2006*



## China – Tanzania Aid

Apart from the 41 Chinese-funded enterprises specializing in cooperation-oriented projects and programmes, the Chinese have invested in 85 registered enterprises in Tanzania, including eight fully-fledged Sino-Tanzanian joint ventures.

As previously mentioned, Tanzania is the largest recipient of Chinese aid in Africa: US\$2 billion since the early 1960s.<sup>72</sup> With extensive liberalization and privatization programmes implemented in both countries Chinese aid, that had previously taken the form of one-off projects, has gradually changed through the 1990s from pure bilateral aid and economic and technical assistance to the more flexible use of Chinese loans.

These focus on key industries such as textiles and agriculture dispersed through the Chinese Ministry of Foreign Relations and Trade (MOFERT).

In July 2001, China agreed to partial debt cancellation for Tanzania. According to bilateral agreements, the Chinese government agreed to exempt Tanzania from the obligations of paying back 15 batches of interest-free loans which had matured by December 31, 1999, to the value of US\$19.2 million.

The debt relief accounts for one third of Tanzania's total debt owed to China in this period.<sup>73</sup> In April 2006, China donated US\$1 million to Tanzania to assist against drought-induced food shortages.

## China – Tanzania Trade and Investment

Sino-Tanzanian economic relations started in 1964 in terms of soft commercial loans.

Joint-venture cooperation began in 1981 and has gained momentum in recent years. Over 100 projects have been carried out in Tanzania in co-operation with China.

These have focused mainly on construction, but have also included other sectors such as industry, transport, communication, mining, trade, health and education.

Apart from the 41 Chinese-funded enterprises specializing in cooperation-oriented projects and programmes, the Chinese have invested in 85 registered enterprises in Tanzania, including eight fully-fledged Sino-Tanzanian joint ventures.

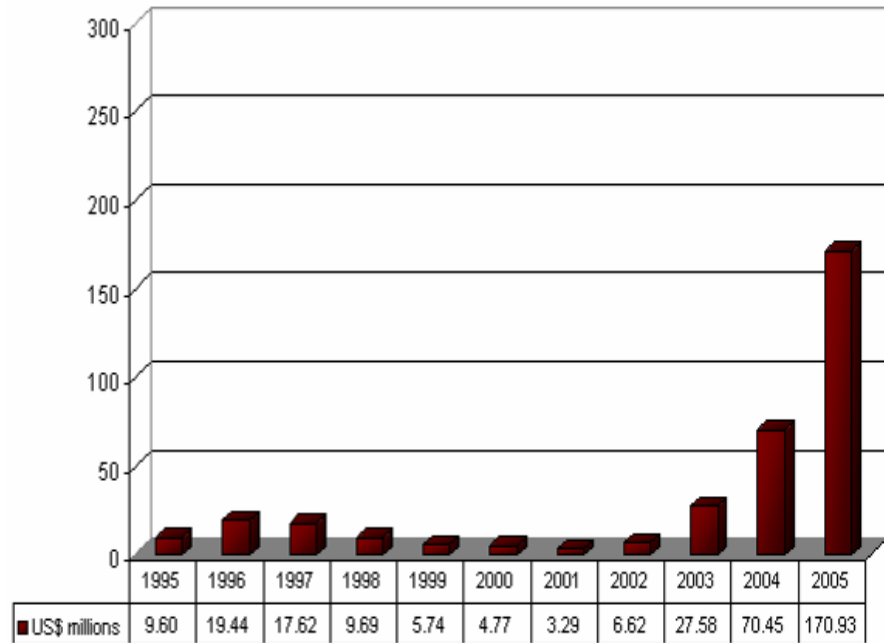
New Chinese enterprises continually enter the country, setting up new ventures or joint-ventures. These include the Sino-Tanzanian Joint Pharmaceutical Company Ltd., the Chinese Agricultural Development Company Ltd., the Jiefang Truck Company Ltd., and the Yuejing Truck Company Ltd.<sup>74</sup>

It is interesting to note that there are no joint ventures in the construction industry.

Trade volumes between Tanzania and China have seen extraordinary growth since 1965.

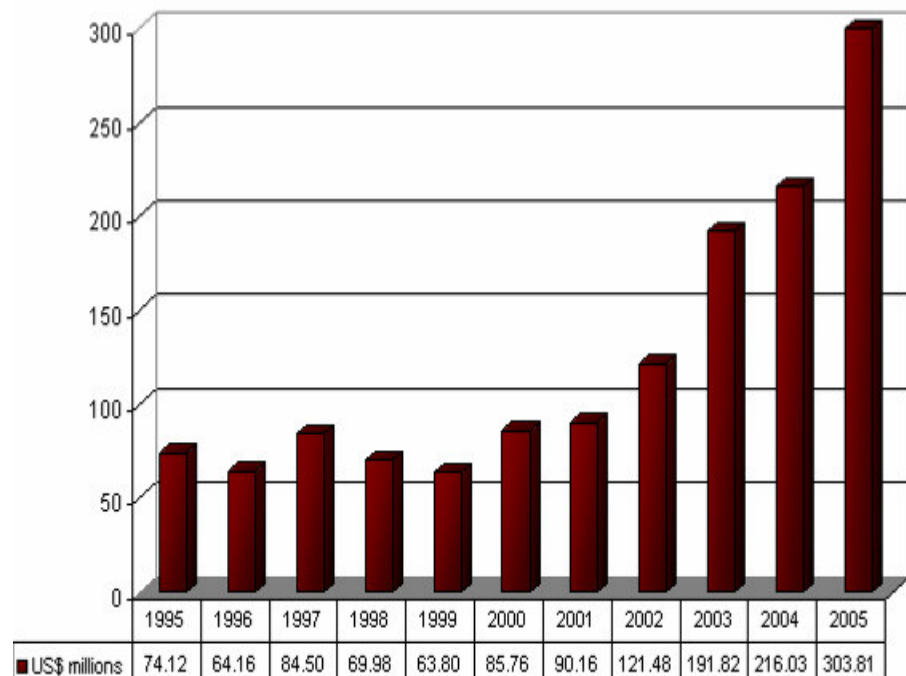
Between 2000 and 2005, bilateral trade between the two countries increased by 524 percent to reach over US\$475 million.

Figure 12: Tanzania's Exports to China (1995- 2005)



Source: World Atlas Trade Data, Tralac Analysis

Figure 13: China's Exports to Tanzania (1995- 2005)



Source: World Atlas Trade Data, Tralac Analysis

China's main exports to Tanzania are foodstuffs, vehicles, textiles, light industrial products, chemical products, mechanical equipment, electric appliances and steel. Tanzania's main exports to China are iron and copper ore, cotton, tobacco, seafood, raw leather and timber.

China continues to enjoy a significant trade surplus with Tanzania. In 2005 exports totalled US\$303.81 million while imports reached US\$170.93 million.<sup>75</sup>

This situation was eased with the introduction of China's Special Preferential Tariff agreement<sup>76</sup> and its extension to 190 items from most underdeveloped countries, including Tanzania. With the introduction of the agreement, exports from China to Tanzania rose by 141 percent increase between 2004 and 2005.

This was against a 243 percent increase in Tanzania's exports of cotton, sisal, sesame seeds, coca beans, wet goat skins, sea shells, waste plastic and seaweeds to China.

Bilateral trade data needs to be treated with caution – reflected by extremely divergent figures on the volume of trade between the two countries.

Large amounts go unreported due to tax evasion, inadequacies in the compilation and handling of records and the clandestine transfer of military equipment.

In December 1997, the China Investment and Trade Promotion Centre was established in Tanzania to offer assistance in linking businesses in the two countries.

However, a representative at the centre explained that the institution is now seriously under-utilized because of improved telecommunications, regular flights between the two countries and the ease with which Tanzanians can obtain visas to visit China.

He explained that Tanzanian and Chinese business people and companies prefer to deal directly with one another rather than through the government or third parties.

### **Chinese Construction Companies in Tanzania**

While many respondents suggested that China's long standing relations with the government of Tanzania was a factor in its attraction to Tanzania, the most important issues cited were Tanzania's political stability, the country's consistent growth, and the perception of relatively less corruption than many other African states.

Fourteen of the 31 currently registered foreign construction companies in Tanzania are Chinese.

These are all state-owned enterprises (SOEs)<sup>77</sup> that, according to one official in the Economic and Commercial Section of the Embassy, are engaged in US\$500 - 600 million worth of construction projects.

Discrepancies between this figure and the total value of all projects currently registered with the Contractors Registration Board, which declares the total value of all registered projects to

be US\$620 million, highlights the extraordinary irregularity of figures in such environments.





*Construction site in  
Dar-es-Salaam, Tanzania*

While the figure quoted by the official may be slightly inflated, a number of respondents interviewed for this study pointed out that many projects are not registered with the Contractors Registration Board while those that are registered are often under-valued to reduce taxation and other costs.

Most of the Chinese companies present in Tanzania first entered the market with government tenders and have subsequently moved into the private construction sector.

China Jiangsu is based in Nairobi and entered Tanzania to construct the new Chinese Economic and Commercial Consular building. It has not yet managed to secure any additional contracts in Tanzania. Yuetan Engineering and Construction is a very small company and CADASP Ltd. Tanzania works as a sub-contractor specializing in interior design.

### **Chinese Companies Registered in Tanzania**

-  CADASP Tanzania Ltd.
-  China Civil Engineering and Construction Corporation
-  China Geo-Engineering Corporation
-  China Henan International Cooperation Group Co. Ltd.
-  China Huashi Enterprises Corporation
-  China Railway Jiangchang Engineering Co. Tanzania Ltd.
-  China Road and Bridge Corporation Ltd.
-  China Sichuan International Cooperation Co. Ltd.
-  MCC 20 – Hainan International Ltd.
-  Yuetan Engineering and Construction Ltd.
-  China Jiangsu International Economic-Technical Cooperation Corporation East African Company Ltd.
-  Sinohydro Ltd.
-  Beijing Engineering
-  China Chongqing International Construction

*Source: Contractors' Registration Board,  
Dar es Salaam, Tanzania.*

### **Key SOE Investments**

#### **Tanzara (TANZAM) Railway**

The Tanzania-Zambia Railway is one of the largest projects China has ever undertaken in terms of foreign aid.

This 1860 kilometre long rail-road runs from Dar es Salaam to Kapri Mposhi in Zambia 1,400 km above sea-level.

The project was financed through an interest-free loan of US\$500 million from the Chinese government. Built during the height of the Cold War, it is interesting to note that the USA financed part of a road that ran parallel to much of the railway track.

The survey and design of this project started in May 1968 and the railway's construction, carried out by the Chinese Civil Engineering Construction Corporation, began in October 1970.

The project was completed in 1975 and handed over to the government of Tanzania in July 1976. This project was a mammoth undertaking involving approximately 50,000 Chinese technicians and workers.

The project required the construction of 320 bridges totalling 16,520 meters in length; 22 tunnels with a total length of 8898 meters; and 93 stations with a total floor space of 376 000 square meters.

In order to guarantee the smooth operation of the railway, China continued to provide interest-free loans, rendered technical assistance and cooperation by sending experts and technicians to assist with management or to act as consultants.

China recently provided a US\$11 million loan to Tanzania and Zambia to rehabilitate the Tanzam railway and in April 2006, the Tanzanian Presidential Parastatal Sector Reform Commission and the Zambian Privatisation Agency began discussions on the privatisation of the jointly-owned railway, which currently needs US\$25 million for locomotive repairs alone.

In July 2006 undisclosed Chinese investors were awarded a contract to rehabilitate the railway and rumours from several well-informed sources suggest a Chinese company has been identified to take over the operation of the railway.

### Shinyanga Water Project

In February 2004, the Tanzanian Ministry of Water and Livestock Production signed an agreement with the China Civil Engineering Construction Company for the construction of a major water project aimed at increasing water supplies to towns and villages in north Tanzania.

The project is expected to be completed in early 2007 and will benefit more than one million people living in the Shinyanga region. The US\$77.2 million project is the second largest freshwater project of its kind in the world.

### Chalinze Water Supply Project

In 2001, the Chinese government provided US\$11.73 million for the Chalinze water supply project in the Chalinze area of Bagamoyo District.<sup>78</sup> The area, which had long faced an acute shortage of water, had been relying on the 54 water wells dug by the villagers under a self-help development scheme; however, many had begun to dry up. Initiated in 2001 and completed in December 2003, the project provides over 7 million litres of clean water a day to 105,000 residents.



*National Social Security Fund  
(NSSF) Building, downtown  
Dar-es-Salaam*

The government of Tanzania officially welcomes Chinese construction companies as providing a cheap alternative to Western companies.

The water supply unit comprises a main station located at Wami River bridge, some 160 kilometres west of Dar es Salaam, fitted with five booster stations and 10 tanks to ensure the smooth flow of water from the Wami River throughout the 160 kilometre-long pipelines.

### **Dar-es-Salaam National Stadium**

In November 2004, China agreed to cover half the cost of a national stadium in Dar es Salaam.

The stadium, scheduled to be completed within 26 months, is designed according to the standards and specifications of the Fédération Internationale de Football Association (FIFA) and the International Olympic Committee.

With a seating capacity of 60,000 people, the stadium is already being earmarked to host national and continental soccer matches.

Construction on the project by Beijing Engineering began in January 2005 and is scheduled for completion at the end of 2006 with the handover scheduled for mid-February 2007.

The estimated total cost of the stadium is over US\$40 million, of which China will contribute US\$20.5 million.

### **Mozambique-Tanzania Bridge**

The governments of Tanzania and Mozambique contracted a Chinese company in October 2005 for a US\$24 million bridge connecting the two countries across the Rovuma River.

The two-lane 720 meter long bridge will be 13.8 meters wide, with a height of between 7.5 and 10 meters, and is to be fully funded by the governments of both countries. It is scheduled for completion in 2008.

The plans include building five kilometre-long access roads on either side of the river.

### **Relations with the Tanzanian Government**

The government of Tanzania officially welcomes Chinese construction companies as providing a cheap alternative to Western companies.

Several government officials interviewed suggested dealing with Chinese companies is considerably easier than with local companies.

Two representatives of Chinese construction companies suggested they are at a serious disadvantage compared to local and Western firms.

When pressed on this point they cited as an example the ease with which Westerners are able to obtain visas to work in Tanzania and the preferential treatment Western companies receive from the government while the Chinese are reportedly stigmatized by corrupt government officials.



## Tendering



Mafuta House Building,  
downtown Dar-es-Salaam

The tendering process for projects funded by the Chinese government is conducted in China and foreign firms are not permitted to compete. Since Public Procurement Act No. 21 was passed in 2004, most respondents described the public procurement process in Tanzania as transparent, although some expressed reservations, suggesting that corruption continues.

Local construction companies are given priority in the evaluation process, but the effects have been negligible and foreign firms continue to secure the majority of projects.

Respondents across the industry explained that there are always several Chinese companies bidding for public projects and some stated that they no longer bother to bid against Chinese companies for fear of wasting time and resources.

Many suggested that the Chinese companies routinely operate in cartels co-ordinated by the Chinese government.

They believe several Chinese companies will collude to present a range of bids and the successful company will then sub-contract tranches of work to their cartel partners.

The Chinese companies interviewed all vehemently denied such practices as did the officials in the Economic and Commercial Section of the Embassy. Such practices are obviously difficult to verify.

It was also suggested that the Chinese are “experts” in analyzing project documents and exploiting loopholes.

However, there is no reason to believe that the Chinese are any more conniving in this particular area than their foreign competitors since it is standard practice internationally for large firms to employ contract specialists to review project contracts thoroughly so as to safeguard their interests.

World Bank, IMF, African Development Bank and East Africa Development Bank (EADB) all have very positive impressions of Chinese companies.

## Securing Capital

As already explained, bonds and advance payments restrict the number of projects a company might pursue simultaneously.

The World Bank, IMF, African Development Bank and East Africa Development Bank (EADB) all have very positive impressions of Chinese companies.

With the exception of the EADB which has not yet been approached by a Chinese contractor, regularly finance their activities in infrastructural development.

In addition many Chinese companies access capital through their headquarters or from Chinese financial institutions at low interest rates, giving them a substantial competitive advantage.

