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CHINA'S ROLE IN GLOBAL TRADE

**Opportunities and
Risks in the Forestry
and Mining Sector**

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Introduction

China's role in the global economy is undergoing a rapid transformation. The manufacture of goods for export to developed markets such as the USA and European Union, as well as booming demand from domestic consumers, is driving China's escalating international search for natural resources. Chinese companies, investors and traders are establishing a solid presence across Africa and Southeast Asia in an effort to meet this demand. Some are well resourced by government finance, while others are entrepreneurs using independent capital. This trend has placed China at the center of an interdependent global network of suppliers, manufacturers and consumers, each with its own responsibilities towards environmental protection and sustainable trade.

This report examines the impact of China's trade and investment patterns in Africa, the Mekong region in Southeast Asia, and Europe. It focuses particularly on the environmental effects of primary resource extraction in developing countries resulting from demand in developed countries and the rise of China as a manufacturing powerhouse. It draws on intelligence compiled from more than a dozen reports written for the WWF over the past few years. These reports cannot pretend to be exhaustive, but aim to give an overview of the current situation.

After providing some background on China's role in global trade and investment, and introducing the concept of triangular trade, the report will move on to two specific areas of concern: forestry and mining. Suffering a paucity of its own resources, China's role in the global timber trade has grown rapidly in recent years, and there is great scope for improvement in the way its companies invest in the sector. With regard to mining, China's increasing demand for natural resources has created complex relationships around the world.

The final section examines our recommendations for changes in policy, particularly regarding trade and investment policies that affect the triangular relationship between resource-rich developing countries, China and consuming OECD countries. The recommendations are divided into two sections. The first addresses governmental actors in the three regions, as well as multilateral institutions. The second aims at corporate actors, namely Chinese companies investing in developing countries and European companies operating in China.

1 China and Global Trade

China is now an exporting giant - 17 percent of total EU imports, worth € 242 billion, originated from China in 2007¹, making China the largest exporter to the European Union. Of this, around € 2.3 billion were timber imports, and € 1.6 billion were furniture imports, with the UK by far the largest EU importer of Chinese wooden furniture, at 37 percent of the EU total.

Over the past decade, the Chinese government has set out successive strategies that outline and encourage this proactive role in natural resource acquisition and diversifying the sources of imports, beginning in 2001-5 with the 10th Five Year Plan for National Economic and Social Development. Not only is China now a leading market for natural resources, but the government's "Going Global" policies implemented since 2004 have also made it a major source of finance for Chinese companies and other actors operating abroad. It is also increasingly a source of finance and infrastructure for its trading partners in the developing world. Because of this, the state-owned Export-Import Bank of China (China Ex-Im Bank), which has played an important role in fostering this rapid expansion of investment flows, is now one of the world's largest export credit agencies.

As it strives to boost its manufacturing capacity, China has grown to become the world's largest consumer of most metals and minerals. Over the past 10 years, the country has become a leading global manufacturer, consumer and exporter of wood-based products. It is the second largest market in the world for industrial timber, pulp and paper². By driving demand in global markets and boosting commodity prices, China is in a unique position to shape the state of trade and investment in mining and timber industries. This influence can already be observed in African supplier nations where the mining industry is still in its infancy or has been disrupted by civil conflict. Here, China is breathing economic viability into once debt-ridden markets through injections of hard cash, technical expertise, basic infrastructure such as roads, schools and hospitals, and other forms of direct investment.

China has been providing assistance to Africa since the 1950s as part of its political relationships with some African countries, but has recently stepped up its engagement in line with growing economic interests. Information on the amounts and recipients of Chinese aid is limited, but if the government's high-profile announcements at the FOCAC summits are anything to go by, Chinese aid to Africa is substantial and growing.

Much of the aid is dispersed as concessional loans, and the terms of these loans are not usually made public. In contrast to the aid from Africa's Western donors, Chinese aid generally comes with few strings attached and

1 Eurostat online database (<http://epp.eurostat.ec.europa.eu>)

2 Andy White, Xiufang Sun, Kerstin Canby, Jintao Xu, Christopher Barr, Eugenia Katsigris, Gary Bull, Christian Cossalter and Sten Nilsson, "China and the Global Market for Forest Products."

focuses on infrastructure projects, training and medical support. Much of the aid is guided by strategic economic or political interests and concessional loans often come as a package combined with aid, investments or arms exports.

In this regard, the establishment of the China-Africa Development (CAD) Fund in 2007 is of particular significance. This fund was initially established with a capitalisation value of US\$1 billion, provided by the China Development Bank, and it is envisaged that this figure will eventually reach US\$5 billion³. The objectives of the Fund are to improve the level of cooperation between China and Africa, and to support the activities of Chinese companies operating on the continent. The CAD fund operates in a somewhat unique position, filling the gap between traditional models of government-funded aid (generally from developed countries), and development funding in the form of loans. The primary focus of the Fund's activities would appear to be direct investment (particularly in infrastructure development projects), the promotion of market-oriented economic development, and the improvement of livelihoods on the African continent.

In Vietnam, official development assistance from China has been significant, reported at US\$312 million in the period of 1992-2004. Overall, ODA from China was more political in nature and focused on cultural exchange and support⁴. As with Chinese capital, Chinese diplomacy plays an increasingly important role in Cambodia. China has been a key source of foreign aid in recent years, donating US\$6 million worth of steel bridges in 2001, waiving outstanding loans in 2002 and more recently pledging to provide naval vessels and other military assistance to the Royal Cambodian Armed Forces. The greatest pledge came in 2006, when China's Premier Wen Jiabao during a visit to Cambodia promised US\$600 million in aid and grants to the RGC, prompting Cambodian Prime Minister Hun Sen to describe China as Cambodia's "most trustworthy friend." Almost half of the aid package will go towards supporting the development of Cambodia's first large dam – the Kamchay dam being built by Sinohydro – with much of the rest earmarked for the construction of bridges and government offices⁵.

In much of Africa, the natural resource market share controlled by Chinese business operators has grown rapidly over the past decade. In Gabon, for example, Chinese companies have become increasingly competitive in the operation of logging concessions and in different kinds of wood processing, some annexing smaller French companies that had traditionally held a dominant position in the local industry. However, despite China's growing involvement in Central African forestry, as at 2009 Chinese companies were still a minor presence compared to established Western competitors, a fact that challenges the widely held view that China is "annexing" Africa's resources.

While some agencies have focused on how China's role in global trade affects individual, resource-rich developing countries, others have taken a macro approach in examining the effects of global trade flows. The Carnegie Institution of Science, for example, in 2010 published a report on the consumption-based accounting of CO₂ emissions in trade. It found that, in 2004, 23 percent of global CO₂ emissions, or 6.2 gigatonnes CO₂,

3 www.cadfund.com

4 Dinh Van An (2005) Vietnam-China Economic relations: Progress and problems, Presented at "New Opportunity for the Furtherance of Regional Economic Integration", Nanning, 24-25 November 2005.

5 Xinhua News Agency (2008) "Chinese FM meets Cambodian PM, foreign minister." 3 February. The Nation [Thailand] (2007) "China invests heavily in Vietnam, Cambodia, Laos." 3 December.

were traded internationally, primarily as exports from China and other emerging markets to consumers in developed countries. It concluded that: “ Consumption-based accounting of CO₂ emissions demonstrates the potential for international carbon leakage .”

1.1 The Growing Influence of Chinese FDI

Since 2004, the Chinese government has begun to develop laudable policies to ensure Chinese foreign direct investment (FDI) underwrites projects that account for environmental and social considerations. While many of these guidelines are still in the formulation stage, the new policy frameworks have the potential to offer real leverage for organizations monitoring the application of sustainable practices in forestry and mining. As Chinese involvement in FDI and other external finance models has grown at breakneck speed, there is a pressing need for further reforms to match the fast-changing trade environment.

