# Feeding the Dragon: China's Quest for African Minerals

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While much of the attention on China’s emergence onto the global economic stage as an industrial powerhouse has focused on the accumulation of its massive trade surpluses, most Western observers probing Beijing’s interest in Africa’s rich natural resources have concentrated on the Middle Kingdom’s seemingly insatiable appetite for energy resources. Africa currently contributes 12 percent of the world's liquid hydrocarbon (oil) production. In 2013, African oil production is projected to rise to 10.7-11.4 million bpd, and by 2018 to 12.4-14.5 million bpd [1]. In 2007, African oil constituted more than 22 percent of the United States' total usage and 28 percent of China’s—the latter case including approximately 60 percent of the Sudan's oil export—compared to the 2006 figures of 9 percent for China, 33 percent for the United States and 36 percent for Europe.

A less mainstream but perhaps more significant issue for Sino-African relations is China’s growing interest in Africa’s rich mineral resources—where Beijing’s shopping list literally runs the gamut, from aluminum to zirconium [2]. Considering China’s dynamic economy and robust growth, its interest in African minerals may well prove in the long run more strategically important in its grand strategy than African oil—especially if China's deals with Central Asian energy exporters prove successful. The minerals sought by China affect every aspect of its economy, from the minerals like titanium needed for producing military aircraft to the iron ore needed to fuel its export of consumer goods, to its surging diamond trade for the country’s growing appetite for luxury items.

Although China possesses an abundant supply of colored metal mineral resources, most of it is of low-grade ores and only one-third of the total amount of mineral ores can be processed through available technology. While China's rapid economic growth drives up demand for colored metal resources, the growing demand and supply gap could put a serious strain on the Chinese economy (Beijing Review, December 14, 2007).

Chen Qiyuan, a professor at Central South University, oversees the project in the 973 Program that is charged with implementing the 11th Five-year Plan (2006-2010), in particular, toward researching and developing essential minerals. Chen said that the project has strategic significance not only for sustaining economic development but also for national security. Chen estimates that the research that his project is undertaking would increase the lifespan of China's mineral resources. If metal output and recycling levels stay at the 2005 level, Chen’s research indicates China's copper resources will last another 12 years, nickel for 40 years and zinc for 18 years (Beijing Review, December 14, 2007).

## China-Africa Overall Trade

During the 1990s, trade between China and Africa grew by 700 percent, doubling from 2002 to 2003 and in 2005 almost doubled again. In 1995, Chinese imports from Africa were worth $1.4 billion; 11 years later, their value soared to $28.7 billion, a 2,000 percent increase [3].

Unlike virtually all of China's significant trading partners, in 2006, Africa as a whole actually ran a modest trade surplus, sending China $28.8 billion in goods while importing $26.7 billion [4]. In January 2006, China released its first policy paper on Africa—China's African Policy—elaborating its future objectives on the continent, noting that “China is willing to negotiate a Free Trade Agreement (FTA) with African countries and African regional organizations when conditions are ripe” (Xinhua, January 14, 2006)

By 2010, China will overtake the United States and France as Africa's biggest trading partner (BBC, July 4, 2007). Current African exports are extensively resource-based, with oil accounting for 73 percent of African exports to China; followed by iron ore, totaling 4.03 percent of China’s global supply, which was worth $131.8 million in 1995 and $839.16 million in 2006; cotton; diamonds, which constituted $151.3 million in 1996 and $704.5 million in 2006, aggregating 29 percent of Chinese global supplies; and timber. For 2006, China's top 10 African import countries were Angola ($10.9 billion), South Africa ($4.09 billion), the Democratic Republic of the Congo ($2.78 billion), Equatorial Guinea ($2.53 billion), the Sudan ($1.94 billion), Libya ($1.69 billion), Gabon ($816.8 million), Mauritania ($402.02 million), Morocco ($359.47 million) and Zambia ($269.13 million) [5].