The director of a prominent Tanzanian bank who has had substantial dealings with a number of Chinese construction companies spoke very highly of their conduct and their work in general.

He did suggest, however, that as relatively new players in the market, many do not have the prestige of their foreign competitors and could possibly benefit from co-operating with some of the more established European companies, either in joint-ventures or as sub-contractors.

This reflects the competitive advantage many of the larger more established foreign construction companies retain over their Chinese counterparts. Several Chinese banks are looking to expand their presence in Africa and the China Development Bank recently signed an agreement with the East African Development Bank with a view to investing in regional infrastructure and agricultural projects through it.<sup>79</sup>

## Labour

Chinese companies operating in the Tanzanian construction industry were found to pay low salaries. Despite widespread reports of companies paying below the basic minimum wage of TZSh 48,000 (US\$38) per month, none were identified in this study.

While some local companies also pay the basic minimum wage, the majority apparently pay 10-20 percent higher with the European and South African companies paying substantially more.

Chinese engineers are paid approximately 10 percent of the salaries their counterparts working for Western-based firms receive.

A number of Chinese companies were reported to maintain labourers on a casual basis and pay workers daily to avoid labour law obligations.

The majority of Chinese companies operate seven days a week, although few work more than 10 hours a day. However, it is not uncommon for them to use lighting for 24 hours a day if necessary to meet deadlines.

The Chinese workers were generally found to be well-organized and their workers considerably better-disciplined than many of the workers in local construction companies.

The majority of Chinese companies in Tanzania reported that up to 80 percent of their workers are local and one company reported that 95 percent of its total workforce is local.

A good number of companies reported that they employed locals as managers and several reported local staff at senior management levels though none reported Tanzanians being employed at executive levels. Workers in Chinese companies commonly receive on-the-job training, particularly in the operation of machinery.

A January 2005 study conducted by the International Labour Organization (ILO) on labour practices in 11 large construction sites in Tanzania found that three of the four sites with the lowest standards were operated by Chinese contractors.

A high percentage of the construction materials for projects funded by the Chinese government are procured in China with only bulky materials such as steel and cement being procured locally.

The study reports that the Chinese companies had “exceptionally low standards, with long working hours, low pay, low standard occupational safety and health (OSH) and a poor record on workers’ rights.”<sup>80</sup>

It concluded that the success of the Chinese contractors in winning an increasing number of tenders in Tanzania may, to some extent at least, be at the expense of the labour force.”<sup>81</sup>

### **Procurement of Materials**

An increasing number of Chinese suppliers are establishing themselves in Tanzania in competition with local supply companies.

However, as the price of Chinese construction materials becomes more competitive, and the quality of their products improves, Tanzanian suppliers are also procuring an increasing amount of construction materials and fittings from China either directly or via Dubai.

A high percentage of the construction materials for projects funded by the Chinese government are procured in China with only bulky materials such as steel and cement procured locally.

The bigger companies use supply companies based in China, while the smaller companies rely primarily on local supply companies.

It is important to note that the source of materials used in construction projects is usually prescribed in the contract by the consultant, not the contractor.

### **Standard of Workmanship**

The Tanzanian government has introduced technical audits for projects to be implemented at various stages of the building phase of the project, but these are rarely implemented properly.

There is a widespread perception of rampant corruption amongst building inspectors and that the government lacks both the capacity and the political will to effectively monitor the construction sector.

The quality of work done by Chinese companies in Tanzania was observed to vary considerably, reflecting the wide disparity in the capacity of the different Chinese companies operating in Tanzania.

Even though they are all SOEs, some are far more experienced in overseas operations.

A well-publicized example is China Huashi Enterprises Corporation which was contracted to renovate the Zanzibar Airport. China Huashi Enterprises has been listed as the 33rd largest construction company in China with total revenue of US\$523 million; however, the company’s involvement overseas is limited.<sup>82</sup>

In Tanzania, the company failed to adequately mobilize the necessary resources and defaulted on the contract. In contrast, a

The Tanzanian government must bolster efforts to overcome corruption, strengthen the capacity of local construction companies and develop the industry.

highly-qualified senior executive in a prominent local construction consulting firm went to great lengths in detailing the extraordinarily high quality of work done by the Chinese contractors that he has worked with.

He cited the example of a particular Chinese company that brought in a large group of highly trained technical engineers and advanced testing equipment demonstrating a level of commitment he described as uncommon amongst international firms present in Tanzania.

## **Conclusion**

Tanzania's construction industry is relatively large and certainly more established than the other countries examined.

The role of local companies remains minimal and there is little competition between foreign construction companies and local firms, which are limited to small scale projects due to their lack of capacity.

This situation, however, is expected to change as the fierce competition between Chinese companies, forces them to move down-market into small-scale projects such as housing.

This will cause local construction companies to come head to head with the larger Chinese companies, something for which the former are not as yet prepared.

The Tanzanian government must bolster efforts to overcome corruption, strengthen the capacity of local construction companies and develop the industry.

Relations between Beijing and Dar es Salaam are strong and trade between the two countries continues to increase dramatically with China enjoying a substantial surplus.

The Chinese construction companies might not be realizing large profits, but they are fulfilling their government's primary goal to consolidate China's presence in Tanzania and continue developing the country as a bridgehead into East, Southern and Central Africa and the natural resources in the region.

## Zambia



### Introduction

Formerly a British protectorate, Northern Rhodesia changed its name to Zambia on gaining independence on 24 October, 1964.

Zambia's mining sector was at its prime during the 1920s and 1930s, drawing a large number of immigrants to its small mining towns on the Copperbelt.

Zambia was at that time the largest producer of premium quality copper in the world. The combination of falling copper prices, economic mismanagement and severe drought during the 1980s and 1990s had a prolonged negative effect on the economy.

The government accordingly embarked on a strategy to privatize the copper mines with the hope of resuscitating the ailing mines; by 2001 the industry had been fully privatised.

Critics of the Zambian government continue to call for the diversification of the economy to offset fluctuations in international copper prices.

The multi-party elections held in 1991 saw the defeat of Zambia's first president, since independence, Dr. Kenneth David Kaunda to Fredrick Chiluba, leader of the Movement of Multiparty Democracy (MMD).

The Chiluba government (1991-2001) embarked on an extensive economic reform programme aimed at bringing new life to the economy.

President Levy Mwanawasa's most prominent act upon coming into power (2002) was to move against corruption in the country, leading to the prosecution of former President Chiluba.

Economic growth has consistently been below the targeted 6-7 percent level required to eliminate poverty. More recently economic growth has picked up, largely due to rising copper prices and increased output.

The privatization of the mines and establishment of new ones has lead to the redirection of accumulated state funds to other public services such as health, infrastructure and education.

The agricultural sector also experienced a boom in 2005 which increased exports and GDP.

Zambia's main exports are copper, cobalt, electricity, tobacco, flowers and cotton.

Its main imports are machinery, transportation equipment, petroleum products, electricity, fertilizer, foodstuffs and clothing.<sup>83</sup>

The country's main trading partners are South Africa, Switzerland, Tanzania, Zimbabwe, China, Democratic Republic of the Congo, Thailand and the UK.

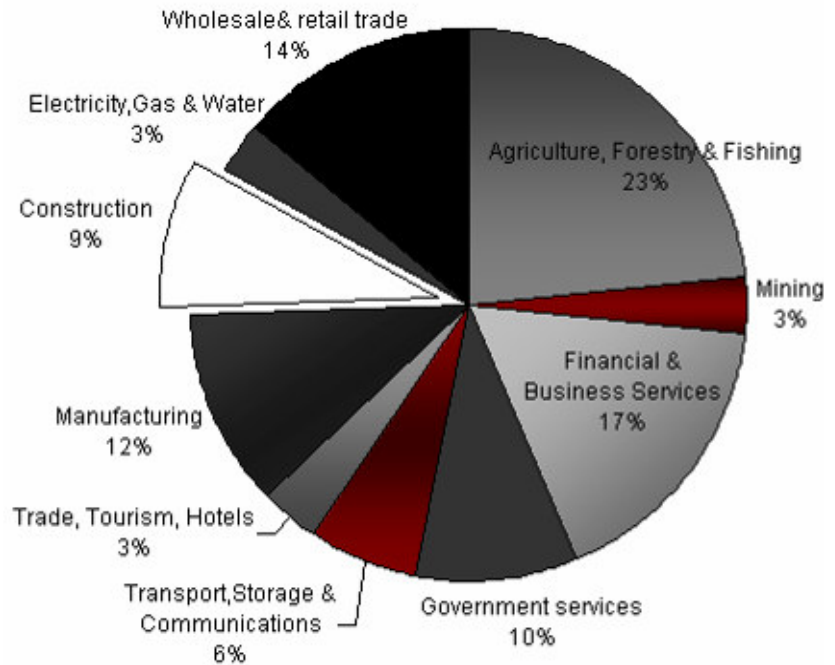
#### ZAMBIA: BASIC DATA, 2005 (CURRENCY IN US\$)

Area	752,614 sq km
Population	11,502,010
Life expectancy 40 years	
Infant mortality	19.93 per 1,000 births
GDP	\$10.59 billion
GDP per capita	US\$ 900
GDP growth	5.1%
Gov Budget	US\$1.6888 billion

## Zambia's Construction Industry

Although it accounted for nine percent of GDP in 2004, Zambia's construction industry is relatively small and has always been closely linked to mining.

**Figure 14: Zambia's GDP by Sector (2004)**



Source: African Development Bank

With the slump in Zambia's economy through the late 1980s and into the early 1990s, the construction industry suffered substantially.

The restoration of the multiparty system in 1991 not only led to renewed donor interest but also a gradual increase of investment in infrastructure over the following five years.

Very few of the 1,255 construction companies registered in Zambia are foreign, apart from the Chinese.<sup>84</sup>

Although several of the larger companies, such as Turner Construction, were initially established and continue to be owned by foreign residents, they are wholly based in Zambia.

The National Council for Construction (NCC), established in September 2003, is responsible for the promotion, development and regulation of the construction industry in Zambia.

The registration of contractors, originally administered by the Ministry of Works and Supply, is now the responsibility of the NCC, as the regulatory body for all government contracts.



**Figure 15: Class Classification of Contractor in Zambia**

Designated Class	Project Value	
	Building and Housing	Civil Engineering
Grade 1	Unlimited	Unlimited
Class 2	\$3,750,000	\$5,000,000
Class 3	\$1,875,000	\$2,500,000
Class 4	\$875,000	\$1,250,000
Class 5	\$500,000	\$375,000
Class 6	\$125,000	\$125,000

*Source: National Construction Council, Zambia, August 2006.*

One of the primary concerns of the organization has been the serious shortage of local skilled workers.

In an attempt to remedy the situation several vocational schools focusing on imparting construction skills have been established.

One of the more successful facilities is the Thorn Park Construction Training Centre established in 2001 and funded by the Department for International Development (DFID).<sup>85</sup>

The Centre has trained over 350 individuals in bricklaying, carpentry, and domestic electrical work.

As is the case in Tanzania, the primary challenge to Zambian construction companies is access to capital for bid bonds and advance payments.

To address this problem the NCC is currently campaigning for local banks to ease restrictions, thereby providing local construction companies with easier access to capital.

### **Zambia-Chinese Relations**

Only days after gaining independence, Zambia established diplomatic relations with the People's Republic of China on October 29, 1964.

Staunchly non-aligned, President Kenneth Kaunda decided to "recognize China's population of over 400 million people against Taiwan's population of 18 million as a matter of principle".<sup>86</sup>

Kaunda worked closely with Tanzanian President Julius Nyerere in engaging China. The strengthening of relations between Lusaka and Beijing helped Zambia to provide crucial assistance to independence struggles in Angola, Congo, Namibia and Rhodesia, now Zimbabwe.<sup>87</sup>

The close relations between China and Zambia continued to grow after the MMD took power in 1991. President Chiluba visited China in 1993 and in 2000.



A sign for Zambia's National Council for Reconstruction

Although Sino-Zambian relations were initially steeped in ideological rhetoric, the central role of Zambia's mineral resources has become increasingly apparent in Beijing's engagement with Lusaka.

The rapidly growing number of Chinese enterprises in Zambia is a direct result of China's investment in the Chambishi Copper Mine. Immigration figures remain unreliable, although it is believed that there are currently 3,000 to 4,000 Chinese nationals in Zambia.

### China – Zambia Aid

Official statistics for China's development assistance to Zambia are unavailable.

Yet it has been noted that China has been involved in over 35 aid projects including agricultural initiatives, infrastructure development projects such as roads and the Tanzania-Zambia (Tanzam) Railway, public buildings including the Government Complex, a maize flour factory, a textile mill, and several water supply developments.

China has accepted more than 180 Zambian students since 1978 and has provided a generous number of teachers and medical personnel to assist Zambia's Education and Health sectors.

### Chinese-Zambia Trade and Investment

Zambia is one of the very few African countries that enjoy a trade surplus with China.

Chinese exports to Zambia consist of machinery, electrical equipment, chemicals, textiles and footwear; they have hovered between US\$32 million and US\$48.5 million over the past five years or so.<sup>88</sup>

Zambia's exports to China, consisting of cotton, copper, iron ore and other minerals, were marginally higher than imports until 2004 when they experienced a three-fold increase to US\$171 million, further increasing to US\$251.8 million in 2005.<sup>89</sup>

This sudden spike in Zambia's exports to China is largely attributed to the decision by the Chinese government to grant Zambia Special Preferential Tariff Treatment from 1 January 2005.

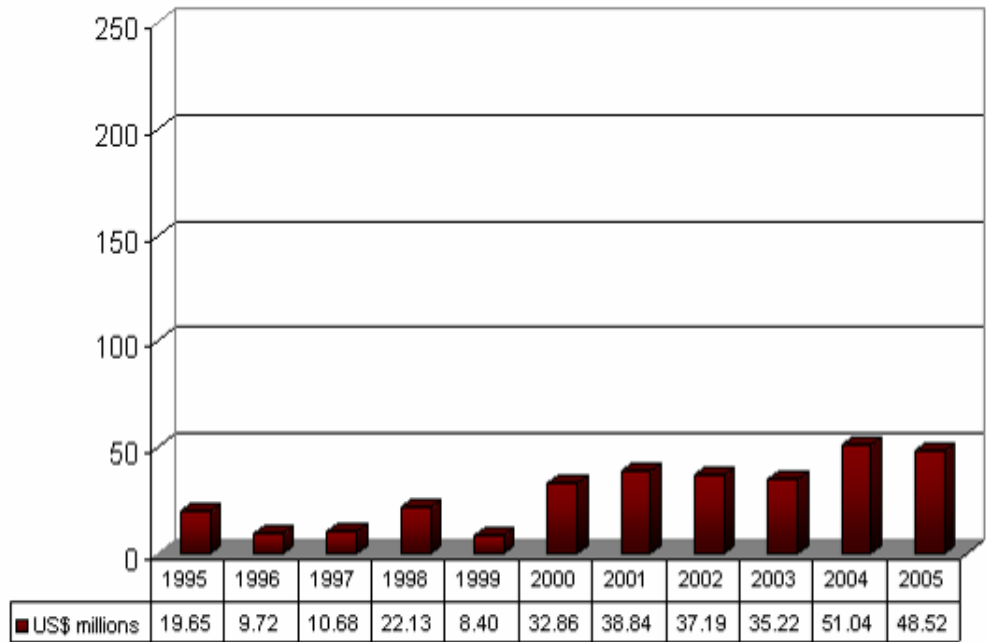
Accordingly all import tariffs on certain goods originating in Zambia were dropped.

The Chinese Embassy in Lusaka reported that more than 160 different Chinese companies employing over 10,000 local workers have invested over US\$316 million in a range of areas including mining, manufacturing, textile and ginnery, telecommunication, agriculture and construction.<sup>90</sup>

The China National Nonferrous Metals Industry Construction Co. (Group) bought the Chambishi Copper Mine in the Northern Copper belt for US\$20 million in 1998.