So far, lending by Chinese financial institutions has tended to focus on infrastructure projects that assist the extraction and transport of natural resources. Chinese banks ICBC, CCB and China Ex-Im Bank have said that the environmental impact is an increasingly important factor in their lending decisions. However, more research needs to be conducted into the role of Chinese financial institutions in developing countries.

Chinese FDI in both the mining and forestry sectors mostly grew between 2004 and 2008⁶. In the mining sector, the stock of Chinese FDI grew from USD5.95 billion in 2004 to USD22.87 by 2008, while that in the agriculture, forestry, husbandry and fishery sector grew from USD834 million to USD1.47 billion over the same period. In the three countries of the Mekong region – Cambodia, Laos and Vietnam – Chinese FDI stock grew from USD338 million in 2005 to USD1.22 billion in 2008. Growth in China’s FDI was also rapid in Africa during this period, rising in DR Congo from USD25 million to USD134 million, and in Mozambique from USD15 million to USD43 million.

1.1.1 Chinese FDI in the Forestry Sector

Cross-border investment by Chinese forestry enterprises is concentrated in four regions⁷: the Commonwealth of Independent States (Russia and Ukraine); neighboring Asian countries (Laos, Myanmar, Korea and Thailand); Africa (Gabon, Equatorial Guinea); and Latin America (Brazil, Peru, Bolivia, Guyana, and Suriname). By the end of 2007, Chinese enterprises had set up 85 companies abroad to develop forest resources, and total outward FDI accrued stood at US\$360 million⁸. Their investments span from logging and timber processing to flower cultivation, from machine repair and maintenance to labor services.

Resource-rich African countries such as Tanzania, while they welcome trade with China, are wary of becoming mere bases from which raw materials are sourced at a high environmental cost and a low value added to the local economy. About 40 percent of Tanzania’s total budget depends on aid and the nation is eager to attract FDI that helps develop its manufacturing sector and grow its economy.

6 "2008 Statistical Bulletin of China's Outward Foreign Direct Investment"

7 "China's Trade & Cross-border Investment in Forest Products, Chinese Academy of International Trade and Economic Cooperation", unpublished research report, July 2009.

8 Ibid.

By the end of 2007, Chinese forest enterprises' outbound investment remained small, with relatively few enterprises focusing on a narrow range of businesses. Chinese guidelines for outward investment in the forestry sector require only that Chinese companies adhere to the laws of countries in which they operate. In many of the recipient countries, however, laws are poorly implemented due to government indifference or lack of local enforcement capacity. Cultural differences can be added to the list of obstacles that lie on the way of better cooperation between Chinese companies and African countries (see box).

CULTURAL BARRIERS IN AFRICA

Relations between China and African nations at a government level are generally excellent and run through a number of regional and bilateral forums. However, the economic activities of private and small-scale traders are less coordinated and not well researched. While the general operating procedures of Chinese and other international actors in Africa show few major differences, there are initial misunderstandings that arise due to language barriers and cultural differences. These are magnified for small and medium companies acting without direct government level assistance.

Chinese companies often make more mistakes in terms of rules and regulations in the early stages of operation. However, these initial problems are resolved once the companies have become accustomed to local rules and regulations with many Chinese companies proving to be 'fast learners'. The problems are put down more to cultural differences and a lack of operational experience in the African setting than any intent to subvert local laws.

Providing Chinese language versions of relevant government regulations and operational standards could prevent some of the issues encountered when Chinese operators enter the market. In 2007, for instance, Mozambique published a Mandarin Chinese translation of its 209-page labor law. Research has shown the document has proved a valuable guide for Chinese companies in settling disputes.

Chinese entrepreneurs in the DRC and Gabon have described themselves at a considerable disadvantage to their Western competitors, who due to longstanding colonial ties have common frames of cultural reference and shared languages. To engage Chinese stakeholders on issues of sustainable trade and development therefore requires that the language and cultural hurdles be taken into full consideration.

Chinese FDI is currently funding mining projects across Central Africa and in the Mekong Region of Southeast Asia. In Vietnam, for example, foreign multinationals, including Chinese companies, have been involved in exploration that is likely to diversify exploitation into high-potential minerals like bauxite and copper. In 2006 high-ranking Chinese and Vietnamese leaders signed a memorandum of understanding (MOU) with Vietnam National Coal, Mineral Industries Group (Vinacomin) to collaborate on bauxite mining in the Central Highlands. The MOU focuses on bauxite mining and aluminum refining plants worth US\$1.3 billion. While Laos has also prioritized bauxite mining, its strategy for exploitation is still emerging as it determines the best options for the country.

In Central Africa, Chinese companies have begun to enter Gabon's mining sector. Two main projects are well known: the manganese concession in the Bembélé Mountains and the iron ore concession in the Bélinga Mountains. Other than those two main projects, Sinosteel is also exploring for manganese in the country.

1.1.2 Chinese FDI in the Mining Sector

The manganese concession in the Bembélé Mountains has been awarded to Compagnie Industrielle et Commerciale des Mines de Huazhou (CICMH), a Sino-Gabonese joint venture. Originally, the CICMH joint venture comprised of the two Chinese companies Ningbo Huaneng Kuangye and Huazhou, China's most important manganese producer with offices in Beijing, Shanghai and Guangzhou. However, in August 2008, Hong Kong-listed CITIC became a majority owner as it bought a 51 percent stake in the JV. They have thus become the first Chinese company to start manganese extraction in Gabon. CICMH's concession has a 30-year exploration span and their production facility has 500 tons annual capacity.

A 25-year exploitation license for the Bélinga iron ore concession in the Bélinga Mountains located in north-eastern Gabon, 500km east of the Gabonese capital Libreville, has been awarded to a consortium named Comibel (Compagnie Minière de Bélinga, Mining Company of Bélinga). The consortium comprises CMEC, Panzhihua Iron & Steel Group, and the Gabonese state. The operator of the project is CMEC. The deal is structured as an infrastructure-for-minerals-barter deal according to the concessional finance model for which China is now well-known in Africa. By means of the US\$3 million China Ex-Im Bank financed barter deal, Comibel will provide Gabon with the infrastructure investments necessary for the exploitation of the remote iron ore deposits.

However, the implementation of the Bélinga project has been slowed down. It has been argued that this is a result both of the global economic downturn and of delays in the environmental impact assessment (EIA), and because of political changes in Gabon due to the death of president Bongo. Moreover, Gabonese and international civil society has been critical about the lack of transparency around the contract between the Gabonese state and CMEC, and of the site selected for the accompanying hydro project, arguing that a hydro project located in the area could have detrimental impacts on the environment. In May 2010, the Bélinga project still has not taken off. The Chinese submitted its feasibility study to the government in January 2010, but it is said that the government wants to renegotiate the contract.

In the Democratic Republic of Congo, there is a great deal of private Chinese investment taking place. Prior to the global economic downturn, many Chinese entrepreneurs and employees were active in the DRC's mining sector – around 5000 Chinese resided in the Katanga province, running processing plants, small scale mining ventures and logistics companies⁹. The global economic downturn and the falling prices of raw material affected these stakeholders severely. By May 2009 only around 1000 or less of them remain, although operations have slowly begun to recover with several Chinese processing plants resuming operations on a small scale¹⁰.

Many resource-rich countries lack mining standards, a gap that the Extractive Industries Transparency Initiative (EITI), established in 2003 as a coalition of governments, companies, civil society groups, investors and

9 "Chinese Companies in the Extractive Industries of Gabon & the DRC: Perceptions of Transparency," Johanna Jansson, Christopher Burke & Wenran Jiang, Centre for Chinese Studies, August 2009 : Interviews with several Chinese company representatives in the Lubumbashi area, 9-13 September 2008, Lubumbashi.