## China and South Africa

Out of the 54 countries and the island territories in Africa, Beijing regards South Africa as the continent’s mineralogical treasure house. South Africa is the largest producer of gold—currently accounting for 14 percent of total global production and containing 40.1 percent of the world’s known reserves—and contains 87.7 percent of the world’s platinum reserves, 80 percent of its manganese ore, 72.4 percent of its chrome ore and 27 percent of its vanadium [6]. In 2006, gold accounted for 20 percent of South Africa’s exports, while coal, platinum and other minerals made up an additional 25 percent [7]. South Africa also has substantial reserves of other industrially important metals and minerals [8].

Between 1996 and 2005, South African exports to China increased to well over $1.25 billion. China reciprocally has invested $130 million in South Africa, mostly in the Buffelsfontein chromium mine (BuaNews, January 9). According to South African Revenue Service trade data, in 2007, South African exports to China rose 195 percent compared with the same period in 2006, to $2.26 billion, behind Japan, the United States, Germany and Britain (Business Report [South Africa], September 14, 2007). South Africa accounts for about 75 percent of world ferrochrome, and China now imports over 90 percent of the ferrochrome consumed by its voracious stainless steel industry.

China is not alone in its interest in South African minerals; the United States is also heavily dependent upon South Africa for key minerals including chrome, manganese, vanadium and platinum. In February 1987, then President Ronald Reagan certified andalusite, antimony, chrysotile asbestos, chromium, cobalt, industrial diamonds, manganese, platinum group metals, rutile and vanadium as “strategic” minerals that were considered essential for supplying military, industrial and civilian needs of the United States at the time of a national emergency; moreover, they are not sufficiently found or produced in the United States [9].

## China's Voracious Appetite for Minerals

China’s outreach for minerals and resources to supply its economy have had a global impact; since 2005, many commodity prices have soared—gold and silver are again reaching price heights not seen since the late 1970s, while in 2007 prices for copper, zinc, lead, tin, chromium, platinum, molybdenum, coal, oil and uranium also set multi-year or all-time highs [10].

China now consumes 30 percent of the global total for zinc and 25 percent of that of lead, while since 1996 China's consumption of refined copper has risen from less than 10 percent of world demand to 22 percent, and the Chinese economy absorbs 27 percent of the globe’s iron and steel and 25 percent of its aluminum. China already produces one-third of the world's steel, and its iron ore imports are expected to double by 2012. In 2003, China passed the United States to become the world’s largest copper consumer and by the following year consumed 46 percent more than the United States. In 2006, China announced plans to set up Strategic Mineral Reserve to stockpile uranium, copper, aluminum, iron ore and other minerals. The reserves are critical for providing China with a buffer to adjust to market fluctuations, manage emergencies and guarantee the security of resource supplies [11].

## China's African Resource Acquisition Investment Strategy

The general patterns of Chinese investment in Africa are discernible and differ in many respects from Western attitudes. First and foremost, China in its long-term view has concluded that Africa’s overall macroeconomic situation is improving, despite the problems wracking the continent—from corruption to civil war—giving it a much bolder position on investment than more cautious Western investors. Chinese producers also see Africa as a continent of immense opportunity for their lost-cost products, which in most cases undercut higher-priced Western imports. The final element in Beijing’s perception of Africa is a keenly focused awareness of the continent’s rich resource base; while Western competitors also covet Africa’s mineralogical resources, Chinese investment strategy benefits from Western deficits and therefore holds advantages over European and American approaches. Western and European investors arrive with ideological baggage and domestic constraints in the form of economic reform, anti-corruption and human rights campaigns—a key aspect of China’s policies toward the continent is its avowedly apolitical and amoral stance described as “non-interference in domestic affairs.” Adding to the appeal of China’s “soft power” is an appreciation of a half-century history of friendly ties and past Chinese support for liberation movements in Africa, topped off with the provision of “no-strings-attached” financial and technical aid to African countries. These deals often include low-interest or interest-free loans and additional funding for both developing infrastructure and civil projects.