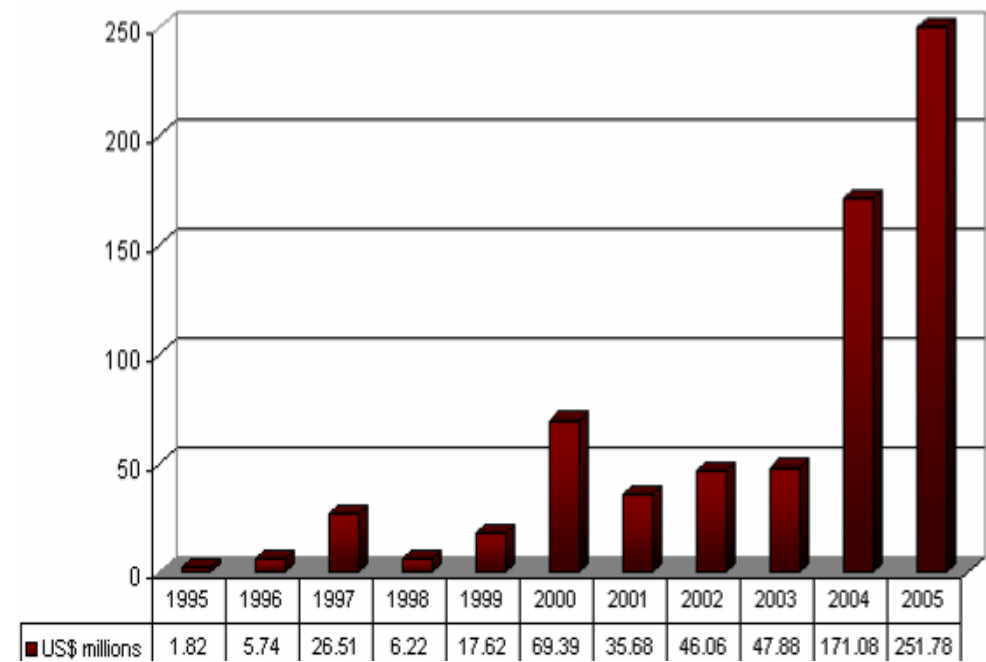
The mine started operation in July 2000, spurring a marked increase in the number of Chinese construction companies, traders, restaurants and medical clinics.

Figure 16: China's Exports to Zambia (1995-2005)



Source: World Atlas Trade Data, Tralac Analysis

Figure 17: Zambia's Exports to China (1995-2005)



Source: World Atlas Trade Data, Tralac Analysis

Over the past ten years the number of Chinese construction companies in Zambia has grown from two or three to almost 20 companies.

China's Investment and Trade Developing Centre opened in June 2001 to facilitate greater trade between the two countries.

But, as in Tanzania, the institution is already becoming increasingly obsolete as companies and business people in the two countries prefer to deal directly with one another.

### **Chinese Construction Companies in Zambia**


Over the past ten years the number of Chinese construction companies in Zambia has grown from two or three to almost 20 companies.


Approximately half of these companies are completely private, presenting a relatively unique situation relative to other countries where Chinese SOEs appear to dominate.

Several of these private companies were initially established in Zambia, making it technically difficult to classify them as Chinese companies apart from the ethnicity of the owner.

These companies do, however, continue to follow modes of operation and work practices similar to other Chinese companies and appear to have ready access to Chinese government capital through the Bank of China.

Only 11 of the estimated 20 Chinese companies in Zambia are currently registered with the National Construction Council. Four of the unregistered Chinese companies are identified as:

 China Building Materials Construction Tangshan Installation Engineering Company (CBMI) Co. Ltd.

 China Railway Construction Engineering Group (CRCEG)

 Datong Cement Co., Ltd

 China Railway Jiangcheng Engineering Co. Ltd.

One respondent suggested that Chinese construction companies have already claimed over 30 percent of Zambia's construction market and have quickly establishing a reputation for good quality work.

Wah Kong Enterprises was engaged for a DFID funded-project to build eight new medical clinics totalling approximately US\$4 million.

After the first building was completed, DFID insisted that a local contractor be identified to complete the remaining seven clinics. A local contractor was engaged for the second clinic known as the Kenyama Health Centre.

There were extremely long delays in the construction of this centre and the quality of work was so poor that Wah Kong was re-employed reportedly at DFID's insistence to complete the remaining six clinics.

## Registered Contractors in Zambia

-  China Jiangxi Corporation (Z) Ltd.
-  China National Overseas Engineering Corporation (Z) Ltd.
-  Hua Jiang Infrastructure Eng (Z) Ltd. (Private)
-  Hua Jiang Invest Ltd. (Private)
-  Wah Kong Enterprises Ltd.
-  Zamchin Construction Co. (Private)
-  Jizan Construction Ltd. (Private)
-  China Geo-Engineering Co.
-  Yangst Jiang Enterprises Ltd. (Private)
-  China Henan International Cooperation
-  China Gansu Engineering Co. (Z) Ltd

## Key SOE Projects

### Government Complex

The Chinese government originally built the Government Complex for the United National Independence Party (UNIP).

Work on the project was started in 1986 by the Chinese Overseas Engineering Company (COVEC) but was halted when UNIP lost power.

The issue went to court and ownership was ceded to the national government. In the original agreement the Zambian government was to pay for the materials and the Chinese government/company was responsible for the design and work.

However the Zambian government failed to raise the necessary funds to complete the project and applied to the Chinese government for assistance.

China provided a grant and in 2002 the Shanghai Construction Company took over the US\$8.4 million project, completed the main building that now houses the Ministry of Labour and Social Services and the Zambian Privatization Agency.

The Museum, along with the 2,000-seat Banquet Hall and a 2,000-seat conference centre remain incomplete.

### Football House

In July 2001, China Jiangxi Corporation won a US\$ 570,000 tender to construct a building in Lusaka for the Football Association of Zambia (FAZ) secretariat to be known as "Football House," across the road from the Chinese Trade Centre, also built by China Jiangxi.

The project is nearing completion but has been delayed over a disagreement on the outstanding payment of US\$45,000 due to China Jiangxi from FAZ.



*A sign at a construction site in Lusaka, Zambia*

### **Lumwana Power Project**

China Henan International Corporation recently won a bid from the Zambia Electricity Supply Corporation (ZESCO) to construct a substation as part of the power supply project for Lumwana copper mine in Zambia's Northwestern Province at a cost of US\$23 million.

The substation will provide power to the mine, which is under construction, and will be the biggest copper mine in Africa once completed toward the end of 2007.

### **Lafarge Cement Plant**

The French cement giant Lafarge has entered into a joint-venture with the Zambian company Chilanga Cement to build a new US\$85 million cement production plant in compliance with the latest technological standards.

The plant, to be located near the capital city of Lusaka, will have a 750,000 tonne capacity. It is scheduled to be operational in 2008.

China Building Materials Construction Tangshan Installation Engineering Company (CBMI), from Hebei Province in China, has been contracted for the construction of the plant and began work in May 2006.

Despite the Zambian government's full support for the project, CBMI has faced considerable difficulty securing immigration clearance for the 260 Chinese workers it argues are necessary to complete such specialized work within the given time-frame.

All the Zambian Government officials interviewed praised Chinese construction companies.

### **Lundazi-Chama Road**

China Geo-Engineering Corporation, a large SOE, claims to have invested over US\$20 million in Zambia's construction sector. The company is currently involved in rehabilitation work on the Lundazi-Chama road that is expected to be completed early in 2007.

The company employs over 600 people and claims to be paying them in accordance with Zambia's labour laws.

## **Relations with the Zambian Government**

All Zambian government officials interviewed for this study praised Chinese construction companies.

They also expressed much greater confidence in their ability to complete construction projects to a high quality and in a timely manner when compared to local companies.

A senior official in the Ministry of Works and Supply cited the example of two separate contracts awarded for two identical inland freight terminals.

One was awarded to a local company for the construction of a terminal at Katima/Mulilo, on the Zambian-Namibian border, while the other was awarded to a Chinese company for the construction of a terminal at Chirundu on the border with Zimbabwe.



The current government came to power with a strong stance against corruption which is generally perceived to have been effective against high-profile graft.

He explained that while the Chinese company was in the advanced stages of completing the project, the local company had only dug the foundations and had not yet even laid the slab.

Not everyone however is enamoured with the Chinese. In the lead-up to the September 28, 2006 national elections, Michael Sata, the leader of a prominent opposition party, the Patriotic Front (PF), stated that should he be elected, he would rid the country of “unnecessary” Indians, Lebanese and Chinese who are taking jobs away from Zambians.

A senior official at the Economic and Commercial Section of the Chinese Embassy, along with several Chinese managers interviewed at the time, dismissed the remarks as “cheap politics.”

Subsequently, Sata described Taiwan as a sovereign state, prompting the Chinese Ambassador to Zambia Li Baodong to announce that should Sata win and establish relations with Taiwan, Beijing might think of cutting diplomatic relations with Zambia.

Baodong’s statement days before the country’s national election may certainly be considered interference, but not necessarily a departure from China’s longstanding policy of non-intervention in the domestic affairs of other states, provided they recognize Beijing’s “One China Policy”.

While Sata’s presidential bid failed, he remains popular with certain elements of Zambian society and his remarks can be perceived as reflecting an underlying antipathy toward one of Zambia’s most important investors.

## **Tendering**

The process of awarding public tenders was adjusted in 2002 to give preference to local companies.

Depending on the size and category of the project, invitations could be extended to specific companies.

However the process quickly proved ineffective, resulting in poor quality construction work. As a result, the previous system of a level playing field for the award of all tenders was reinstalled in 2003.

The current government came to power with a strong stance against corruption which is generally perceived to have been effective against high-profile graft.

Most respondents described the current public procurement as “relatively transparent.” According to the National Council for Construction Act of 2003, all companies tendering for a public sector contract must be registered with the NCC and be at least 51 percent Zambian-owned.

These regulations are, as yet, rarely applied.

## **Securing Capital**

The NCC is canvassing local banks to ease regulations for local construction companies.

The Chinese companies regularly receive loans from Stanbic Bank and Barclays, but their most common source of finance is the state-owned Bank of China (BOC) whose first branch in sub-Saharan Africa was established in Lusaka in 1997.

The Lusaka branch is now a subsidiary of the main branch in Johannesburg, established in 2003.

According to one bank official, the charges vary according to the client's particular circumstances; however loans are provided at 12 percent.

The branch can provide loans up to US\$500,000 although loans over US\$250,000 must be approved by the head office in South Africa.

European Union (EU) funding is only available to companies that originate from EC/ACP States and are signatories to the IV Lome Convention 2nd financial protocol, rendering Chinese companies ineligible for direct EU funding.<sup>91</sup> The EU does however provide sector-specific support. Once the money has been allocated to the Zambian government, Chinese companies can access it through various government departments and institutions such as the Road Development Authority (RDA).

## **Labour**

As seen elsewhere, the lack of skilled and experienced workers presents a serious challenge to the development of the construction industry in Zambia.

The impact of HIV/AIDS has additionally been a significant factor in reducing the number of skilled workers. Salaries in Zambia are marginally higher than in Sierra Leone and Tanzania, although less than in Angola. The average salary for unskilled casual labour is US\$1.50-2.00 a day.

## **Procurement of Materials**

Timber, bricks, concrete and some steel products are produced locally.

Although several Chinese supply companies have established themselves in Zambia, many of the local suppliers do not feel threatened by Chinese entry into the construction supply network, believing the market is big enough for everyone.

While a growing majority of construction materials and fittings in Zambia come from China and India, the better quality fittings are still largely sourced in South Africa and Europe.<sup>92</sup>

Most of the Chinese companies interviewed claimed to source material locally, from China or third countries, depending on the project's needs.

According to Act No. 13, passed in September 2003, construction materials used in public sector contracts must comply with the Standards Act stipulated by the Zambian Bureau of Standards.

It was pointed out that Chinese companies save a significant amount in procuring materials through cash payments.

Numerous examples were provided of Chinese companies procuring local materials such as timber or river sand, offering cash on the spot, with no concern for receipts or taxation, and pushing down prices by up to 40 percent.

Numerous examples were provided of Chinese companies procuring local materials such as timber or river sand, offering cash on the spot, with no concern for receipts or taxation, thereby pushing down prices by up to 40 percent.

The larger, more established companies in Zambia, usually pay by cheque and require receipts.

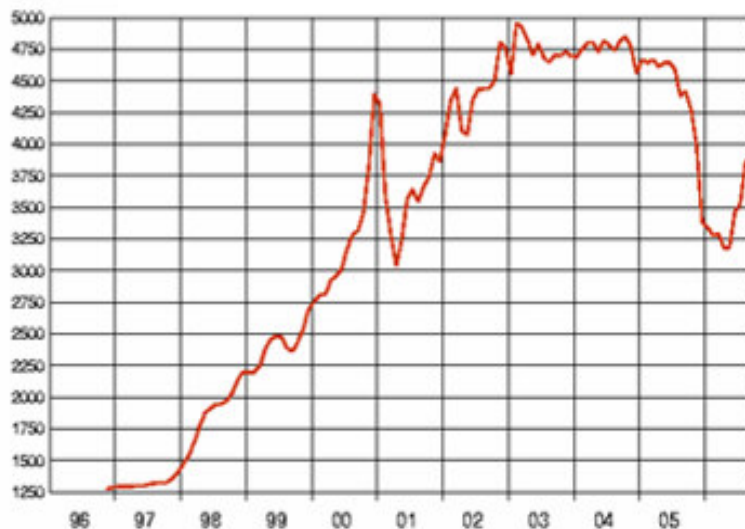
### Standard of Workmanship

Although one official at the Zambian Ministry of Works and Supply suggested that Chinese companies continue to exhibit some weaknesses in terms of fittings, he nonetheless noted that the quality of work by Chinese companies in Zambia was very high.

Other officials at the Ministry of Works and Supply went as far as to suggest that the integrity of Chinese companies and the quality of their work provided a benchmark for quality and standards in Zambia's construction industry and was easily on par with South African and European companies.

The Chinese companies remain very competitive in pricing and can generally be relied upon to complete projects according to schedule.

**Figure 18: Monthly Average Exchange Rate:  
Zambian Kwacha per US Dollar**



Source: Prof. Werner Antweiler,  
University of British Columbia, Vancouver BC,  
Canada, August 20, 2006

Chinese companies are highly conscious of their image and reputation and will go to considerable lengths to maintain them.

For example, one Chinese company was contracted to build a double-story structure valued at US\$698,800 for the Centre for Infectious Disease Research with funding provided by the US Government.

The company incurred a considerable loss on the project with the devaluation of the Zambian Kwacha which, despite a steady strengthening over the past 10 years, dropped significantly in 2001 and again toward the end of 2005.

The relatively small market has not attracted a large number of Chinese SOEs and allowed the smaller private Chinese companies, many of which were initiated in Zambia by former employees of SOEs, to flourish.

The official explained that any other company would have caused problems, but the Chinese resolved to complete the project at the original price, making no compromises on quality.

## Conclusion

Zambia's construction industry is more developed than any of the other countries studied for this report.

Local companies dominate the industry with very few foreign companies, apart from the Chinese. The effective enforcement of building regulations has resulted in relatively high standards of construction.

The relatively small market has not attracted a large number of Chinese SOEs and allowed the smaller private Chinese companies, many of which were initiated in Zambia by former employees of SOEs, to flourish.

Many of these private firms are growing fast and one can expect they may soon start expanding into the DRC where the market remains relatively underdeveloped.

Zambia already enjoys a substantial surplus in bilateral trade and the favourable terms of trade recently introduced by China will help Zambia to diversify its economy with the development of agricultural exports.

Relations between Lusaka and Beijing remain solid and are expected to grow despite comments from the opposition during the recent elections.

## Cross Cutting Trends



Winning a tender for a government-endorsed contract enables the Chinese company to secure low-cost capital from China's central banks to deal with the expensive start-up costs associated with moving the necessary equipment into place.

## Market Entry Strategies

China's Africa focus is undoubtedly geared towards resource-rich countries such as Angola, Nigeria, Sudan, Tanzania, and Zambia. The PRC is however expanding its presence across the African continent relatively quickly, with a strong preference for the larger and/or more stable markets.