10 Ibid.: Telephone interview with a well informed Chinese observer in Lubumbashi, 29.04.2009.

international organisations, in part tries to fill. The initiative seeks to support improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining. The goal of EITI is to ensure the large revenues generated from the exploitation of natural resources are properly used to foster sustainable growth and reduce poverty. China has expressed its support for the EITI in several international fora, notably supporting the UN General Assembly Resolution which emphasizes that transparency should be promoted by all Member States and the G20 Pittsburgh declaration that support participation in the EITI. Chinese companies have reported under the EITI framework in countries such as Gabon, Kazakhstan, Mongolia and Nigeria¹¹.

The Chinese government has introduced a comprehensive legal framework for the forest industry, including tariffs, import licensing and quota limitations to regulate timber import, export tax rebate reductions, and new trade policies that support the export of high value-added, Chinese-owned brands using advanced technology. The government has also formulated guidelines for Chinese enterprises regarding investment in forestry abroad, and has taken measures to protect China's own forests. However, much work still needs to be done. Success is also dependant on cooperation with organizations outside of China's borders.

The Forum for China-Africa Cooperation (FOCAC), for example, is a diplomatic platform for consultation and formalization of Sino-African relations, complementing China's bilateral relations with individual African countries by providing a forum where Chinese and African leaders can set the direction for and consolidate the relationship going forward¹². The inaugural FOCAC ministerial meeting was held in Beijing on the 10th - 12th October, 2000. The meeting "charted the direction for the development of a new, stable and long-term partnership featuring equality and mutual benefit between China and African countries." In November 2006 the high-level FOCAC Summit was held in Beijing, summoning 41 heads of state, government and delegation as well as ministers of foreign affairs and ministers in charge of economic cooperation from China and 48 African countries.

Following the meeting, the Beijing Action Plan was released, a comprehensive document covering plans both for more high-level cooperation in terms of economic and international affairs, and detailed commitments on human development, infrastructure development and technical assistance. By means of the multilateral FOCAC process, China is also seeking to engage with African multilateral fora. In the 2000 Beijing Declaration of the Forum on China-Africa Cooperation and the 2003 Addis Ababa Action Plan, China pledged its support to the African Union (AU) and the New Partnership for Africa's Development (NEPAD). In July 2006, a memorandum of understanding was signed between the FOCAC and

1.2 Role of Multilateral Forums in Establishing Trade Patterns

11 <http://eitransparency.org/blog/china-and-eiti>

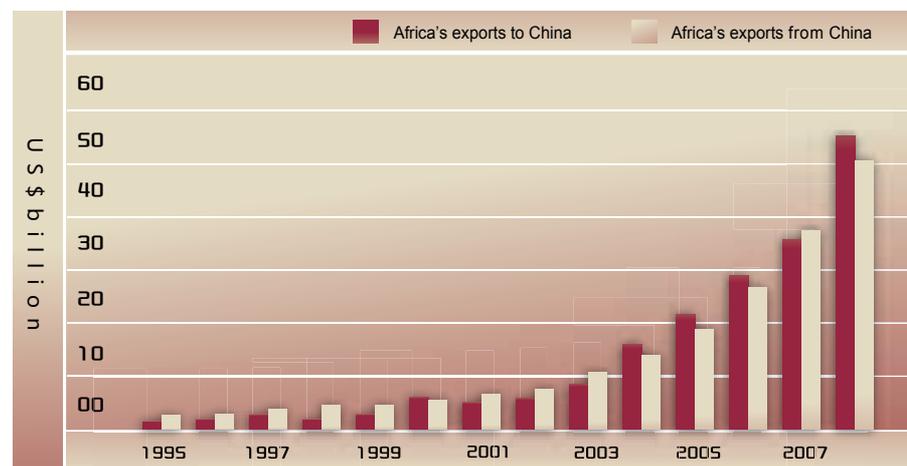
12 Forum for China-Africa Cooperation website (2009): www.focac.org

NEPAD secretariats. The support for AU and NEPAD was subsequently renewed in the 2006 Beijing Action Plan. However, China's engagement with African countries continues to predominantly take place through bilateral frameworks.

There has been a remarkable increase in trade since the inaugural FOCAC meeting, although a great deal of structured research is needed to further explore the extent to which FOCAC and China's African Policy has played a role in terms of facilitating trade in an increasingly globalized world. Between 2003 and 2008, Sino-African trade increased from US\$18.6 billion to US\$106.8 billion, a 474 percent increase¹³. China's exports to Africa largely comprise manufactured goods, notably electrical appliances, textiles, machinery and vehicles. The shares of the respective products in the overall trade profile have remained relatively intact over the last decade. China is largely importing raw materials from Africa; oil, ores, wood, tobacco and cotton. Oil and petroleum products have come to increasingly dominate the trade profile, particularly since 2000.

As well as FOCAC, China has also acceded to a variety of international conventions such as the United Nations Convention to Combat Desertification, Convention on International Trade in Endangered Species of Wild Fauna and Flora, and Ramsar Convention on Wetlands and Convention on Biological Diversity and actively attended relevant international conferences. Meanwhile, China has also signed memorandums of understanding on combating illegal logging and illegal trade of forest products with some neighboring countries like Indonesia, and set up cooperation mechanisms on the common and sustainable development of forestry with countries such as Russia and Myanmar. In 2007, China signed an MOU with the U.S., under which the two countries would start immediately to share information on shipments of timber, step up law enforcement against illegal activity and encourage private-sector partnerships to promote sustainable forest management¹⁴.

Figure 1 : Trade between Africa and China 1995-2008



Source : World Trade Atlas

¹³ World Trade Atlas

¹⁴ Xinhua, "China, U.S. sign first MOU addressing illegal logging, timber trade," 2007-12-13

Although China is a key actor in global trade, the country is only one part of a larger web of international actors, some importing and manufacturing within China's own borders. For example, many of the largest forestry product manufacturers in China are foreign-invested transnational companies. In 2007, trade by foreign enterprises in China accounted for 45.25 percent and 60.37 percent of China's total imports and exports of forest products, respectively¹⁵.

Triangular trade, historically, refers to trade among three ports or regions. It usually develops when a region exports commodities that are not required in the region from which its major imports come. In the case of the global wood industry, it can describe a scenario whereby the raw materials for goods produced are sourced in one country, processed in another, and sold in a third, thus completing the triangle.

Figure 2 : China's timber product imports and exports (1997 and 2006)

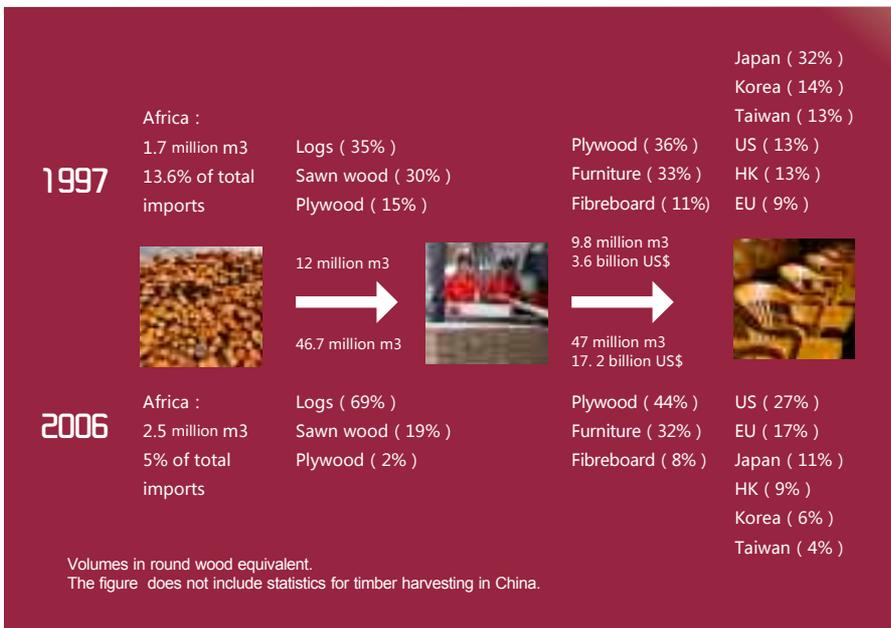


Image: China Customs Statistical Yearbook, data compiled by Forest Trends, reproduced from *Completing The Triangle: Piloting a New Approach to Dialogue Among Political and Economic Actors in the Global Supply Chain*, January 2009, p9

With this in mind, it is important that trade cooperation and dialogue accounts for the triangle of end consumers, manufacturers and resource providers, each sharing the burden for progressive action on sustainability.