A prime example is Chinese investment in Angola. China invested in Angola's oil industry even as civil war raged, in 1995 exporting $135.7 million worth of hydrocarbons. Since the nation ended a 27-year civil war in 2002, Angola has become China's largest trading partner, in 2006 surpassing Saudi Arabia as China's leading oil exporter, and has the fastest-growing economy on the continent with a projected 2007 gross domestic product (GDP) growth rate of over 20 percent. In 2006, Angola exported $10.93 billion of oil to China and joined OPEC, but two-thirds of the population is estimated to earn less than a dollar a day. This has provided an opportunity for the opposition, with Unita party leader Isaias Samakuva commenting, "What we have seen is that Angolans have not benefited from the accords with China. These are aspects that need to be looked at carefully and see how they can be bettered" (Cruzeiro do Sul, January 12, 2007).

China has landed some impressive deals throughout Africa, including winning a majority stake in the Democratic Republic of the Congo's (DRC) Gecamines joint venture. In return for a $5 billion loan, the DRC government is giving four Chinese state enterprises a 68 percent stake in a joint venture with Gecamines, the state-owned mining company, in addition to China Overseas Engineering's $300 million investment in two Congolese copper and cobalt mining projects [12]. In another coup, in June 2006, China beat out Brazil's Vale do Rio Doce—the world's top iron ore producer—and French company Eramet to secure a $3 billion contract to develop massive iron ore reserves in Belinga, Gabon. During the China-Africa Summit in November 2006, among the agreements concluded by China were a $938 million contract to develop an aluminum plant in Egypt and a $230 million deal for ferrochrome mining and smelting in South Africa.

These investments do not come without risks: on April 24, 2007, a guerrilla attack on a Chinese-run oil field in Ethiopia left 77 people dead. Since 2004, dozens of Chinese workers, engineers and other civilians have been killed or kidnapped in Nigeria, Kenya and other African states. Moreover, African workers in Angola, Zambia, Nigeria and Morocco have demonstrated over Chinese labor policies, most notably at Zambia's Chambishi copper mine, where on January 3, 500 workers went on strike to protest low salaries and poor working conditions, with one worker representative commenting that salaries were as low as $54 per month (The Times of Zambia, January 4).

China's extensive operations in the Sudan have also attracted intense international criticism for fraternizing with a supporter of terrorism involved in a brutal campaign in Darfur, an ongoing legacy of the Sudan's ongoing 24-year civil war. The international community also deplores China's deepening relationship with Mugabe's despotic regime, but Beijing instead focuses on projections that in 2008 trade between Zimbabwe and China is set to increase to $500 million (The Herald, January 7). In December 2007, Sinosteel Corporation acquired a 67 percent stake in Zimbabwe's leading ferrochrome producer and exporter Zimasco Holdings (The Herald, December 20, 2007).

Despite the problems enumerated above, the possibilities for the future of Chinese-African trade seem limitless. According to South African mining executive Sir Sam Jonah, only 30 percent of Africa has been explored for mineral wealth (The Gibbs Review, January 2006, Vol. 01.). The only question, in an increasingly resource-hungry world, is whether Africa's riches go East or West.

## Conclusion

China's Africa strategy—which is tied to over 50 years of ideological solidarity, beginning when the continent was struggling to liberate itself from colonialism—is now paying immense economic dividends. China's willingness to invest heavily in African nations either currently wracked by civil war—such as the Sudan and the Democratic Republic of the Congo—or recently emerged from chaos—such as Angola—has given it a leading position in development projects that more timorous Western investors up to now have largely avoided. Given the relative political stability of Africa, it remains a high-risk strategy. For Beijing to maintain China's impressive growth record, however, there is really little choice, as American and European investors have already locked up many of the globe's more stable sources of raw materials. It remains to be seen whether China's Africa policy will ultimately become a system that pacifies the continent, or possibly leads to either covert or overt "resource wars" for the limited supply of both hydrocarbons and strategic minerals. China's policy, at least as regards what Washington defines as strategic minerals, could certainly become a disruptive influence in Washington-Beijing relations. Given China's oft-stated commitment to global peaceful development, it remains to be seen how such a confrontation might play out. Considering