Once established in a specific locality, Chinese enterprises are searching for opportunities within regional settings - as observed through the Nigerian and Guinean based firms expanding their presence into surrounding countries, such as Sierra Leone, as demand for construction grows.

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.

With access to substantial liquidity, it is no surprise that Chinese SOEs are at the forefront of China's engagement with Africa.

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 all Chinese companies.

The size and capacity of private companies is growing rapidly, but SOEs still dominate China's construction market and continue to win the majority of these international contracts.

Winning a tender for a government-endorsed contract enables the Chinese company to secure low-cost capital from Chinese 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-contractors 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.

While seeking large-scale government projects the companies will also engage in small scale private projects and make full use of their access to relatively cheap capital from Chinese banks when necessary.<sup>93</sup> It is at this juncture that the Chinese companies first encounter competition with local companies.

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







Construction Towers, Luanda, Angola

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.<sup>94</sup> 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 deepen China's penetration of the African economy, more especially its presence amongst the informal sector through the establishment of new markets.

### China's Edge

Representatives of Chinese construction companies who were interviewed for this study suggest that the competitiveness of Chinese firms resulted from their:

-  Low labour costs;
-  Hands-on management style;
-  High degree of organization; and
-  General aptitude for hard work.

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.

Surprisingly none of the representatives interviewed alluded to their access to relatively cheap capital, which is perhaps the single biggest challenge that their competitors face, as part of their comparative advantage.

SOEs can secure the necessary funds for advance payment and performance bonds from their head offices in China. 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.<sup>95</sup>

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.

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.

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.<sup>96</sup>



Chinese companies are also quickly earning a reputation for good quality and timely work, rendering them popular in both the public and private sectors.

Chinese companies may occasionally undercut competitors by up to 50 percent on the price of the overall bid.<sup>97</sup> However, such low prices are the exception rather than the rule.

This was observed with the losing bid by a Chinese company based in Guinea for a road construction project in Sierra Leone that was twice as high as the winning bid from an Italian company.

The differences between Chinese bids and the traditional market players' are usually considerably less than perceived, especially where private Chinese companies are concerned. The list of 16 tenders submitted for the construction of a school in Zambia where eight Chinese companies were relatively evenly spread through the middle of the field is common, especially in markets where the Chinese presence is more mature. Chinese companies are also quickly earning a reputation for good quality and timely work, rendering them popular in both the public and private sectors.

Each of the countries examined had Chinese Trade Centres<sup>98</sup> that provided information to both local and Chinese businesses wishing to enter the respective market either through trade or investment options.

These Centres also provided limited logistical support assisting with the organization of accommodation, transportation and, in some instances, telecommunications. Such services are usually offered for a fee.

The Economic and Commercial Counsels, which are attached to PRC Embassies but have a larger degree of autonomy than other desks, restrict their assistance to providing information.

None were able to provide solid information on trade or investment figures between China and the respective countries.

**Figure 19: List of Tenders for Construction of a School in Zambia, August 2006**

	Bidder	Bidder Price (US\$)	Bid Security (US\$)	Bid Security Source	Construction Period
1	Gabmans Const.	636,815	12,750	Invest. Trust	21 weeks
2	Cozzolona Eng.	613,363	14,500	ZANACO	32 weeks
3	China Jiangxi	670,004	20,000	Bank of China	32 weeks
4	Pilarcon Const.	708,221	14,164	Caumont Capital	18 weeks
5	China Gansu Eng	714,092	15,000	Bank of China	34 weeks
6	Kegon Services	714,608	14,292	Stanbic Bank	28 weeks
7	Datong Const.	722,511	15,500	Bank of China	36 weeks
8	Zamchin Const.	741,225	15,000	Bank of China	32 weeks
9	Hua Changsu	784,545	16,250	Bank of China	40 weeks
10	Hua Jiangsu	810,613	17,500	Bank of China	38 weeks
11	AK Electrical	831,445	16,629	Inter Mkt. Coop.	40 weeks
12	Jizan Const.	817,065	16,350	Stanbic Bank	32 weeks
13	Wakong Ent.	817,426	18,750	Stanbic Bank	36 weeks
14	Buluba Const.	841,615	18,000	ZANACO	36 weeks
15	Matty Invest.	900,727	18,250	Barclays Bank	36 weeks
16	Appollo Invest.	1,097,060	20,000	Bank of China	32 weeks

Very few local companies in the countries surveyed have the capacity for large-scale projects and rarely find themselves competing with Chinese companies in the early stages of the latter's market penetration.

They also authenticate and provide translations of official documents issued in China - such as company registrations and academic qualifications.

The Chinese government is clearly very supportive of Chinese construction companies.

All Chinese diplomatic representatives interviewed were adamant that this support was in line with free trade practices and was limited to what several described as "political support".

In practical terms the latter means assisting Chinese nationals with administrative problems that they may encounter with local authorities.

More crudely put this amounts to identifying and accessing appropriate local government officials, which can be a costly and time consuming affair, especially when seeking payment. In some instances it represents a significant advantage.

### **Competition with Traditional Players**

In countries specifically targeted by the Chinese government such as Angola, Zambia or Tanzania, 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 with their large-scale projects, 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 gained approximately 30 and 40 percent of the respective markets.

Though the Chinese presence continues to grow incrementally, these markets have since adjusted to the Chinese and have begun to stabilise.

The Chinese have only just entered Angola and are expanding rapidly causing considerable alarm as many of the traditional players find themselves unable to compete. Given the PRC's obvious interest in Angola, complemented by a corresponding scale of investment, we can expect it will be sometime before the situation stabilises.

This is in marked contrast to Sierra Leone where the construction market remains small and the impact of the Chinese construction companies is minimal, despite the country finding itself swamped by Chinese consumer products.

Very few local companies in the countries surveyed have the capacity for large-scale projects and rarely find themselves competing with Chinese companies in the early stages of the latter's market penetration.



*A cordoned off construction site, Luanda Angola*

The geographic origin of a company in China also has a bearing on the company's competitiveness.

We observed a number of cases where Chinese companies regularly subcontract local companies, albeit with strong reservations.

Many of the Chinese company representatives consulted expressed dissatisfaction over the quality of the work done by these local contractors and cited concerns over their ability to manage finances and keep to deadlines.

While Chinese companies may have a general comparative advantage over their competitors, this is not always the case. 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. A senior manager with a foreign contractor in Tanzania was resigned to the fact that companies such as his will eventually be squeezed out and only be able to engage in subcontract work for Chinese firms.

He had previously subcontracted for the Chinese and cited a number of other foreign-based companies that had also worked for Chinese companies. His overall impression of Chinese companies was very positive, a sentiment echoed by several prominent Tanzanian companies.

Two senior executives with a large Kenyan-based contractor operating in Tanzania remained very optimistic that their company will find a niche area as the construction market becomes more competitive.

When pressed as to where this niche might be, they pointed out that donors such as the EU will not fund Chinese companies directly. They went on to explain that other funders, such as the World Bank, are obliged to engage contractors from a range of countries and cannot therefore use Chinese companies for every contract, no matter how competitive they might be.

## **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 market entry were SOEs. 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 are clearly more efficient in project implementation.

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 extremely 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, the advanced infrastructure in this region of China, and the speed with which they may mobilize their procurement strategies.<sup>99</sup>

In situations where competition among Chinese companies is sparse, such as in Sierra Leone, Chinese communities appear very close-knit.

They regularly share information and equipment. Such co-operation was 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. 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 weeded out and only the most effective companies will remain.

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. In general terms, the quality of construction is dependent on the following five factors:

 Design, calculations and drawing;

 Materials specified by the consultant;

 Contractors' compliance in procurement of specified materials;

 Workmanship, and

 Effective supervision by consultants.



*The interior of a partly finished 'health centre' by a Chinese Company in Lusaka, Zambia*

Hence, the only areas where building contractors can possibly prove deficient are in the procurement of specified materials and workmanship.

Therefore supervision is of critical 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 and Western 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.

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

Procurement of materials is usually stipulated in the tender or contract agreement, though these stipulations are regularly ignored by construction companies across the board.

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.

There is a general trend of construction companies increasingly buying materials imported from China due to the cheaper prices.<sup>100</sup> Although opinions on the quality of these Chinese materials vary, the majority of respondents agreed that quality is improving.

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.

Yet there were 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.

Without exception, all the Chinese construction companies commented on the lack of skills and extremely high turn-over of local workers.

The general perception is that Chinese companies not only bring in their own labour but underpay the local labour they do employ.

With few exceptions, locals accounted for 85-95 percent of the total workforce of the Chinese construction companies examined for this survey.


While predominantly employed as unskilled casual labourers, there were many instances of locals employed in administration and managerial positions.


This is a phenomenon 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.


Chinese workers often live on-site in very simple accommodation. Chinese managers, engineers and labourers usually live together with little visible difference between them. This facilitates understanding and communication, drastically reducing costs.

A good 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.

### **Three factors have been put forward to explain the higher productivity of Chinese workers:**

 **The 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 24-hour productivity.

 **The rate of absenteeism** of Chinese construction worker 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 companies in contrast have absentee rates of practically nil.<sup>1</sup>

 **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 site diggers 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.



Without exception, all the Chinese construction companies commented on the lack of skills and extremely high turn-over of local workers.



*A sign for the PRC Economic Counsellor's office in Lusaka, Zambia*

Aside from Angola, 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 labourers in China vary enormously, generally ranging between US\$1-5 a day depending on location, ownership of the company and the legal status of the workers.

There are over 100 million migrant workers from rural areas in Chinese cities without work permits supplying approximately 80 percent of China's construction labour.<sup>101</sup> The conditions are usually poor and underpaid by global labour standards.

Chinese workers can expect a salary increase in the order of between 30 and 400 percent as an incentive to work overseas.

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 cutting-edge technology used in China.

Since Chinese companies compete on price they will continue to push down the price of labour, although they will have to contend with wage increases to retain competent workers.

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 suggested that due to their longer presence and better knowledge of the market, European companies are more thorough and able to identify capable local personnel.

### **Prison Labour**

There are widespread rumours of Chinese construction companies in all countries surveyed using Chinese prison labour. We found no evidence to support these rumours. In Tanzania, an

Chinese construction companies face many of the same challenges their local and foreign competitors. The most widely cited challenge in all the countries surveyed was the serious shortage of locally-sourced skilled workers and reliable labour.

internal report by a European diplomatic mission suggested prisoners were being used in the construction of the National Stadium and in Zambia a mid-level government official suggested that prisoners were possibly being used in the construction of the Chinese embassy's residential compound. On investigation, neither proved true.

With regards to Angola, the comment came from several respondents<sup>102</sup> that some Chinese construction labourers are essentially convicts that have been faced with the choice of jail in China or labour in Africa.

Once the sentence has been completed, the Chinese worker is reportedly allowed to bring his wife through to the country or he may be repatriated. None of these assertions were proven however.

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 in the case of Angola.

## Challenges

Chinese construction companies experience many of the same challenges faced by their local and foreign competitors.

The most widely cited challenge in all the countries surveyed was the serious shortage of locally-sourced skilled workers and reliable labour. This problem was commonly offered as the rationale by most companies for their lack of local recruitment, particularly in Angola.

Another serious challenge is the lack of infrastructure across most of the continent, notably in countries such as Sierra Leone and Angola which have little to no infrastructure as a result of protracted civil wars.

One challenge unique to the Chinese was the issue of communication. In countries where they have been established for some time, the Chinese workers generally communicate in English or, at times, local languages.

In Angola, communication continues to be a problem purely because English is not widely spoken, and it has only been two years since the Chinese construction companies entered the market in 2004.

In Sierra Leone a number of government officials and sub-contractors complained that the building plans used by the Chinese were written in Chinese script. These were incomprehensible to the local engineers and required the continued involvement of the Chinese in on-going maintenance.

It is anticipated that this problem will diminish over time. In Tanzania for example, Chinese companies regularly use building plans written in both Chinese and English to overcome this problem.

### Corruption

Very few of the Chinese construction companies consulted were even remotely interested in entering into a joint partnership with a local partner. The main problem they envisaged with such an arrangement was trust while several suggested that local partners would have very little to offer.

Corruption is widespread across much of Africa and according to the NGO Transparency International, the countries surveyed in this report are among some of the worst culprits. While the level of corruption varied across the four countries surveyed, countless accusations were encountered that government officials and even building consultants were being bribed to leak information on tenders, approve sub-standard work or inferior quality materials. These practices appear more common in Angola and Sierra Leone and in line with the recent findings of Transparency International, there appeared to be considerably less corruption in Zambia than Tanzania. In as much as the vast majority of Chinese respondents expressed frustrations with the situation as regards corruption they also saw it as a factor of doing business in Africa.

**Figure 20: Transparency International Corruption Perceptions Index (2006)**

Country rank	Country	CPI Score
96	Tanzania	2.9
116	Zambia	2.6
129	Sierra Leone	2.4
151	Angola	2.0

*Source: Transparency International*

### Joint venture business models

Even though joint ventures present an excellent opportunity for skill and technology transfer, there are very few examples of joint ventures between Chinese companies and local firms in the African construction industry.

There were none in Tanzania and only one in Zambia which were reportedly successful. In Sierra Leone one example of a joint-venture was discovered, although details concerning ownership were very murky.

It was not clear if it involved the government of Sierra Leone, as widely reported, or a local individual, as reported by a senior manager at the Bintumani Hotel. Whatever the case, the local partner is not apparently involved in the day-to-day operation of the business.

Very few of the Chinese construction companies consulted were even remotely interested in entering into a joint partnership with a local partner.

The main problem they envisaged with such an arrangement was trust while several suggested that local partners would have very little to offer.

Their preferred mode of engagement with local businessman and corporations was through sub-contracting arrangements for discrete sections of work.

Many respondents suggested that Chinese technology is most “appropriate” for Africa. The techniques and practices many of the Chinese companies initially bring are low-tech and relatively easy for African construction companies to emulate, as opposed to the often specialized and capital-intensive equipment used by Western and South African companies.

One local construction consultant explained that while it would be very difficult to establish a joint-venture arrangement for contractors in the day to day operations of the construction industry.

A more realistic option was to explore opportunities in the consulting sector, where responsibilities could be easily divided according to particular areas of experience and expertise.

Angola presents an interesting exception. In February 2006 the China National Overseas Engineering Corporation (COVEC) publicly expressed interest in entering into joint-venture initiatives with the Angolan government.

The company’s Deputy Director General Shi Ping stated the company’s willingness to finance some projects, in a bid to compete on an international basis in the Angolan construction industry, especially in the sphere of public-private partnerships.<sup>103</sup>

A number of comments were received from government officials about the desirability of making it mandatory for foreign companies wanting to invest in the sector to form joint-ventures with local companies. This is seen as an effective method to enhance skill transfers and improve the capacity and output of the local construction industry.

However, an infinite number of schemes have been developed to circumvent legislation of this nature in other industries.

Therefore, before such legislation is passed with regard to the construction industry, the loopholes present in other industries would require thorough scrutiny to prevent similar occurrences in the construction industry.

By contrast, the potential opportunity for co-operation between Western and Chinese companies in Africa’s construction sector is vast.

Where many of the foreign-based companies that used to dominate the market are rapidly losing market share to Chinese companies, sub-contracting remains an option. In addition, as mentioned, many of the Western firms retain an edge over Chinese firms in terms of technology.

### **Capacity building**

Many respondents suggested that Chinese technology is most “appropriate” for Africa.

The techniques and practices many of the Chinese companies initially bring are low-tech and relatively easy for African construction companies to emulate, as opposed to the often specialized and capital-intensive equipment used by Western and South African companies.

While some Chinese companies maintain the use of low-level technology, others are slowly adopting more sophisticated methods and technology, utilizing comparatively cheap equipment that is not beyond the reach of local firms. The technologies and methodologies employed by Chinese companies are generally easier to transfer to the local industry.

The challenge, nevertheless, is to encourage such transfers.

With the exception of Angola, (where the majority of the Chinese companies import all their requirements in terms of materials and labour directly from China due to the lack of local skills and the availability of equipment) the Chinese construction companies interviewed in the other three countries surveyed claimed that they provide employees with on-the-job training, focusing particularly on machine operation.