No country fits neatly into any category, but the involvement of actors from all three nodes can be applied at local, national, regional or global levels. With this in mind, China's direct contribution to the global forestry sector's ecological footprint may not be as large as some believe because it can be argued that China is used mainly as a manufacturing link in a

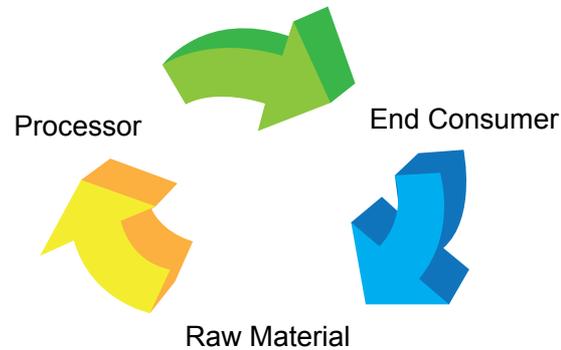
1.3 Triangular Trade and Responsibilities

1.3.1 The Triangular Approach

15 Forestry industry statistics issued by Chinese Ministry of Commerce for 2007.

chain where most of the value is added outside of the country. A 2009 report about China's forest exports even suggested that some Chinese manufacturers are exporting at a loss and the main source of profit for Chinese wood processors on certain products is an export tax rebate (of 9 percent to 11 percent of the export price)¹⁶.

Figure 3 : The Triangular Trade Model



China's Trade & Cross-border Investment in Forest Products, Chinese Academy of International Trade and Economic Cooperation, unpublished research report, July 2009, p64

16 "China's Trade & Cross-border Investment in Forest Products, Chinese Academy of International Trade and Economic Cooperation", unpublished research report, July 2009, p64

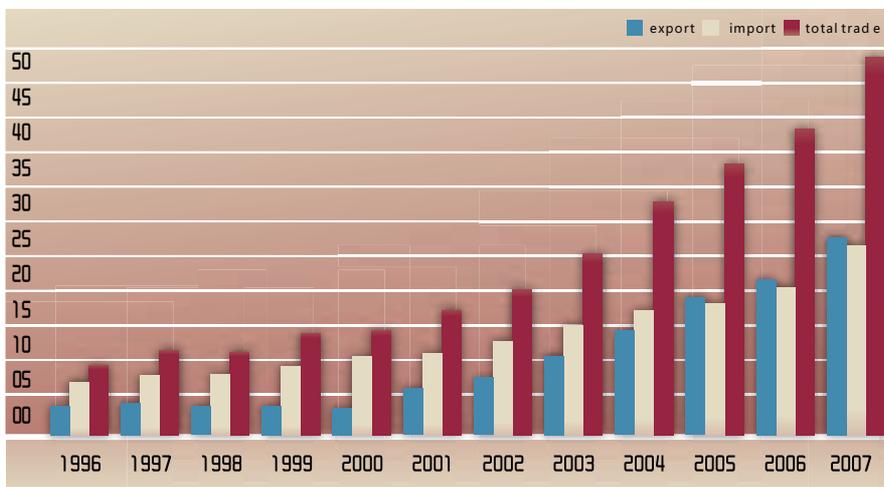
Here is a strong argument that countries involved in the supply, manufacture and consumption of products are all jointly responsible for the protection of natural resources – and those benefiting most should bear the largest responsibilities.

2 Forestry

From 1997 to 2007, China's trade in wood-based products expanded five-fold from US\$8.261 billion to US\$44.2 billion - an average annual growth rate of 18.13 percent. Exports increased at an average annual growth rate of 23 percent, compared with 14.97 percent for imports. Despite rapid increases in volume, the base value of its forest product exports remained comparatively low, so China maintained trade deficits for most of the last decade. As exports grew stronger, their value rose. In 2007, China achieved a trade surplus of US\$210 million. China became a net exporter of forest products in 2005¹⁷.

2.1 China's Footprint in the Forestry Sector

Figure 4 : Overview of China's export and import of major forest products (in billion US\$)



Source: compiled with data from the State Forestry Administration's Statistics Yearbook (1996-2007)

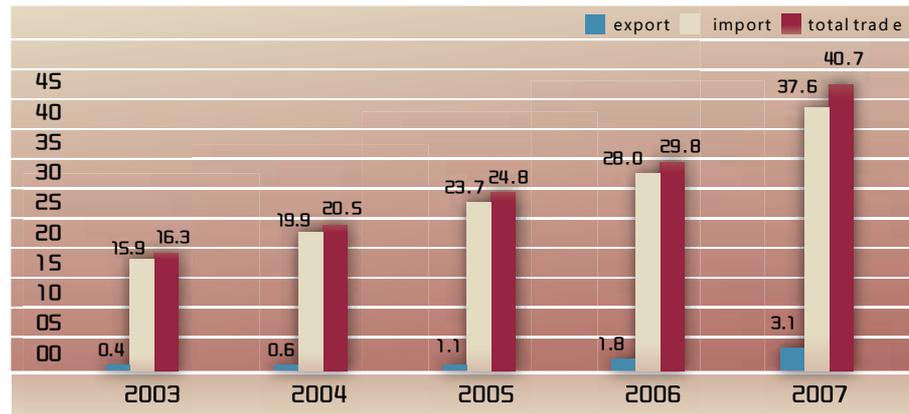
Note: Forest products refers to rough logs, sawn woods, building boards (flake boards, fiberboards, plywood), wood articles, furniture, wood chips, wood pulp, waste paper, papers and paper products, not including byproducts such as fruits, nuts, juices etc.

Russia is now China's largest overseas market for forest resource development and utilization. In 2007, 74.1 percent of Chinese companies investing in forestry overseas were involved in Russia-based investments¹⁸. Also, Chinese companies operating in Russia are mainly involved in timber processing, which creates more jobs locally.

17 "State Forestry Administration's Statistics Yearbook" (1996-2007).

18 Compiled with data from the Chinese Customs Statistics Yearbook 2007.

Figure 5 : China-Russia bilateral trade in major forest products (2003-2007), US\$100M



Source: compiled with data from the Chinese Customs Statistics Yearbook

The EU's imports of Chinese forest products are substantial and have expanded considerably. Imports of timber products (mainly plywood, joinery and carpentry wood and wood for parquet flooring) and wooden furniture have increased 15-fold since 1995 to reach €3.9 billion in 2007²⁰, accounting for 17 percent and 42 percent of total imports respectively²¹. The UK, Germany, Italy, France and Spain are the biggest buyers. Chinese exports of manufactured wood products to Africa have also increased significantly, but remain relatively small in absolute terms and are mainly shipped to non-supplier countries on the continent.

Europe's timber processing industry has felt the impact of growing forest product imports from China (and other countries). This is particularly true for plywood produced from valuable okoumé logs from the Congo Basin. While most production of okoumé plywood historically took place in Europe, okoumé log exports have increasingly shifted to China where plywood processing is less costly. Nevertheless, despite growing imports, Europe's wood working industries increased their output overall in response to rising European demand for wood and wooden products.

EU imports of both timber and wooden furniture from China grew rapidly in the last decade. Imports of timber rose from € 210 million in 1995 to € 2.3 billion in 2007, the latter now representing 17 percent of total timber imports into the EU. Imports of wooden furniture rose from € 50 million in 1995 to € 1.6 billion in 2007. The Chinese share of total EU wooden furniture imports increased from 3.4 percent to 42.3 percent between 1995 and 2007. The main EU import countries for timber from China are the UK (22 percent), Germany (15 percent), Italy (9 percent) and Spain (9 percent). The main EU import countries for wooden furniture from China are the UK (37 percent), France (10 percent) and Germany (9 percent). The UK is by far the largest EU importer of Chinese wooden furniture.