Washington's establishment last year of its AFRICOM military command, there seems little doubt that in the event of armed confrontation Beijing would be the loser. China clearly prefers the economic benefits of peaceful trade; as the wars in Afghanistan and Iraq so vividly illustrate, armed conflict is a net consumer of men, material and money and it is obvious that for the present Beijing is trying to avoid such a path.

Notes

1. First African Union Conference of Ministers Responsible for Hydrocarbons (Oil and Gas), December 11-15, 2006, Cairo, Egypt, sourced at http://www.africa-union.org/root/AU/Conferences/Past/2006/November/infrastructure/doc/en/AU_EXP_OG_5_Fuelling_Eng.doc.
2. China's extensive shopping list for African minerals includes: aluminum; asbestos; basalt; boric acids and oxides; carbonates; chromium ore and concentrates; coal; cobalt ore and concentrates; diamonds; feldspar; ferroalloys; fluorspar; gold; granite; iron ores and concentrates; lead ore and concentrates; leucite; manganese ores and concentrates, including ferrous manganese iron ore; lime; molybdenum ore and concentrates; nepheline; nickel; niobium; syenite; oxometallic and peroxometallic acid salts; platinum; porphyry; silver; slacked lime; tin ore and concentrates; titanium oxides; tungsten ore and concentrates; quartz; quartzite; quicklime; tantalium; vanadium; zinc and zirconium ore and concentrates (World Trade Atlas—Index for Chinese Trade Data, Chinese Customs, Trade Law Centre for Southern Africa).
3. See World Trade Atlas, "Index for Chinese Trade Data–Dec. Years (ranked by Chinese imports)," Trade Law Centre for Southern Africa, sourced at http://www.tralac.org/pdf/20070220_China_Africa_top20s2007.xls
4. Ibid.
5. Ibid.
6. Minerals Bureau, "South Africa's mineral reserves 2005," 2006/2007, South Africa Yearbook: 16—Mineral, energy and geology. www.gcis.gov.za/docs/publications/yearbook/chapter16.pdf
7. Esipp Mines 2006: Country Profile: South Africa. www.mines2006.com/Downloads/EN/SADC%20Mining%20Industry%20Review_MINES%202006.pdf
8. These minerals include antimony, asbestos, diamonds, coal, fluorspar, phosphates, iron ore, lead, zinc, uranium, vermiculite and zirconium. South Africa is the world's largest producer of gold, platinum group metals, vanadium and alumino-silicates, as well as one of the world's top five producers of antimony, chromite, diamonds, ferrochrome, ferro-manganese, fluorspar, manganese, titanium, vermiculite and zirconium.
9. Natalie Johnson, "Strategic Minerals in the United States," sourced at http://www.emporia.edu/earthsci/amber/go336/natalie/newindex.htm
10. Michael Dynes, "Africa's Biggest Fan," March 1, 2006, sourced at http://www.africa-investor.com/article_mag.asp?id=507&magazineid=11
11. Metals prices have completed the sixth year of a bull-pricing phase that started in 2002. Since the end of 2001, a market basket of six basic nonferrous metals (aluminum, copper, lead, nickel, tin and zinc) has increased in a supercycle pricing surge of 338 percent ("Metals: here's what you'll pay this year," January 1, 2008, sourced at http://www.purchasing.com/article/CA6518773.html?industryid=48405).
12. See The China Monitor, November 2007, Issue 24, Centre for Chinese Studies, University of Stellenbosch, South Africa

http://www.jamestown.org/china_brief/article.php?articleid=2373938