A good number of the Chinese companies surveyed cited examples of local employees who left after a certain period to establish themselves as contractors, clearly indicating skill transfer.

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.<sup>104</sup>

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. Many of the Chinese companies interviewed, particularly in Tanzania and Zambia, had however identified dedicated local staff members – a phenomenon they expect to increase with time.

Though neglected until the late 1980's, the contribution of infrastructural development to broader economic and social development is now widely acknowledged.<sup>105</sup>

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 centres and an array of government building has made a clear and definite contribution to improving the lives of people across Africa.

## Into the Future

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. Oil accounted for 99.9 percent of Angola's total exports to China in 2005. The same year minerals accounted for 97 percent of Sierra Leone's and 87.4 percent of Zambia's total exports to China with a similar pattern in Tanzania, where minerals accounted for 92.1 percent of the country's total exports in 2004.

Agricultural products including cotton, tea, coffee, cocoa and tobacco accounted for 3.6 percent of Tanzania's total exports to China and at present remains the best opportunity for expansion, especially considering the introduction of the Special Preferential

Tariff Treatment that the Chinese government introduced in an attempt to correct the enormous trade imbalances and promote development.<sup>106</sup>

Chinese companies are increasingly involved in forestry, though reported exports are relatively small.

In 2004, Tanzania's reported timber exports to China reached US\$1.3 million, accounting for only 1.85 percent of Tanzania's total exports to China.<sup>107</sup>

In Angola and Zambia reported timber exports to China accounted for 0.001 and 0.01 percent respectively, of total exports to China in 2005.

In the absence of sustainable logging practices this must be considered a short-term activity as Africa's forest reserves are rapidly being depleted. In Tanzania for example, conservative estimates suggest trees are being felled at approximately four times the sustainable rate.

The Chinese have shown little interest in diamonds or precious stones. China's Ambassador to Sierra Leone, Cheng Wenju, pointed out with considerable pride at an event celebrating the 35<sup>th</sup> anniversary of relations between the two countries that no Chinese companies are involved in Sierra Leone's diamond industry.

In terms of other mining activities, aside from the China National Nonferrous Metals Industry Construction Co. (Group) purchase of the Chambishi Copper Mine, there is little large-scale activity in the mining sector of the countries surveyed. This does not, however, rule out the existence of small private Chinese actors involved in small-scale mining activities; nor does it suggest that China does not procure minerals from Africa. For the moment, it seems that Chinese mineral processors acquire their raw materials originating in Africa from established African traders, such as South Africa, instead of embarking on direct extraction themselves in the country or origin<sup>108</sup>.

With an increased presence in Angola and Zambia, however, the Chinese can be expected to increase their both their presence in resource-rich Democratic Republic of Congo (DRC) and their direct engagement in extractive operations. In addition, the mineral deposits in Tanzania and its proximity to Zambia; the recent discoveries of commercially viable oil reserves in Kenya and Uganda; and the extensive reserves in neighbouring Sudan all make East Africa an attractive destination for Chinese investment.

Looking at other infrastructure sectors, African telecommunications have recently seen the arrival of Chinese companies such as ZTE and the private Chinese multinational Huawei.<sup>109</sup>

Huawei has been lauded for introducing telecom products at prices which are affordable to the African consumer.

In Kenya, for example, the price of a fixed line has dropped by 65 percent following Kenya Telecom's procurement of digital



Even though Africa's markets present a new frontier for Chinese products and services, it is the access to raw materials that is the underlying force in China's engagement with the continent; it will remain at the forefront of Chinese companies' rapid involvement in Africa's extractive industries.

equipment made in China.<sup>110</sup> Huawei has since set up an office in Tanzania, and a training centre in Nigeria.

Besides substantial investment in Angola's telecommunications industry, ZTE's products are available in 15 other African countries<sup>111</sup>. Although Huawei and ZTE are actually equipment manufacturers, in Africa they have been bidding for telecoms operation tenders.

SOE China Mobile has also tendered a US\$ 4 million bid for Nasdaq-listed Millicom International, a global mobile operator with African subsidiaries in Chad, DRC, Ghana, Mauritius, Senegal, Sierra Leone and Tanzania.<sup>112</sup>

In Africa, the mobile phone is increasingly popular on a pay-as-you-go basis. For the Chinese, this another lucrative sector in which they carving out a market share at the expense of existing market players.

For Africans, entry by the Chinese companies promises to substantially lower the sometimes prohibitive costs of such technology. In addition, the Chinese are installing and upgrading it much faster than other foreign-based service providers.

Even though Africa's markets present a new frontier for Chinese products and services, it is the access to raw materials that is the underlying force in China's engagement with the continent; it will remain at the forefront of Chinese companies' rapid involvement in Africa's extractive industries.

In light of the importance of natural resources to China's engagement with Africa, we can expect the location of oil and minerals to dictate the geographic focus of China's future engagement on the continent.

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On a political level, China's diplomatic presence is relatively evenly spread across the continent and continues to grow. It was observed that substantial (re)construction of Chinese diplomatic missions were being undertaken in several of the four country case studies.

The third Forum on China-Africa Co-operation (FOCAC) held in Beijing in November 2006, further outlined promises for increased economic co-operation through political means.

Significantly, the infrastructure and energy sectors were highlighted as key sectors for such co-operation the 2006 "Beijing Action Plan". In addition, China has pledged US\$3 billion in preferential loans and US\$2 billion in preferential buyers' credits, as well as a further US\$5 billion to be used in a development fund for Africa.

This fund is to "encourage Chinese companies to invest in Africa and provide support to them".<sup>113</sup> It is anticipated that such mechanisms will further Chinese companies' market penetration in Africa, especially in the construction and infrastructure sectors.

The Chinese are well positioned to take advantage of developing market demand and new discoveries of natural resources wherever they might occur and to be able to also weather the political competition from countries such as the US.

## Conclusion



It rather is 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.

China's interests in Africa are guided primarily by economic imperatives.

Construction companies, both SOEs and the growing number of private companies, earn hard currency and provide a convenient platform to penetrate new markets and secure access to natural resources through investment, trade and military assistance.

In this respect, Chinese companies are little different from Western 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 companies naturally prefer to position themselves in resource-rich countries with booming economies such as Angola or in countries where there is also a long history of relations with China, such as Tanzania.

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.

It is important to note that considerable variation exists in terms of the size, capacity and capability of Chinese companies 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 generally have more experience, improved equipment and technology and greater access to capital.

On the other hand private companies, though still small in number, can be expected to be more efficient.

Several Chinese companies admitted having made mistakes on initially entering Africa.

But as the head of a prominent Tanzanian bank suggested they "learn faster than their Western counterparts." Chinese companies appear to adapt to the African environment more readily and quickly find their feet providing them with a strong competitive edge.

The entry of the Chinese construction industries into Africa, albeit controversial, has marked a period of rapid infrastructural regeneration.

In Angola, for example, which has only recently emerged from civil war, the rehabilitation of vital roads and railways and development of infrastructure is recognized as a national priority to sustain economic growth and encourage further investment.

Many African states, particularly resource-endowed states are finding themselves in stronger positions vis-à-vis the latest scramble for Africa.

Chinese companies have made a positive contribution by their ability to provide infrastructure more efficiently and cheaply than other alternatives.

The Chinese construction companies are extremely competitive and present a serious threat to other foreign-based companies in Africa.

Competition between Chinese construction companies and indigenous firms, which lack the capacity for large scale projects, has been minimal. However, this can be expected to change as Chinese companies move down-market into smaller scale projects, such as housing, once the demand for large-scale works decreases.

In most instances, Chinese construction companies regularly engage significant numbers of local labour and sub-contractors transferring skills and technology in the process. However, there are 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.<sup>114</sup>

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.

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. In addition, the capacity of existing bodies such as the Bureau of Standards, Public Procurement Authority in Zambia and Tanzania, should be strengthened. The Engineers Registration Board could be mobilized to see that this is done.

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. They should also be able to enforce conditionalities linked to contract awarding.

## Engaging China on Development



*A construction work team on a break in Zambia*

The Chinese government has demonstrated little to no inclination toward becoming involved in multilateral development initiatives. Chinese government representatives interviewed for this study suggested that the level of Chinese aid is of little consequence in comparison to assistance from Western donors, pointing out that involvement in such arrangements is incompatible with PRC's policy of non-intervention.

China instead regularly reaffirms its commitment to the delivery of bilateral assistance compatible with the means at its disposal. Focused on mutual prosperity, China proclaims to have no interest in the domestic affairs of African states - this is very attractive to many African governments.

While attempts to engage the Chinese government directly on issues of bilateral aid have been less than successful, the rapidly growing number of NGOs and civil society actors in both Africa and China may yield better results. They could approach the PRC on softer issues such as occupational health and safety that the Chinese government openly recognizes requires improvement in China's own domestic industries.

The rhetoric of the Chinese Communist Party's 5<sup>th</sup> and 6<sup>th</sup> year plan acknowledged the importance of environmental and safety concessions in industry and, in August 2005, several regulatory measures were put in place to safeguard these.

Encouragement to implement these standards in overseas projects may prove more successful. In addition, the US has been lobbying for China to have a larger role in multilateral bodies as the World Bank and IMF in the hope that an increased role in these institutions will encourage more 'responsible' actions as a rising global power. It remains to be seen how the self-evident tensions between China's own policies of non-intervention and the international financial institutions' conditional assistance will be resolved.

Interestingly, China's contentious policies of non-intervention were the same approach the Americans used at the close of the nineteenth century as they first entered East Asia where spheres of interest had already been firmly established by European powers.

This approach worked well until the United States established interests on the continent which needed to be defended. A question to be further explored is thus whether the interests the PRC government is developing on the continent will lead to political intervention from China, and whether the policy of non-intervention will be as immutable in the future as it is now.


### Areas for Further Research


The study identifies several areas which require further examination:


 **Further exploration of the support provided by the PRC government to Chinese construction companies.**


Interestingly, the China's contentious policies of non-intervention was the same approach the Americans used at the close of the nineteenth century as they first entered East Asia where spheres of interest had already been firmly established by European powers.

Evident in cases such as in Angola, linkages between MOFERT and Chinese companies in other countries are not always apparent.

 **Repatriation of profits** from Chinese construction contracts. Precisely how is this done and what benefits to the companies enjoy.

 **The nature of Chinese companies', especially SOE, supply chains** in terms of logistics and processes. Many Chinese companies import materials wholesale from China, substantially undercutting local market prices.

 **The impact of AIDS** on the quality of local labour vis-à-vis Chinese companies and the potential impact of AIDS on the Chinese labour force in Africa needs to be explored.

 **The social impact of the Chinese immigrant population in African countries.** The numbers of recent Chinese immigrants in the countries under study are inconclusive; however there has been a large influx of Chinese nationals into Africa. The broader impact of this phenomenon should be unpacked.

## Appendix I

Listed below are several Chinese companies that have already engaged in major projects in the four country case studies.



*Construction site in Luanda,  
Angola*

### Anhui Construction Engineering Group Company Ltd. (ACEG)

Anhui Construction Engineering Group Co., Ltd. (ACEG) is an SOE owned by the Anhui provincial government. Established in 1952, the company has over 10,000 employees and focuses on road and bridge construction, water and electricity projects, building decoration, equipment installation, metal structural parts, cement products, windows and doors, construction machinery, real-estate development, the supply and sale of materials, scientific research, design, schools, hotels, and restaurants. ACEG has contracted and implemented projects including a textile mill, sugar refinery, pharmaceutical factory, army barracks, military college, air force and navy bases, dam, canal, school, hospital, office building, houses, water supply networks, water tanks, and stadiums.

In 1992, ACEG was among the first companies to qualify as "General Contractor of Grade One" by the Ministry of Construction of China. In 1993, ACEG was issued the Franchise by The Ministry of Commerce of China, enabling the Company to contract overseas projects and send labour abroad. In 1997, ACEG was issued the Franchise which enables the Company to deal with import-export businesses. The company has worked in Tanzania, Algeria, Sri Lanka, Iraq, Kuwait, Madagascar, France, Russia, Finland, Denmark, Singapore, the US, Pakistan, Afghanistan, Sierra Leone and Mongolia.

### China Civil Engineering and Construction Corporation

China Civil Engineering and Construction Corporation (CCECC) is an SOE. More than 40 years old the company is based in Beijing and has operations in Asia, the Middle East and Africa. CCECC engages in construction contracting, design, consulting services, economic and technical cooperation and trading services. Its Hong Kong branch has also been actively involved in various projects such as the construction of ports, roads, drainage and railways.

### China Complant

Since its foundation, China Complant has been authorised by Chinese government to fulfill the assignment of the implementation of economic aid to foreign countries by undertaking turn-key projects and offering technical assistance where necessary. China Complant also plays an important role in international civil engineering contracting and providing labour services.

### China National Electronics Import and Export Corporation (CEIEC)

China National Electronics Import and Export Corporation, the largest foreign trader of electronics in China, is a comprehensive foreign trade enterprise with import and export of electronic technology and products as well as other services.





*Construction site in Luanda, Angola*

The company, established on April 15th, 1980, now has 56 solely-funded and proprietary subsidiaries both at home and abroad, 5 offices abroad and more than 200 joint ventures. By the end of 2000, CEIEC, with its total assets reaching RMB 8.4 billion (US\$ 1.05 billion), had brought about the total sales income of RMB 7.5 billion (US\$ 948 million) and the gross profit of RMB 68.65 million (US\$ 8.7 million). CEIEC, at present, has a staff of 4500.

The company's primary concerns include importing and exporting of electronic technology, equipment, elements and products, as well as undertaking of government trade, contracting international engineering projects, labor service, co-production, joint venture operation, processing with supplied materials, samples and blueprints, setting up maintenance and after-sale service centers by foreign electronics manufacturers, sales agents, consignment sale of spare parts; software development and financial leasing, packaging and transportation, exhibition and advertising, market information and legal consultation service in the foreign trade, and etc.

Since its establishment, CEIEC has concentrated on foreign-based contracts. The company's trade volume from 1980 to 2000 totaled US\$ 24.2 billion. Since 1992, CEIEC has been ranked in the top ten among the 500 largest Chinese importers and exporters with an annual export volume of US\$ 1 billion for several consecutive years. The company has established trade relations with more than 140 countries and regions in the world.

#### China Geo-Engineering Corporation

China Geo-Engineering Corporation is based in Beijing and focused on heavy and civil engineering construction in hydrogeology, engineering geology, mineral prospecting and exploration, water well drilling and water supply. The company also provides technical advisory services and labour co-operation; undertaking of joint ventures abroad and projects of economic assistance to foreign countries; supply of complete sets of equipment, single items of equipment and spare parts for contracted and economic assistance projects

#### China Henan International Cooperation Group Co. Ltd. (CHICO)

China Henan International Cooperation Group Co. Ltd. (CHICO) is an SOE located in the city of Zhengzhou in Henan Province of Henan. It is a large-scale group corporation operating in the domestic Chinese market and internationally. CHICO has been involved in more than one hundred projects in over sixty countries including countries in Asia and Africa. The company focuses on a broad range international construction projects and international trade.



*The Port at Luanda*

### **China Huashi Enterprises Corporation**

Based in Sichuan Province, China Sichuan Huashi Group Corporation Ltd. (China Huashi Enterprises Corporation) is an SOE that originated from the No.1 Engineering Bureau and South-West Engineering Administration of Construction Ministry of China and Construction Engineering Bureau of Sichuan Province. Established in 1950, the company can provide surveys, design, research, and the construction of large scale civil and industrial projects. China Huashi also engages in manufacturing, the sale of machinery, real estate development, project supervision, technical consulting and trade.

### **China Jiangsu International**

China Jiangsu International Group is a comprehensive transnational group of enterprises. Its principal businesses cover overseas and domestic contracted engineering projects, overseas labour service, import & export trading, investment in industries, exploitation of high-grade science & technology and development of real estate. It has over 50 member companies, of which 30 are based abroad.

The core of the group is China Jiangsu International Economic-Technical Cooperation Corporation (CJIETCC). Approved by the State Council, CJIETCC has undertaken projects linked to China's overseas economic aid as well as other private overseas projects.