Looking at EU timber imports by product group, plywood and veneer (24 percent in 2007), joinery and carpentry wood (18 percent) and wood for

19 All figures from Eurostat online database (<http://epp.eurostat.ec.europa.eu>).

20 Canby, K., Hewitt, J., Bailey, L., Katsigris, E. and Sun, X. (2008) "Forest products trade between China & Africa: An analysis of imports & exports", Forest Trends and <http://www.GlobalTimber.org.uk>, USA: Washington D.C., and van Gelder, J.W., Kroes, H. and Herder, A. "Mapping out China's and Africa's relationship with Germany and the UK", WWF, UK: London, and White, A., Sun, X., Canby, K., Xu, J., Barr, C., Katsigris, E., Bull, G., Cossalter, C. and Nilsson, S. (2006) "China and the Global Market for Forest Products; Transforming Trade to Benefit Forests and Livelihoods", Forest Trends, USA: Washington D.C.

parquet flooring (13 percent) are gaining importance. The shares of the two other categories (other wood articles and wood marquetry) are declining over time. The category “other articles of wood” is still the largest category in 2007. Unfortunately there is no further breakdown for this category available. On average, each EU country sources 5.3 percent of its timber imports from China. This is less than the Chinese share in total EU imports (17 percent), because each member country sources a large part of its imports from other EU countries. This internal EU trade between member countries is of course excluded from the import figures of the EU as a whole. For wooden furniture, each EU country on average sources 12.6 percent of its imports from China. For the EU as a whole this percentage was 42.3 percent.

In Africa and in the Mekong Region, China is a vital growth market for timber products, although its trade value differs greatly between countries, as does the level of penetration by Chinese investors. In Africa, China’s timber buyers are particularly important to nations such as Mozambique – which exports 90 percent of its forest products to China²¹ – and central African countries such as Gabon, Cameroon and the Democratic Republic of Congo (DRC). These countries form China’s main supply of African forestry products²².

In recent years the Mekong region has maintained continuous surpluses in forest product trade with China. China’s imports from the region mainly consist of primary forest products such as logs and sawn timber, and these imports are often tens or even hundreds of times greater in value than China’s wood exports to the region. In 2007, sawn wood accounted for about 30 percent of China’s total import of forest products from the Mekong region, while the import of paper and paper products has varied from 10 percent to 20 percent of total imports over the past several years²³. China’s wood exports to the Mekong countries primarily consist of veneer, fiberboard, furniture, wood articles, paper and paper products, and other extensively processed forest products.

Chinese consumers are relatively modest users of timber and paper. The average person in the U.S. consumes 17 times as much wood as a person from China²⁴. Yet with a fifth of the world’s population and rapid economic growth, the Chinese market for industrial timber, pulp, and paper is the second largest in the world, outranked only by the US.

According to a 2004 WWF report on China’s wood market, China’s own forests and plantations produced around 79 million cubic metres of wood for industrial use, less than half of the 173 cubic metres required for domestic use and export. China’s domestic needs required the harvesting of a log volume of 138 million cubic metres and China’s factories absorbed an additional 35 million cubic metres for the manufacture of products for export

2.1.1 Africa

2.1.2 Mekong Region

2.1.3 China’s Domestic Wood Market

21 World Trade Atlas

22 World Trade Atlas

23 Compiled with data from the “Chinese Customs Statistics Yearbook” (2000-2007).

24 “WWF Living Planet Report 2004.”

to other countries²⁵. Such figures show that a growing portion of the wood processed in China ends up being used by consumers in other countries. But domestic demand for wood products is still significant, it is growing and local forests cannot support it.

China is a relatively forest-poor country. Most of its original forests were cleared centuries ago, and over-harvesting in recent decades has depleted many of the remaining forests of mature timber trees. Domestic wood production rates have been in decline since 1995. In 1998, China responded to disastrous floods in the Yangtze and other rivers, worsening sand-storms in Beijing and declining productivity in timber forests by initiating ambitious policy reforms. In 2007, the State Forestry Administration announced targets for national forest cover of 20 percent by 2010, 23 percent by 2020 and 26 percent by 2050²⁶.

However, while sustainable exploitation in certain well-stocked domestic forests can help to bridge the gap between domestic supply and demand, China is likely to continue to face a severe shortage of wood in the coming decades. Imports have expanded dramatically, and will continue to expand, to meet demand.

China's growing demand for foreign timber is leaving a massive environmental footprint outside of China's borders and raising legitimate concerns that an increase in illegal logging may occur to meet that demand.

China does have a major role to play in reducing the global footprint of the forest industry and can do so without losing competitiveness, income or jobs. By continuing to police such activity and clamp down on such practices, while at the same time sourcing timber from environmentally ethical sources and improving production efficiency and reuse at home, China can bring a significantly positive environmental impact.

In regions with sound governance and well-managed forests, revenues from wood exports to China may come without significant environmental cost. If China transfers its timber sourcing to such regions, it may reduce its net footprint. However, in frontier regions with poor forest governance, increased exports to China can result in a larger ecological footprint in the form of indiscriminate forest clearing.

In April 2009, the China State Forestry Administration and Ministry of Commerce jointly released guidelines for Chinese enterprises in pursuing sustainable operations and management of overseas forestry. The same month, the Ministry of Commerce released a guide to foreign investment in 164 countries and regions. The guide introduced environmental protection regulations and standards in the markets concerned.

The Sino-African trade relationship is facing a particular challenge from illegal logging — a problem coined in local African media as the

2.2 Governance and Illegal Exports

²⁵ "China Yearbook of Statistics" (various years) and the "Yearbook of Forestry Statistics".

²⁶ <http://www.china.org.cn/e-news/news071204-1.htm>

“Chinese takeaway”. The issue is especially acute in Mozambique, China’s lead supplier of wood in East Africa. In several provinces, according to a report for the South African Institute of International Affairs titled *China in Mozambique: A Cautious Approach*, most of the timber exported to China is attained through illegal extraction of unprocessed logs, transported on smaller vessels directly to Chinese cargo ships waiting in international waters — collusion involving local communities and private Chinese timber buyers.

The Mozambican experience highlights the impact of weak governance in African countries on sustainable trade. While Mozambique has adopted a rigorous environmental policy framework, one that has recently been updated to account for issues of sustainability, its ability to implement these policies is weak, exposing the country and its environment to dishonest business practices. In this instance, local authorities simply lack the capacity to patrol Mozambique’s vast coastlines to intercept illegal traders.

Resource-rich developing countries that export logs and sawn timber are particularly vulnerable to illegal logging and environmentally harmful practices because of weak legislation, or an inability to implement and enforce existing legislation, as well as poor environmental awareness and protection in general. These factors, coupled with the day-to-day survival needs of local populations, mean that wide-scale environmental damage can occur in a short space of time. Also, while some of these countries might individually account for only a small percentage of China’s total wood imports, China might still account for the majority of these countries’ wood exports and can have a major influence on local markets and practices.

Another example is Tanzania, where the contribution of the forestry sector to GDP is officially 5 percent. However, with 1 million people in the country depending on forests for their livelihood, the actual contribution to GDP is estimated to be 15 percent, due to a significant amount of illegal logging²⁷. Based on data from two of the five major shipping companies operating in Tanzania, between July 2005 and January 2006, China imported all indigenous hardwood logs and three-quarters of processed hardwoods (sawn and billets) exported from Tanzania²⁸. During the whole of 2005, 66 percent of containers with timber products leaving Tanzania were destined for China²⁹. A 2007 report by the wildlife trade monitoring network TRAFFIC, titled *Forest, Governance and National Development: Lessons learned from a logging boom in Southern Tanzania*, provides evidence of the illegality of this trade. Statistics in the report show that China imported 10 times more timber products from Tanzania than appear on Tanzania’s own export records. This suggests that Tanzania collected only 10 percent of the revenue due from these exports.