CJIETCC is present in over 80 countries and regions and has established 30 branches and offices abroad, with annual contract value and turnover exceeding US\$ 100 million. The corporation has received such accolades as one of "500 All-China Giant Service Firms" by the State Council, one of "Top 100 Firms in International Economic Cooperation & Trade" by the State Statistics Bureau, one of "Top 30 Firms in the Line of Foreign Economy" and a "Key Enterprise Earning Foreign Exchange under Special Care" by the Chinese Ministry of Foreign Trade & Economic Cooperation.

### **GGC Overseas Engineering Company**

CGC entered Angola in November 2003, when it established an Angola Management Division, registering as CGC Overseas Construction Angola LTA, one of only two registered Chinese companies in Angola. CGC has three divisions: Developing, Engineering and Material & Resource.

CGC Overseas Construction Angola LTA (known as CGCOC) has registered capital of US\$26 million and investors which include Sinopec Star Petroleum Co., Ltd, China Geo-Engineering Corporation, Sichuan Tianchen Group, the PRC Ministry of Land and Resource / Shanxi Geological Mineral Prospecting Development Agency, China National Chemical Engineering No.13 Construction Company and as well as individual investors.

One of the first SOEs to enter the global market, over 30 years, COVEC has undertaken over 1,000 large and medium-sized international projects. The corporation has won a cumulative total of US\$2.6 billion worth of contracts, with US\$2.2 billion in turnover.

As a result of the outstanding performance in overseas markets, CGCOC has become one of China's key external trading companies and was nominated the standing as committee director of the Beijing and Business Association and the Vice-President of Foreign Economic and Technological Cooperating Association in Beijing.

#### Chinese Overseas Engineering Corporation (COVEC)

Formerly an enterprise under PRC's Ministry of Foreign Trade and Economic Cooperation (MOFTEC), China National Overseas Engineering Corporation (COVEC) joined China Railway Engineering Corporation (CREC), to consolidate its international project contracting. COVEC specializes in China-financed foreign-aid projects, investment in overseas businesses, leasing business of large engineering equipment and machinery, overseas labour service and import/export business.

One of the first SOEs to enter the global market, over 30 years, COVEC has undertaken over 1,000 large and medium-sized international projects. The corporation has won a cumulative total of US\$2.6 billion worth of contracts, with US\$2.2 billion in turnover.

COVEC has been listed by the US magazine Engineering News Records as one of the top 225 international contractors for several years starting, from the mid-1990's and has operations in West Africa, Southeast Africa, South Pacific and Southeast Asia. COVEC is one of the 167 SOEs selected for preferential support by China's State-owned Assets Supervision and Administration Commission to be a flagship enterprise.

#### China Road and Bridge Corporation

The China Road and Bridge Corporation was inherited by China's Department of State-owned Assets Supervisory and Administration Commission as one of China's larger SOEs. Initially established in 1979 as the China Highways and Bridges Engineering Company, the present corporation was established in 2005. Primarily engaged in project contracting, construction, design, supervision, counselling and international trade operations, the company has five categories affiliates and 31 overseas branches.

#### Golden Nest International Group

The Golden Nest International Group (Pty) Ltd. is a company which is owned by Chinese investors and registered in South Africa. Since its establishment in 1997 the company has evolved into a large multinational group with its business interests ranging from construction, property development, mining and smelting, light industry, medicine, finance, culture, education, tourism and trading.

 Guangdong Xinguang International Group



*Group of Construction workers on site in Lusaka, Zambia*

This company, based in Canton province is a state-owned enterprise that has recently been granted a contract to build cold-storage vessels for the Angolan government in all the provinces. The company is present not only in Angola, but in Nigeria as well, where it has also just been granted a US\$ 2 billion project. The company is also present in the USA and Macau. Its presence in Macau of course gives it a distinct advantage in terms of the language barrier- cited as one of the most challenging aspects of working in Angola.

As one of the companies on the list of 35 pre-selected Chinese companies permitted to tender in Angola, the Guangdong Xinguang International Group was encouraged by the Chinese government to enter the Angolan market, and succeeded in winning the contract from all competitors, including the mandatory other two Chinese companies that participated in the bidding process.

 Guangsha Group

Since the 1950s, Sinohydro has built almost 100 hydroelectric stations in China. Up to now, Sinohydro Ltd. was engaged in more than fifty other countries in areas of Asia, Africa, Europe and America.

Headquartered in Hangzhou, capital of east China's Zhejiang Province, the Guangsha Group is one of the first of 49 large group trial units approved by Ministry of Construction and one of five key backbone enterprises in Zhejiang province. The group has expanded from a small company to a multi-trade group covering the fields of culture, film and television, tourism, finance and trade over the past decade. Its output value climbed to US\$ 670.7 million last year and its net profits totalled US\$19 million.

 Sinohydro Ltd.

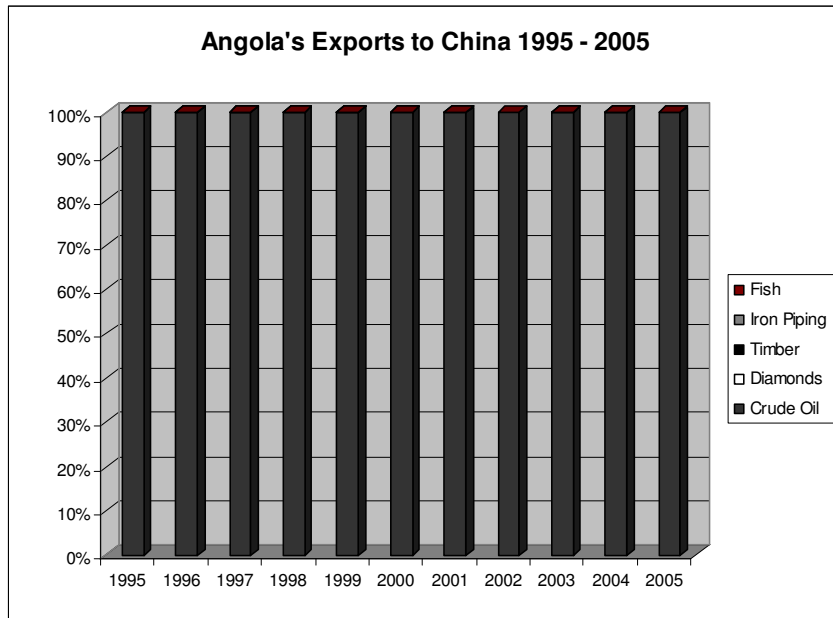
Sinohydro Ltd. is an SOE and the largest hydraulics and hydroelectricity construction company in China. Established in the 1950s, the company focuses on projects involving hydraulics and hydroelectricity construction the company provides services in design, construction, consultation and the supervision of mechanical and electrical equipment, manufacture of machinery, installation of electrical equipment roads, railroads, harbours, and airports. The company also provides services in investment, finance, real estate and international trade.

Sinohydro has built almost 100 hydroelectric stations in China, and has engaged in projects in more than fifties in Asia, Africa, Europe and America.

## Appendix II

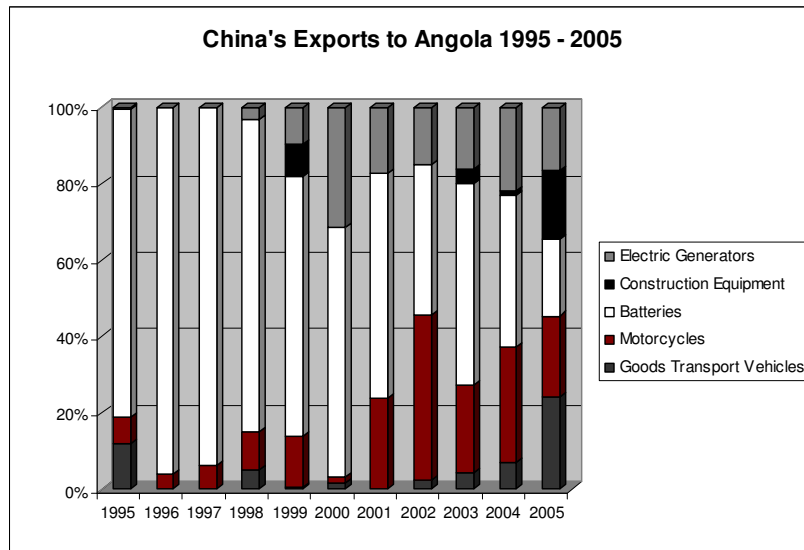
Displayed below are graphs illustrating the break-down of trade between China and the four country cases studies according to the top five categories of goods in terms of value in US currency. Trade between China and the Southern African Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA) are also displayed due to the membership of some of the case studies to these bodies.

Angola: Figure 21



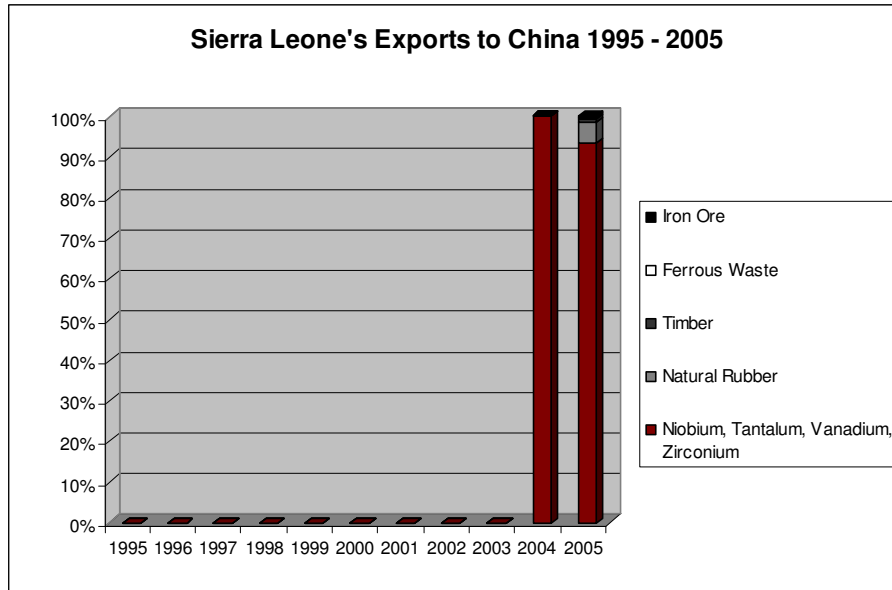
World Atlas Trade Data, Tralac Analysis

Figure 22:



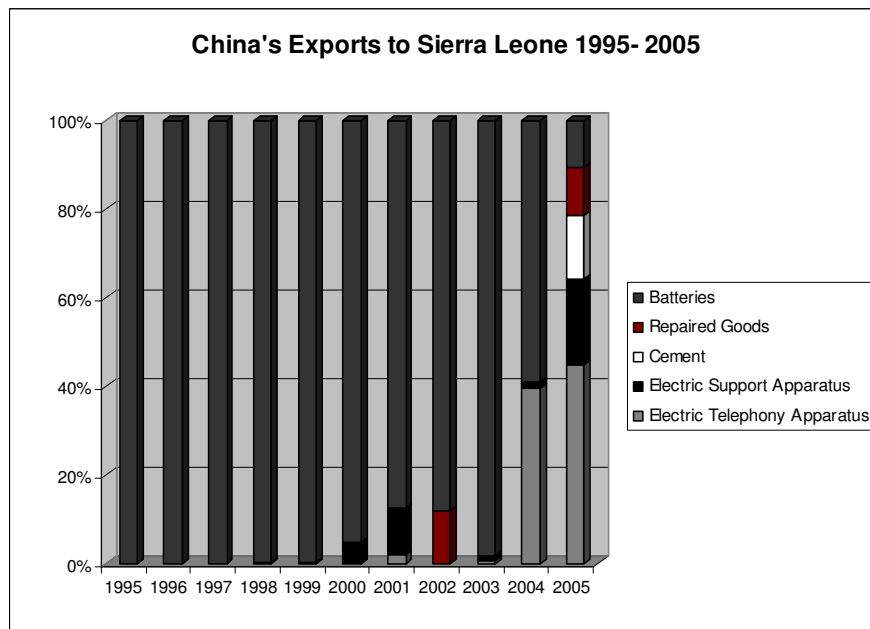
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Sierra Leone: Figure 23



World Atlas Trade Data, Tralac Analysis

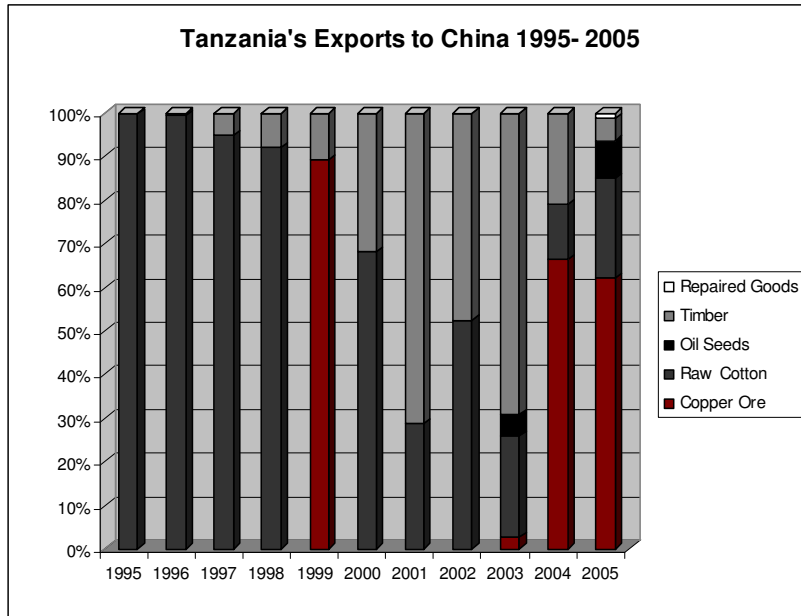
Figure 24:



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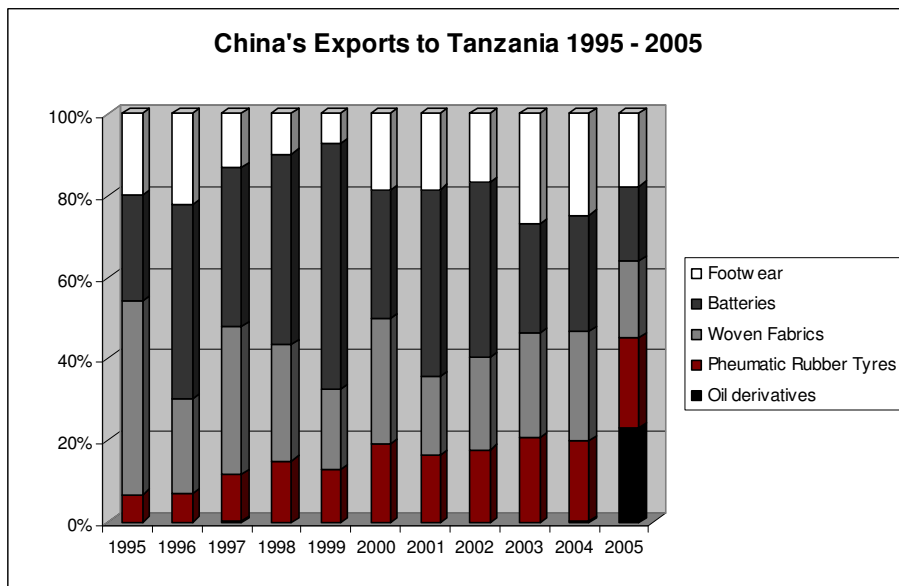


Tanzania: Figure 25



World Atlas Trade Data, Tralac Analysis

Figure 26



World Atlas Trade Data, Tralac Analysis

Zambia: Figure 27

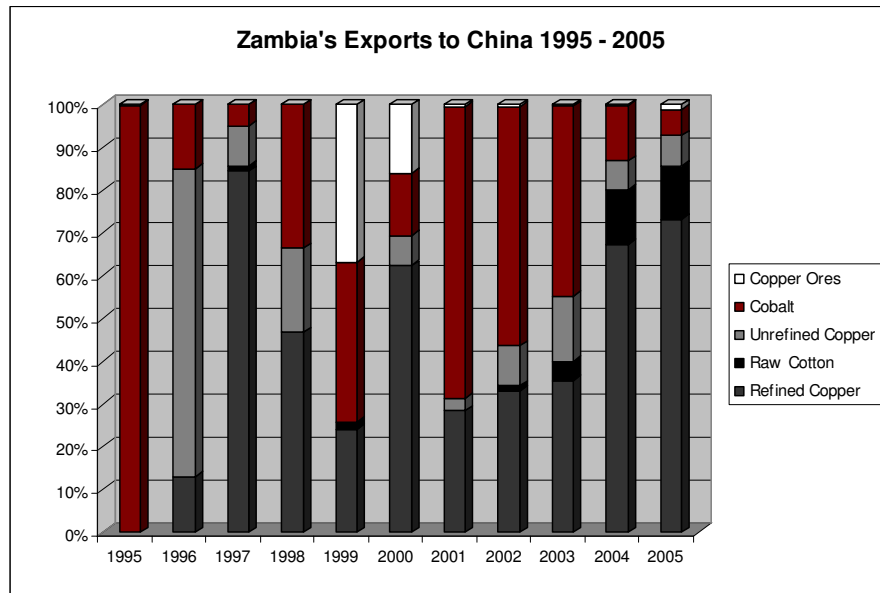
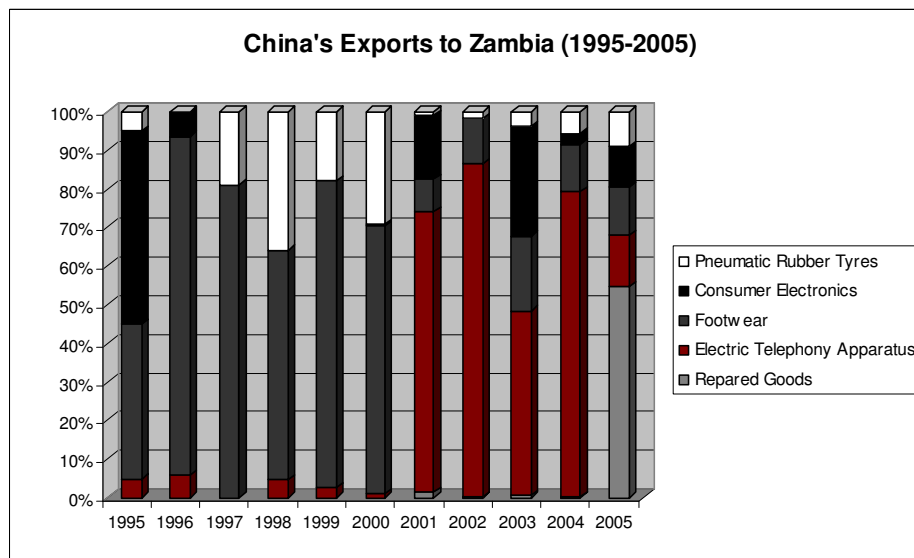


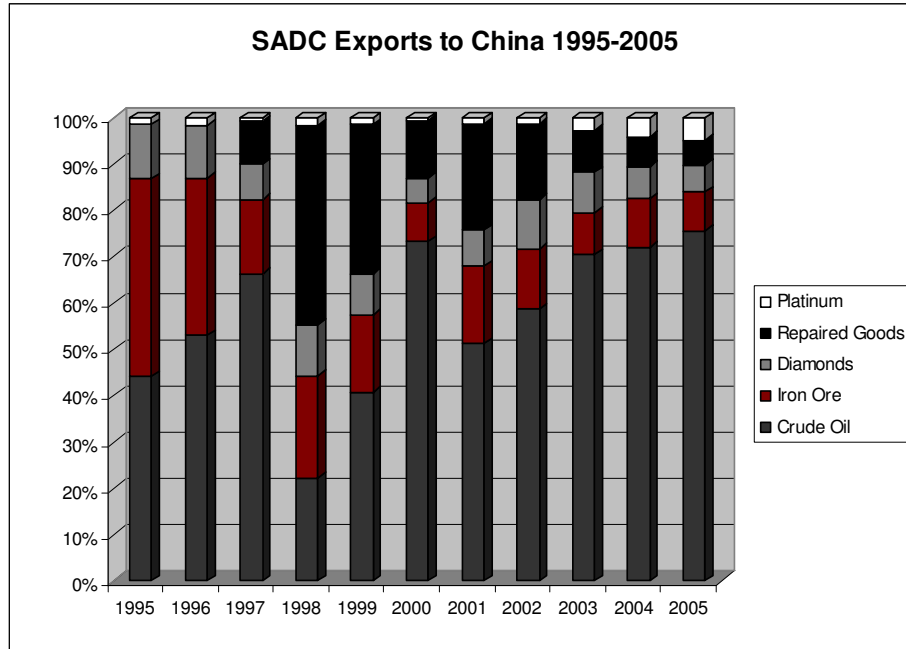
Figure 28



## SADC

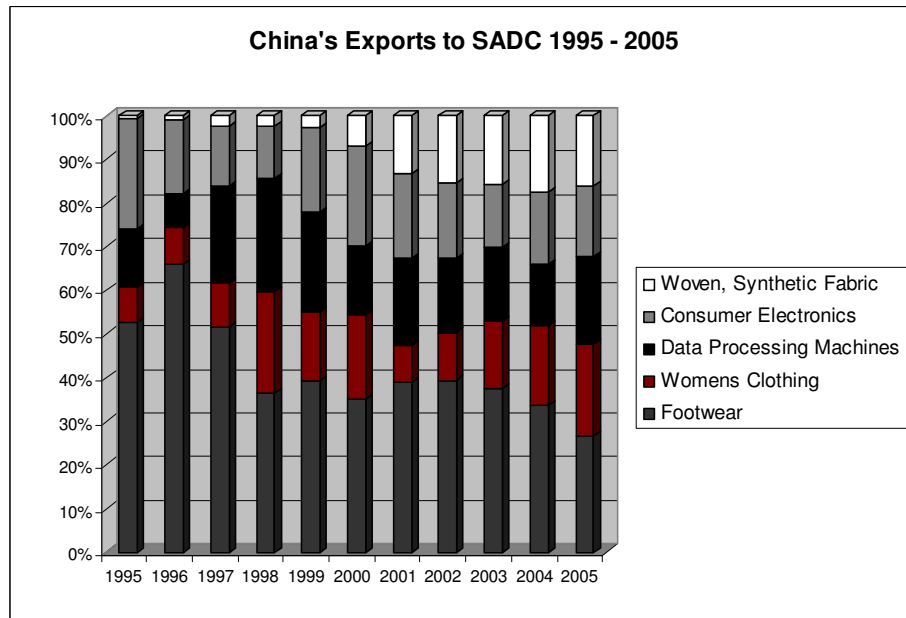
SADC members comprise: Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

Figure 29



World Atlas Trade Data, Tralac Analysis

Figure 30

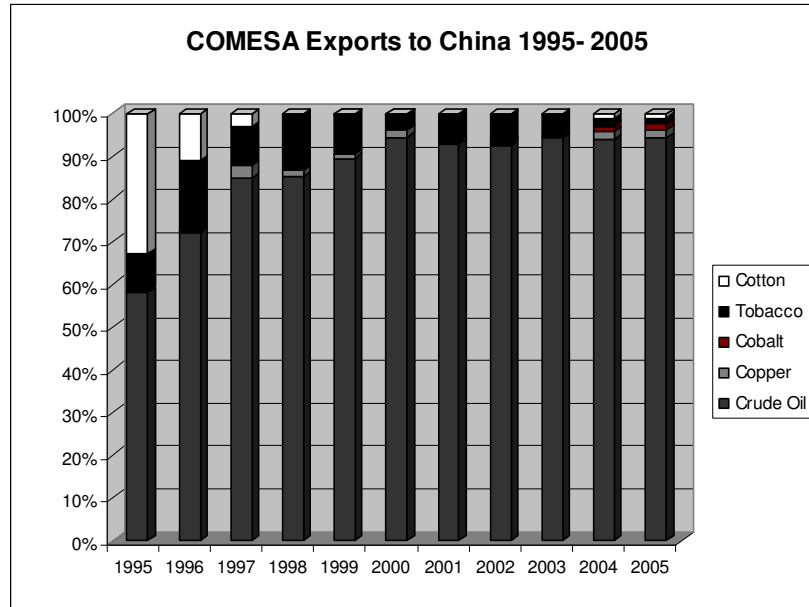


World Atlas Trade Data, Tralac Analysis

## COMESA

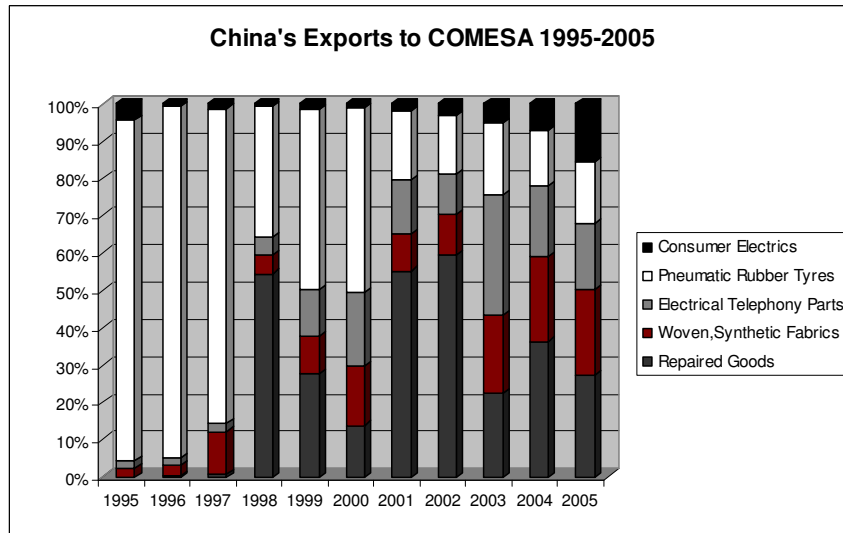
COMESA members comprise: Angola, Burundi, Comoros, DRC, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, and Zimbabwe.

Figure 31



World Atlas Trade Data, Tralac Analysis

Figure 32



World Atlas Trade Data, Tralac Analysis

## Appendix III

### Profiles



**The Centre for Chinese Studies** (CCS) is the first institution devoted to the study of China on the African continent. The CCS promotes the exchange of knowledge, ideas and experiences between China and Africa. As Africa's interaction with China increases, the need for greater analysis and understanding between our two regions and peoples grows. The Centre seeks to fulfil this role.

Housed at Stellenbosch University in the Western Cape Province, the CCS is a joint undertaking between the Governments of South Africa and the People's Republic of China having been

agreed to at the South Africa-PRC Bi-national Commission held in June 2004. The Centre conducts analysis of China-related research to stakeholders in Government, business, academia and NGO communities. The CCS produces three main publications, *The China Monitor* (monthly), the *China Quarterly Insight*, and the annual *China-Africa Review*. The CCS also publishes regular *ad hoc* publications.

The Centre is active in delivering business strategy content to academic and business audiences at the Graduate School of Business at Stellenbosch University, as well as private sector corporates.

The CCS hosts visiting academics and Government officials within the *China Forum* that provides a platform for discussion and debate on China-Africa related subjects. *China Forum* events are often organised in collaboration with other institutions.

The CCS has co-operative linkages with key Chinese universities and institutions pursuing both research collaboration and exchange undertakings. The CCS has prioritized linkages with Chinese institutions that include Beijing University, Tsinghua University and the Chinese Academy of Social Sciences.

The CCS thus serves as the foremost knowledge bridge between China and the African continent.



**Lucy Corkin** is Projects Director the Centre for Chinese Studies at the University of Stellenbosch, South Africa.

She has worked in public relations and image and issue management for several South African mining houses and corporate firms.

Lucy has also tutored at the Political Science department, Stellenbosch University and acted as research assistant for the Dean of the Humanities Faculty both at Stellenbosch University. She has also worked at Stellenbosch University's the Centre of Comparative Politics.

Lucy holds a Bachelors degree in International Relations (*cum laude*), an Honours Degree in International Relations (*cum laude*) and a research Masters Degree in Politics.

Her Master's thesis was a longitudinal study comparing the level of support for democracy in Brazil and South Africa from 1994-2004.

She is fluent in French and Portuguese and conversant in Mandarin and German.

Lucy has been the recipient of a number of merit bursaries for academic achievement, and is a life member by invitation of the Golden Key Society as well as an alumnus of *Alliance Française*. She achieved third place in the third annual China Bridge Mandarin language proficiency competition held nationally in South Africa. [lcorkin@sun.ac.za](mailto:lcorkin@sun.ac.za)





**Christopher Burke** is a Research Associate at the Centre of Chinese Studies. Christopher has held numerous research positions focused on international relations including: Research Associate at Faculty of Social Sciences, Makerere University, Uganda; Visiting Research Fellow at the Centre for Defence Studies, School of Australian and International Studies, Deakin University, Australia; and Research Fellow at the Institute for Far Eastern Studies, Kyungnam University, South Korea.

Christopher recently directed an initiative to build the first commercial FM radio station in Southern Sudan and previously worked with The Carter Centre's Conflict Resolution Program, Atlanta, USA.

He served in the capacity of country director in Uganda and was active in the implementation of the 1999 Nairobi Peace Agreement between the Governments of Sudan and Uganda brokered by former U.S. President Jimmy Carter.

Christopher has an M.A. in international relations from Yonsei University, South Korea. The title of his research thesis was: *China's Bilateral Relations with the Two Koreas: Maintaining Stability in Times of Change*. He also holds a B.A. in Development Studies from La Trobe University, Australia. Christopher is an Australian national based in Uganda and Sudan for the past six years. [cburke@sun.ac.za](mailto:cburke@sun.ac.za)

## Appendix IV

### A Note on Methodology

After extensive desk top research, researchers visited each of the four countries and met with a broad range of people involved in construction and other associated industries. These included: local, Chinese and other foreign constructions companies, consultants, suppliers, transport companies, banking and finance institutions, relevant government regulatory authorities, local, foreign and international government representatives, academic and research institutions, law firms, trade associations, unions, consumer organizations, construction workers and customers. The majority of interviews were conducted on condition of anonymity and most respondents are not identified.