On January 27, 2006, the Tanzanian government reinforced the ban on exports of all logs and sandalwood and suspended tree harvesting in protected natural forests in order to address illegal logging.

27 "Tanzania - China Natural Resource Investment, Trade and Aid Relation: A Scoping Study", p41.

28 *Ibid*, p52.

29 Shipping company statistics, 2005.

Chinese manufacturers need to respond to emerging environmental sensitivities in their export markets. For example, a Chinese factory supplying furniture to a retailer in the USA may need to provide assurance that the wood in its products was not harvested illegally. A Chinese paper manufacturer supplying copy paper to Japan may need to ensure the paper does not contain fibre sourced by clear cutting rainforests. Such trends can also be seen as incentives for Chinese companies to gain market share by marketing green credentials.

2.3 A Path to Sustainability - Forestry Certification

Certification has become an important tool used to identify sustainable and legally managed forestry sources, at the same time providing participating producers with a potential market advantage when compared to illegal suppliers.

The Forest Stewardship Council (FSC) is one such certification scheme, launched in 1993 as a joint initiative of timber users, traders and representatives of relevant civil society groups. It is an important example of triangular cooperation due to its global reach and the successes it is already starting to show in China. The FSC now has a worldwide network of national initiatives in 46 countries — with China seeing the fastest growth of FSC certification globally. In 2007, the FSC accredited the Working Group on Forest Certification in China under the leadership of the Chinese State Forest Administration (SFA), the Chinese Academy of Forestry and WWF. Over 700 Chinese companies have obtained “chain of custody” certification and over 1 million hectares of forest area have been certified. Another model in the application of voluntary industry standards is the Programme for the Endorsement of Forest Certification (PEFC), a global umbrella organization for the assessment of and mutual recognition of national forest certification schemes. Although no African and Chinese schemes are yet to be represented in significant numbers, data from the UK shows PEFC-certified imports make up 28 percent of the timber market.

While the Chinese have made great improvements to their domestic forestry industry, in Africa, certification has been granted to just 0.3 percent of forests and Africa accounts for only 3.4 percent of certified forests globally³⁰. By taking shared responsibility for the problem of illegal logging, there is considerable scope for China to assist in providing African supplier countries with the financial resources and technical support to develop local forestry certification schemes.

³⁰ FSC (2008) Global FSC certificates: type and distribution (as of September 2008), Forest Stewardship Council, Germany.

3 Mining

Much of the planet's remaining natural resources is located in developing countries, and these nations often rely on extraction of these resources for government revenues. Until recently these deposits have been too difficult, dangerous or economically unfeasible to exploit. But relative stability combined with a depletion of resources elsewhere has brought these countries into focus. Lacking extraction technology and funding themselves, these governments have promoted investment from overseas, particularly from nations where the minerals and oil will be used. Important among these is China, which has become increasingly concerned about securing stable supplies of primary resources for its economy.

China's involvement in Africa's mining industries is diverse and complex. In Gabon, for instance, the main extractive sectors in which the Chinese are involved are oil, iron and manganese, all of which demand companies that are capable of long-term, large-capital investments. By contrast, in the Democratic Republic of Congo, cobalt and copper are extracted both by artisan miners and large-scale operations. A number of Chinese small and medium-sized operations were active in these sectors before the global financial crisis and the resultant drop in commodity demand. After a severe decrease in 2008, the number of Chinese stakeholders has slowly begun to recover. The growth that Africa has seen over past five years has been based on the demand for commodities, and up until the financial crisis, much of this demand has been driven by China.

Cameroon is also one of the destinations for Chinese investment in the primary resources sector. The Chinese oil company Yan Chang from Shaanxi province signed an agreement in April 2009 with the Cameroonian national oil company SNH (Société Nationale des Hydrocarbures) to start a four-year exploration undertaking on two previously untouched onshore blocks, Zina and Makari in northern Cameroon, at a cost of US\$18 million. The contract is renewable for two two-year periods. Yan Chang would own 75 percent of the blocks and SNH 25 percent. This would be Yan Chang's second venture outside of China as they have previously signed up for exploration blocks in Madagascar. It is Cameroon's first onshore oil drilling project, and the only oil venture in the country where a Chinese company is involved. In terms of Cameroon's mining sector, the only registered Chinese company is Sinosteel's subsidiary Sinosteelcam S.A., which is exploring for iron at the Lobe concession close to Kribi.

3.1 China's Footprint in the Oil and Mining Sector

3.1.1 Africa

3.1.2 Mekong Region

In Laos, where mining is underdeveloped, the Laotian government has singled out the mining industry as a priority investment sector with potential to boost economic and social development. Key mineral resources include gold, copper, tin, coal potash and gypsum. From a base of 0.5 percent of GDP in 2000, the Government of Laos projects that mining will account for 10 percent of GDP by 2010³¹. Laos recently accepted an offer from China to carry out a survey of potential mining deposits through the country. As of 2008, 33 of the 113 companies operating in the Laotian mining sector were from China.

Vietnam too is rich in mineral resources with some of the world's largest deposits of phosphate, bauxite and rare earths and large viable deposits of oil, coal, gold, gems, copper, zinc, tin, chromite, manganese, titanium, and graphite. Exports of crude petroleum and coal made up 23.4 percent of the country's total export earnings in 2006³². More than 50 percent of Vietnam's exports to China consist of raw and semi-processed natural resources — around 20 percent of total exports³³. Since 2000, several Chinese companies have entered the Vietnamese mining sector, once dominated by state-owned enterprises, and are looking to diversify exploitation into high-potential minerals like bauxite and copper.

Bauxite is the major material used in the production of aluminium and is therefore of central importance to China's manufacturing capacity. Neighboring Cambodia, Laos and Vietnam are rich in mineral deposits but due to war, bureaucratic inefficiency, limited capacity and little capital for the establishment of mines beyond small-scale operations, much of these resources remains untapped. Because of this, the Mekong region is fast becoming a strategic partner for Chinese mineral investments but, at this stage, the full extent of output and demand is difficult to estimate.

Bauxite mining presents a critical challenge to the environment in the region, although it is by no means the only environmental challenge. It involves the discharge of toxins that, if not stored securely and permanently, can severely impact the hydrology of rivers and water quality, and cause the loss of fish species important to ecosystems and local livelihood. These potential effects can be felt far beyond the mining site, with contaminants spreading downstream and across borders.

Information about Chinese mining operations in Cambodia, Laos and Vietnam is extremely limited. Although companies may assert they have undertaken due process regarding the environmental and social impacts of their activities, it is virtually impossible for third parties to verify their claims. The willingness and capacity of host governments to monitor industry compliance is also deficient.

In Vietnam, experience has shown that environmental impact assessments are only carried out to meet minimal government requirements, green issues are only mentioned in a very general sense, and implementation is not closely monitored. For instance, in the first alumina project in Lam Dong province, a company controlled by the

31 Mekong Private Sector Development Facility (2008) "Improving the investment climate for the mining sector in Lao PDR," Business Issues Bulletin, 6 March.

32 Wu, J. C. (2007) "The mineral industry of Vietnam." 2006 Minerals Yearbook: Vietnam. US Geological Survey, Reston, USA.

33 Coxhead, I. (2007) "A new resource curse? Impacts of China's boom on comparative advantage and resource dependence in Southeast Asia." World Development Vol. 35 No. 7, pp. 1099-1119.

investor, the state-owned Vietnam National Coal, Mineral Industries Group (Vinacomin), conducted its own environmental impact assessment, an unambiguous conflict of interest.

In 2007, the Bolaven Plateau in southern Laos was set aside for major development by several Chinese mining companies after bauxite deposits were found in a 24,600-hectare area. This development has the potential for major environmental and social impact. The area retains a substantial degree of forest cover, is a significant tourist destination and, due to its mild climate and fertile soil, is an excellent place for crop production, mostly coffee. In June 2009, a senior Laotian government official announced that part of the plateau would be rezoned for commercial crops and water sources but admitted plans for a US\$4 billion bauxite mining would go ahead at some point.³⁴

China is starting to make efforts to improve its profile in the international arena by showing its willingness to take on board international best practices such as the Equator Principles for banks, public participation strategies and green credit policies, among others. China now has the chance to become a global leader in environmentally and socially sustainable investment by carefully monitoring Chinese overseas investments, strengthening its own investment regulations and adopting global best practices and principles. However, the onus cannot be on China alone. China will need to partner with governments within the countries it operates in order to help resource providers strengthen their own regulations, which does not necessarily have to come at the expense of investment inflows.

Much attention has been given to China's infrastructure-for-minerals-barter deals in Africa — the so-called "Angola Model," named after a project in Angola where China Ex-Im Bank made loans with mineral resources used as collateral. In the DRC, the best known is the large-scale Sicomines deal between the Congolese government and two Chinese companies: China Railway Engineering Corporation (CREC) and Sinohydro. The agreement, signed in 2008, provides Congo with China Ex-Im Bank infrastructure finance totaling US\$9 billion in exchange for substantial copper and cobalt mining concessions in Katanga Province.³⁵

But controversy over the Sicomines financial arrangements has eclipsed the larger situation of Chinese involvement in the DRC's mining industries, where a great deal of small-scale private investment is underway. The global financial crisis saw a dramatic drop in the numbers of Chinese entrepreneurs and employees, but operations have begun to recover and several Chinese processing plants have resumed operations.

3.2 Sustainable Business Practice

34 Vientiane Times, "Bauxite developer to build processing plant", 12 May 2009

35 Further details on the agreement can be found in "Convention de Collaboration entre La République Démocratique du Congo et le Groupement d'Entreprises Chinoises relative au Développement d'un Projet Minier et d'un projet d'Infrastructures en République Démocratique du Congo", signed 22.04.2008.

3.3 Governance

A good example of improved natural resource governance can be illustrated by a case study on on-shore oil exploration in a national park in Gabon. The Gabonese economy is dependent on oil exports and while Chinese companies are present, traditional actors Shell Gabon and Total Gabon dominate the industry. The main Chinese company active in Gabon is Sinopec, which has its own exploration blocks, joint exploration and production blocks, as well as two active subsidiaries — Sino-Gabon Oil and Gas and Sinopec International Petroleum Service (SIPSC).

In 2005, Sinopec was allocated an exploration permit within a national park, Loango NP. It began seismic exploration in Loango national park while not having their Environmental Impact Assessment finalized and without having authorization from the National Parks Agency to enter the Park. Following national and international public outcry, the Gabonese National Parks Service ordered Sinopec to cease all field activities. Sinopec, previously not having been properly informed by the Gabonese authorities about the rules and regulations related to oil exploration in a national park, than interrupted their activities in order to get their EIA approved and their entry permit into the park delivered.

Following harsh criticism on the quality of the draft EIA produced by a local consultancy firm, Sinopec decided to interrupt that contract and to engage an international company to redo the EIA. This EIA was developed in close coordination with the Ministry of Environment and international conservation organisations Wildlife Conservation Society (WCS) and World Wide Fund for Nature (WWF). In order to assure implementation of the environmental and social management plan, which is part of the EIA, the Ministry of Environment formerly mandated WCS and WWF to audit its implementation. A team was set up that has been with Sinopec teams in the field throughout their seismic operations. This resulted in a seismic campaign with very little social and environmental impact on Loango National Park. This case study shows how environmental standards in Gabon have increased in the recent past and that a Chinese company was very proactive in adhering to these news standards.

However, such examples are rare in regions where governance challenges are more severe. For example, the Extractive Industries Transparency Initiative set up in 2003 has become stalled in the DRC, and none of the Chinese respondents in a study³⁶ had heard of EITI and its guiding principles. When the research team explained the principles of EITI to the respondents, all of them suggested that they would be very interested in taking part in the implementation of such an initiative. They were, however, highly skeptical of its implementation under current local operational conditions with the low standards of governance in the mining sector. A claim made by all respondents was that there are no short-term remedies for the corruption and the lack of overall transparency in the DRC.

36 "Chinese Companies in the Extractive Industries of Gabon & the DRC: Perceptions of Transparency", Centre for Chinese Studies, University of Stellenbosch, August 2009.

4 Recommendations

The following section contains a series of recommendations for companies, governments and inter-governmental institutions to improve the environmental sustainability and responsibility of their activities and/or policies related to the extraction of natural resources within ecologically sensitive regions, including Africa and South-East Asia.

Bring additional governmental partners into ongoing political processes: Several existing political processes could be and already have been expanded to engage a broader range of governmental actors spanning the triangle, such as the G8 summits, the Organization for Economic Cooperation and Development, the New Partnership for Africa's Development, the African Union, the Yaoundé Forest Summit, the Congo Basin Forest Partnership and the World Bank's regional forest law enforcement and governance (FLEG) initiatives. Furthermore, it is vital that the issue of environmental sustainability and responsible use of resources is highlighted within regional bi- and multilateral trading blocs in resource-providing regions, such as the Association of Southeast Asian Nations (ASEAN), the Southern African Development Community (SADC), and the Common Market for Eastern and Southern Africa (COMESA), to name but a few, as well as in the relationships between these blocs and those in developed countries, such as the European Union, on the one hand, and China in particular on the other. In this regard, as discussed above, the role of FOCAC is a particularly important one.

Encourage coordination and collaboration between different political processes: In some instances, governments may prefer to pursue specific strategic objectives at the bilateral level. However, where objectives and areas of collaboration overlap triangular coordination between the processes can be useful such as the bilateral summits between the EU, China and Africa or the regional FLEG processes.

Encourage and facilitate trade and sale of sustainable goods: Triangular cooperation can focus on reducing trade in illegally logged timber (such as the EU's Action Plan for Forest Law Enforcement Governance and Trade) and stimulating the sale of forest products originating from sustainably managed forests (e.g. through certification and government procurement schemes). China can also work together more with other players in the global supply and manufacturing chain to strengthen wood monitoring systems and ensure transacted products are from legal sources. Existing laws and regulations should be modified to promote certificates, lumber tracking, effective EIAs and supply chain management.

4.1 Governments

4.1.1 Inter-governmental Institutions

4.1.2 China

Work together more with other governments: bilateral and multilateral exchange and cooperation mechanisms should be activated to carry out international obligations jointly. Mechanisms for ecological protection should be enshrined in inter-governmental agreements on forestry cooperation. Also, better cooperation between China and exporting countries in the exchange of data and product documents can prevent the illegal export of forest products and the forgery of export documents; it can also deter smuggling and stem illegal logging.

Partner with Mekong Region governments to assist in the monitoring of compliance, by ensuring its own sustainable investment regulations are not breached and by adopting principles such as the Equator Principles for banks and the International Council on Mining and Metals Sustainable Development Framework: Given the lack of transparency, poor regulatory supervision and the rapid movement of Chinese mining firms into the region, the opportunity exists for China to take a leadership role on this issue in the region.

4.1.3 The EU, its members and other European countries

Harness investment and aid for technology cooperation: Foreign direct investments and aid can help facilitate access to new technologies and knowledge and thereby assist African and Chinese producers in making the most efficient use of forest resources. Chinese wood product manufacturers need to push technological innovation and brand building, and reduce their reliance on primary product exporters. By doing this, they can jump upwards in the value chain and also improve wood use efficiency, thus reducing their environmental footprint. In addition, looking at forest management more holistically, technologies can also help to reduce other pressures on forests in Africa, notably in the area of energy.

Channel more aid to support sustainable natural resource use: Areas that could be targeted for enhancing aid include sustainable forestry development and management, facilitating the adoption of new technologies to use forest resources more efficiently or improving Africa's business environment overall to help African producers move up the value chain. Existing initiatives could be tapped into in this context, such as the Congo Basin Forest Fund, the International Tropical Timber Organization, the Forest Carbon Partnership Facility, the OECD-NEPAD Africa Investment Initiative or the WTO's Aid for Trade Initiative.