## Endnotes

- <sup>1</sup> China Statistical Yearbook, 2004.
- <sup>2</sup> It is unclear what is meant specifically by 'corollary industries' in this context and there is the possibility that this figure is slightly inflated, It nevertheless serves to illustrate the important knock-on effects of the construction industry in the Chinese economy.
- <sup>3</sup> Low Sui Pheng and Jiang Hongbin, Internationalization of Chinese Construction Enterprises, *Journal of Construction Engineering and Management*, November/December 2003, p. 591.
- <sup>4</sup> Jean Jinghan Chen, "The impact of Chinese economic reforms upon the construction industry," *Building Research and Information*, Volume 25, Number 4, 1997, p. 241.
- <sup>5</sup> Low Sui Pheng and Jiang Hongbin, Internationalization of Chinese Construction Enterprises, *Journal of Construction Engineering and Management*, November/December 2003, p. 591.
- <sup>6</sup> Haley, U. & G. Haley. 2006. "The logic of the Chinese business strategy, East versus West: Part I". *Journal of Business Strategy*. 27(1). pp. 39.
- <sup>7</sup> Low Sui Pheng and Jiang Hongbin, Internationalization of Chinese Construction Enterprises, *Journal of Construction Engineering and Management*, November/December 2003, p. 591.
- <sup>8</sup> Garnaut, R. et al. 2005. *China's Ownership Transformation: Process, Outcomes, Prospects*. World Bank/International Finance Corporation Study
- <sup>9</sup> Deng, Ping. 2003. "Foreign Investment by Multinationals from Emerging Countries: The Case of China". *Journal of Leadership and Organizational Studies*. Fall. 10(2).pp 120.
- <sup>10</sup> Diebold, D & Associates. 2006. "A Glance at China's Go-out Strategy". *Beijing Lives*. 11 February.
- <sup>11</sup> Deng, Ping. 2003. "Foreign Investment by Multinationals from Emerging Countries: The Case of China". *Journal of Leadership and Organizational Studies*. Fall. 10(2).pp 115.
- <sup>12</sup> *World Watch Institute*. 5 January 2006.
- <sup>13</sup> Deng, Ping. 2003. "Foreign Investment by Multinationals from Emerging Countries: The Case of China". *Journal of Leadership and Organizational Studies*. Fall. 10(2).pp 121.
- <sup>14</sup> Jean-Christophe Servant, China's trade safari in Africa, *Le Monde Diplomatique*, May 2005.
- <sup>15</sup> Jonathan Holslag, 2006. "China's New Mercantilism in Central Africa". *African and Asian Studies* 5(2).
- <sup>16</sup> William Pesek, *Asia is offering African countries a rare opportunity to add steam to its economies*, June 25, 2006.
- <sup>17</sup> Servant, J-C. 2005. "China's Trade Safari in Africa". *Le Monde Diplomatique*. May edition.
- <sup>18</sup> Christopher Thompson, 2006. 'Angola gets \$2.6 bln non-oil FDI in 2005'. *Reuters*. 11 April.
- <sup>19</sup> Angolan Chamber of Commerce and Industry. 2005. *Mensagem económico*. 1(6). September.
- <sup>20</sup> *Macauhub*. 2006. "IMF projects Angolan economy to grow over 13 percent per year until 2010" 3. April.
- <sup>21</sup> Angolan Chamber of Commerce and Industry. 2005. *Mensagem económico*. 1(6). September.
- <sup>22</sup> The presence of the Portuguese construction firms is still in terms of private contracts.
- <sup>23</sup> *Macauhub*. 2006. 'Increased private investment registered in Angola'. 20 July.
- <sup>24</sup> Interview with Director from Standard Bank.
- <sup>25</sup> Interview with a representative from South African construction firm. It was stated that the company entered Angola in 1995 and have only relatively recently (2001) pursued their first significantly sized construction contracts.
- <sup>26</sup> Su Ming Sheng.
- <sup>27</sup> Interview with the South African Ambassador to Angola, Themba Kubeka.
- <sup>28</sup> China became a net oil importer in 1993.
- <sup>29</sup> Mbendi Profile of China in Angola.
- <sup>30</sup> *Ibid*.
- <sup>31</sup> François Lafargue, 2005. "China's presence in Africa". *China Perspectives*. No. 61. September to October. pp 2.
- <sup>32</sup> H. Botequilla, 2006. *Visão*, no 286. pp 8.
- <sup>33</sup> This may be partly due to the fact that Angolans seem not to be able to distinguish between the different East Asian nationalities conducting business in Angola, such as Japanese, South Koreans and Phillipinos among others, resulting in a large variance in reported numbers.
- <sup>34</sup> J. Reed, 2006. "China on track to win many friends in oil-rich Angola", *Financial Times*, 4 March; H. Botequilla, 2006. *Visão*, no 286. pp 8.
- <sup>35</sup> World Atlas Trade Data, Tralac Analysis, please refer to graphs.
- <sup>36</sup> *Ibid*.
- <sup>37</sup> Lecture by Ian Taylor, Stellenbosch University, 28 August 2006
- <sup>38</sup> *IRIN News*. 2005. "ANGOLA: Oil-backed loan will finance recovery projects". 21 February.

- <sup>39</sup> *Macauhub*. 2006. *Macauhub*. 2006. "Angolan ambassador says Luanda wants to boost economic cooperation with China". 28 February
- <sup>40</sup> This statement refers to the fact that the World Bank and the international Monetary Fund (IMF) have been reluctant donors to Angola, as the Angolan government failed to comply with the necessary preconditions of good governance and transparency. The World Bank in September 2006 recently declared its intention to review the stringency of the conditions attached to its loans following Great Britain having withheld US\$ 94 million in contributions, in protest of World Bank policies.
- <sup>41</sup> *Macauhub*, 12 May 2006
- <sup>42</sup> *People's Daily*. 2001. "Chinese Economic, Trade Delegation Ends Visit to Angola". 24 May
- <sup>43</sup> *Macauhub*. 2006. "Chinese companies in Africa have government 'seal of quality', says Chinese consultant". 27 February.
- <sup>44</sup> This government-aided market entry also applies to those private Chinese construction companies included on the pre-selected list of 35.
- <sup>45</sup> Interview with representatives from Guangsha group and from Guangdong Xinguang International Group; Interview with representative from PRC Economic Counsellor's office.
- <sup>46</sup> Although considered not considered a state-owned enterprise, this does not necessarily preclude the Chinese government or a related body from having a shareholding in the company. Chinese companies' shareholding arrangements are notoriously complicated.
- <sup>47</sup> This may be through the consulting firm Sigma, owned by Sonangol, the state-owned oil company.
- <sup>48</sup> H. Botequilla, 2006. *Visão*, no 286. pp. 8.
- <sup>49</sup> John Donnelly, 2005. "China scooping up deals in Africa as US firms hesitate". *Boston Globe*. 24 December.
- <sup>50</sup> A South Africa-based multi-national with extensive experience in the construction industry on the African continent. Africon has overseen several high-profile projects, such as the Ministry of Finance building contracted by Golden Nest, a Chinese firm.
- <sup>51</sup> Group Five. Cautionary announcement: "Group Five Enforces Zero Tolerance For Irregular Activities In Angola". Released: 8 June 2006.
- <sup>52</sup> At the time of writing, the Rand exchange rate had been fluctuating between R6.50 – R6.85 to the US\$.
- <sup>53</sup> *Capital*, 3-10 June 2006
- <sup>54</sup> This is possibly due in part to prevalence of HIV/AIDS. Even if the worker is not personally afflicted by the disease, increased family obligations including caring for the sick and funeral attendance may affect working hours.
- <sup>55</sup> Benguela is the port connected to the Benguela Railway, thus facilitating transport of goods to the interior of the country. While this railway has not been fully operational since damage during the civil war, it is in the process of being refurbished by Chinese company, China International Fund Ltd. Cabinda's strategic importance lies in the fact that it is the port of the most resource-rich province in Angola.
- <sup>56</sup> Dutch disease is an economic concept that tries to explain the seeming relationship between the exploitation of natural resources and a decline in the manufacturing sector. The theory is that an increase in revenues from natural resources will de-industrialise a nation's economy by raising the exchange rate, which makes the manufacturing sector less competitive.
- <sup>57</sup> World Bank, Sierra Leone Country Brief, cited September 10, 2006.
- <sup>58</sup> Interview with Eddy Bruce, Lecturer, Civil Engineering Department, Sierra Leone University, Freetown, 22 July 2006.
- <sup>59</sup> Interview with building contractor, Freetown, 21 July 2006.
- <sup>60</sup> SIPRI Arms Transfers database
- <sup>61</sup> Trade Map, Access provide courtesy of the Uganda Export Promotion Board, Kampala.
- <sup>62</sup> *Ibid*.
- <sup>63</sup> Interview with James Sackey, Country Manager, World Bank, Freetown, 26 July 2006.
- <sup>64</sup> Contractors Registration Board, Tanzania, *Directory of Registered Contractors as of January 2006*, Design and Printing Colour Print (T), 2006, p. vi.
- <sup>65</sup> Bid bonds are paid by bidders when submitting tenders to demonstrate commitment; performance bonds are also paid by the bidder to guarantee against defects; and advance payments are paid by the client to cover the initial costs of the necessary labour, materials and equipment.
- <sup>66</sup> The United Republic of Tanzania, Ministry of Works, *Construction Industry Policy*, Government Printer, Dar es Salaam, 2003, p. 7.
- <sup>67</sup> Gavin Menzies, *1421: The Year China Discovered the World*, London: Bantam Books, 2003, p. 364.
- <sup>68</sup> Richard Gott, Introduction in Ernesto Che Guevara's, *The African Dream: the Dairies of the Revolutionary War in Congo*, London: Harvill Press, 2000, p. xvii.

- <sup>69</sup> Patrick Chabal and Jean-Pascal Daloz, *Africa Works: Disorder as Political Instrument*, Oxford: James Curry, 1999, p. 116.
- <sup>70</sup> SIPRI Arms Transfers database, <<http://www.sipri.org>>
- <sup>71</sup> Ministry of Foreign Affairs of the People's Republic of China, Cited 28 July 2006.
- <sup>72</sup> *People's Daily Online*, April 18, 2005.
- <sup>73</sup> *People's Daily Online*, July 18 2001.
- <sup>74</sup> *People's Daily Online*, October 11, 2000.
- <sup>75</sup> Trade Map, Access provide courtesy of the Uganda Export Promotion Board, Kampala.
- <sup>76</sup> The Special Preferential Tariff Treatment (SPTT), announced at the second Ministerial Conference of the Forum on China- Africa Co-operation (FOCAC) implemented on 1 January 2005, removes the tariffs from some 190 tariff items exported to China from countries classified as Africa's least-developed countries (LCDs). The 25 African countries to which this applies are: the Republic of Benin, the Republic of Burundi, the Republic of Cape Verde, the Central African Republic, Union of Comoros, the Democratic Republic of Congo, the Republic of Djibouti, the State of Eritrea, the Federal Democratic Republic of Ethiopia, the Republic of Guinea, the Republic of Guinea-Bissau, the Kingdom of Lesotho, the Republic of Liberia, the Republic of Madagascar, the Republic of Mali, the Islamic Republic of Mauritania, the Republic of Mozambique, the Republic of the Niger, the Rwandese Republic, the Republic of Sierra Leone, the Republic of the Sudan, the United Republic of Tanzania, the Togolese Republic, the Republic of Uganda and the Republic of Zambia.
- <sup>77</sup> The fierce competition between these well established SOEs has presumably deterred private Chinese construction companies from entering the market.
- <sup>78</sup> This district was the constituency of President Jakaya Kikwete who was at the time Minister for Foreign Affairs and international relations
- <sup>79</sup> *The East African*, July 10-16, 2006, p. 22.
- <sup>80</sup> International Labour Organization, *Baseline study of labour practices on large construction sites in the United Republic of Tanzania*, Working Paper 225, Geneva, January 2005, p. 98.
- <sup>81</sup> International Labour Organization, *Baseline study of labour practices on large construction sites in the United Republic of Tanzania*, Working Paper 225, Geneva, January 2005, p. 11.
- <sup>82</sup> Low Sui Pheng and Jiang Hongbin, "Internationalization of Chinese Construction Enterprises" in *Journal of Construction Engineering and Management*, November/December, 2003, pp. 589-598, p. 595.
- <sup>83</sup> Trade Map, Access provide courtesy of the Uganda Export Promotion Board, Kampala.
- <sup>84</sup> Information provided by the National Council for Construction (NCC), Lusaka, 2 August, 2006.
- <sup>85</sup> Interview with Paul Hamoonga, Instructor, the Thorn Park Construction Training Centre, Lusaka, 18 August 2006.
- <sup>86</sup> Interview with former Zambian President Kenneth Kaunda, Lusaka, August 16, 2006.
- <sup>87</sup> *Ibid.*
- <sup>88</sup> Trade Map, Access provide courtesy of the Uganda Export Promotion Board, Kampala.
- <sup>89</sup> *Ibid.*
- <sup>90</sup> *Presence of China in Zambia*, Undated European Union brief.
- <sup>91</sup> Interview with Liso Simbeleko, Programme Officer-Infrastructure, European Union. Lusaka, 15 August 2006.
- <sup>92</sup> One supplier of top-quality fittings and construction material noted that the quality of Chinese products is improving rapidly and explained that electrical fittings from the UK are actually only assembled and packaged there with many of the components manufactured in China. He explained that there is confusion amongst consumers over the European Community (EC) stickers that many people misinterpret to mean manufactured in Europe rather than simply meeting EC standards.
- <sup>93</sup> 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.
- <sup>94</sup> Fredrick D. Lugard. 1968. *The Rise of Our East African Empire: Early Efforts in Nyasaland and Uganda*, London: Frank Cass and Co., pp. 488-490.
- <sup>95</sup> According to *China Daily* (11 April 2004), with regards to overseas investments by Chinese firms, People's Bank of 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.

<sup>96</sup> Karby Leggett. 2005. "China forges deep alliances with war-torn nations in Africa," *The Wall Street Journal*, 30 March

<sup>97</sup> Emmy Bosten, *China's Engagement in the Construction Industry of Southern Africa: The Case of Mozambique*, Paper for the Workshop: Asian and Other Drivers of Global Change, St. Petersburg, Russia, January 19-21, 2006, p. 5.

<sup>98</sup> In Angola's case this was in the form of a Chamber of Commerce for Chinese Companies in Angola.

<sup>99</sup> Interview with a representative of Guangdong Xinguang International Group.

<sup>100</sup> One notable exception however is Sierra Leone where several respondents cited examples of materials from Guinea, India, South Africa and even the UK being cheaper.

<sup>101</sup> Anastasia Liu, "China's migrant worker pool dries up", *China Daily*, August 29, 2006,

<sup>102</sup> Respondents included representatives from the World Health Organisation (WHO) and other non-governmental organisations operating in Angola, representatives from construction companies who compete with Chinese construction companies on tenders.

<sup>103</sup> *Radio Nacional de Angola – Canal A*. 2006. "COVEC propõe parcerias público-privadas". 21 February.

<sup>104</sup> Interview with Bobson Sesay, Freetown, 26 July 2006.

<sup>105</sup> World Bank, *World Development Report 1994: Infrastructure for Development*, New York: Oxford University Press for the World Bank, 1994.

<sup>106</sup> The Special Preferential Tariff Treatment (SPTT), announced at the second Ministerial Conference of the Forum on China- Africa Co-operation (FOCAC) implemented on 1 January 2005, removes the tariffs from some 190 tariff items exported to China from countries classified as Africa's least-developed countries (LCDs). The 25 African countries to which this applies are: the Republic of Benin, the Republic of Burundi, the Republic of Cape Verde, the Central African Republic, Union of Comoros, the Democratic Republic of Congo, the Republic of Djibouti, the State of Eritrea, the Federal Democratic Republic of Ethiopia, the Republic of Guinea, the Republic of Guinea-Bissau, the Kingdom of Lesotho, the Republic of Liberia, the Republic of Madagascar, the Republic of Mali, the Islamic Republic of Mauritania, the Republic of Mozambique, the Republic of the Niger, the Rwandese Republic, the Republic of Sierra Leone, the Republic of the Sudan, the United Republic of Tanzania, the Togolese Republic, the Republic of Uganda and the Republic of Zambia. At the 2006 Forum on China and Africa Co-operation, SPTT was expanded to include 440 categories of goods.

<sup>107</sup> Trade Map, Access provide courtesy of the Uganda Export Promotion Board, Kampala.

<sup>108</sup> Jonathan Holslag. 2006. "China's New Mercantilism in Central Africa", *African and Asian Studies*, 5(2).

<sup>109</sup> It is important to note that especially with the ongoing restructuring and privatization of SOEs undertaken by the Chinese government in order to increase their competitiveness, the exact shareholder structure of these companies, and whether they are indeed public or private, is difficult to ascertain. For the purposes of this article, SOEs are companies in which the PRC government has a majority stake-holding, and companies are considered private if the Chinese government does not own a controlling share.

<sup>110</sup> *Xinhua News Agency*, "With China's technology, rural Africa may soon get digitized", 24 January 2006, [http://news.xinhuanet.com/english/2006-01/24/content\\_4094516.htm](http://news.xinhuanet.com/english/2006-01/24/content_4094516.htm)

<sup>111</sup> These are Algeria, Tunisia, Nigeria, Ethiopia, Egypt, Zambia, Kenya, Benin, Tanzania, Libya, Ghana, Rwanda, Morocco, Congo, Niger.

<sup>112</sup> Southwood. 2006.

<sup>113</sup> Hu Jintao. "Presidential Address at the Opening Ceremony of FOCAC". November 2006.

<sup>114</sup> According to Global Witness, 10 percent of Angola's oil revenues are unaccounted for, illustrating the corrupt nature of public finance in that country.