Establish new political cooperation processes with multi-stakeholder input: Some issues may require establishing new cooperation mechanisms that are built on a triangular relationship from the outset. One example is the current effort by the EU to initiate a trilateral dialogue with China and African countries to jointly promote Africa's development.

Consumers should be encouraged to change their consumption patterns: For example, by recycling wood and paper products, or buy recycled and certified products to reduce the demand for forest products.

On an industry level, the recycling of plywood and other materials and the full use of thinned logs, small logs, processing residues, wood substitutes and composites should also be encouraged.

Collaborate in developing an internationally applicable methodology for measuring and placing a cost on CO2 footprint: The most common way to evaluate a country's CO2 emissions is to produce an inventory of emissions within the country. Calculated in this way, the CO2 emissions do not take into account that a country's consumption also instigates production and hence pollution outside of the country. Goals need to be based on consistent, measurable results.

Aid Chinese companies in overcoming cultural and linguistic hurdles: Through simple measures such as translating documents and legislation into Mandarin, governments can help investing companies understand local regulations and feel included in the regulatory framework, as was the case in Mozambique with the translation of the labor law. They can also build their own capacity in order to better understand Chinese investors

Focus on (building capacity for) the implementation of existing regulations instead of developing new ones: No matter how robust the regulatory framework, poor enforcement can undermine all attempts at domestic environmental protection.

Mitigate the factors that hinder implementation of environmental protection laws: The factors include rapidly expanding demand for investment, porous borders and a lack of resources for enforcement at the local level and a lack of transparency.

Include relevant environment- and sustainability related departments (environment, forestry etc) in the negotiation and implementation of bilateral and multilateral agreements governing resource extraction and land use planning in general: In many instances, such agreements are negotiated by those departments responsible for trade, mining and/or international relations, without the participation of relevant environment-related departments, leading to insufficient consideration of potential environmental impacts arising from their implementation.

Implement and enforce requirements related to sustainability reporting to (foreign and domestic) companies involved in large industrial (extractives or infrastructural) projects: Such reporting might include indices measuring the growth or decline in socio-economic development, biodiversity impact, impacts on communities and indigenous people, carbon emissions and ecological footprint, all of which can be calculated through the application of relatively well-developed international methodologies.

Apply relevant full-cost accounting practices, in order to determine the overall impact of resource extraction activities: As is the case for

4.14 Developing Countries With Rich Natural Resources

sustainability report, a number of relatively comprehensive standards exist for full-cost accounting of various activities; by applying these, developing countries will be in a position to compare, for example, the social and environmental costs associated with resource extraction activities, with the economic benefits they might produce.

4.2 Corporations

Many of the recommendations mentioned above are equally applicable to those companies (whether Chinese, European or domestic in origin) operating in resource-rich countries in Africa and Asia. In many instances, where insufficient regulation is in place or where ineffective enforcement of regulation occurs, companies can play an important role in “raising the bar” in terms of their own levels of environmental and/or social responsibility. Furthermore, it is often the case that when exporting finished products to developed country markets, the application of supply chain responsibility practices such as FSC certification and various other voluntary standards, can provide companies with a significant competitive advantage, as a result of consumer preferences in these markets.

4.2.1 Chinese Companies Operating in Developing Countries

Improve capacity to undertake effective Environmental and Social Impact Assessments: Companies need to build capacity on best practice ESIA standards and associated management plans. Engaging independent third parties can also improve the usefulness and credibility of ESIAAs.

Become more aware of investment policies and environmental policies in the countries in which they operate: Many countries have comprehensive laws and regulations that they nevertheless have difficulty enforcing. Ignorance of these policies can be a hindrance in companies acting responsibly.

Enact strategies to deal with cultural and communication divide: The incidence of regulatory compliance is increased if companies are prepared for the cultural and language environment in which they will be operating. This requires translation summaries of relevant regulations, education of employees in local language, cultural mores and standard business practices, and hiring of local specialized staff.

Utilize specialized industrial zones: Government-supported industrial areas and special economic zones offer an incubating environment for companies and investors. Ready access to planned, strategic infrastructure would mean increased likelihood of responsible resource use.

Work together with other companies: In response to issues with local regulatory changes, several Chinese firms in the Democratic Republic of Congo established a Chinese chamber of commerce. This type of forum allows for pooling of resources, particularly by micro-, small- and medium sized companies, where key or larger actors can assist members with education on compliance and sustainability.

Encourage investors to adopt standards for sustainable investment and operations: Measures can be taken by the companies and investors themselves and by the governments where the companies are registered to reduce the environmental impacts of foreign direct investments. Examples of collaborative action in this area include the OECD's Guidelines for Multinational Enterprises, the World Business Council for Sustainable Development and the UN-backed Principles for Responsible Investment.

Maintain dialog with local and international civil society: As the example of SINOPEC in the Loango National Park shows, Chinese companies can be very proactive in ensuring the impact of their activities is limited by listening to the concerns of civil society, especially where government oversight is weak.

Seek ways to reduce the intensity of natural-resource use: Companies need to use environmentally friendly materials and advanced techniques to reduce the direct and indirect impact on nature. Innovative changes should be started from the product design stage and cover the whole life of the product.

Establish an information tracking system that encompasses the entire supply chain: Manufacturers should have full information about the sources of the raw materials they buy or use, and take all necessary measures to ensure that each link of the supply chain is legal.

Create greener supply chains: In response to the increasing environmental expectations of customers and governments, companies need to integrate suppliers into environmental management processes. The legality and sustainability of goods along the supply chain should be verified.

4.2.2 Foreign Companies Operating In China

Abbreviations

ASEAN	Association of Southeast Asian Nations
AU	African Union
CAD	China-Africa Development Fund
CICMH	Compagnie Industrielle et Commerciale des Mines de Huazhou
COMESA	Common Market for Eastern and Southern Africa
CREC	China Railway Engineering Corporation
DRC	Democratic Republic of Congo
EITI	Extractive Industries Transparency Initiative
FDI	Foreign Direct Investment
FLEG	Forest Law Enforcement and Governance
FOCAC	Forum for China-Africa Cooperation
FSC	Forest Stewardship Council
MOU	Memorandum of Understanding
NEPAD	New Partnership for Africa's Development
PEFC	Programme for the Endorsement of Forest Certification
SADC	Southern African Development Community
SFA	Chinese State Forest Administration
SNH	Société Nationale des Hydrocarbures
SIPSC	Sinopec International Petroleum Service
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature

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References

"Patterns of Chinese Investments, Aid and Trade in Central Africa" (Cameroon, the DRC and Gabon), WWF and Centre for Chinese Studies, August 2009

"Patterns of Chinese Investments, Aid and Trade in Mozambique", WWF and Centre for Chinese Studies, November 2009

"Patterns of Chinese Investments, Aid and Trade in Tanzania", WWF and Centre for Chinese Studies, November 2009

"In Search of Aluminium: China's Role in the Mekong Region", Heinrich Boell Stiftung, WWF and International Institute for Sustainable Development, 2009

"Rethinking Investments in Natural Resources: China's Emerging Role in the Mekong Region", WWF and International Institute for Sustainable Development, 2008

"Completing the triangle: piloting a new approach to dialogue among political and economic actors in the global supply chain", January 2009

"Chinese companies in the extractive industries of Gabon and the DRC: Perceptions of transparency", Centre for Chinese Studies, November 2009

"China's Trade & Cross-border Investment in Forest Products", Chinese Academy of International Trade and Economic Cooperation, unpublished research report, July 2009

"China's Wood Market, Trade and the Environment", WWF, Science Press, 2004

"The Forum on China-Africa Cooperation (FOCAC)", WWF and Centre for Chinese Studies, University of Stellenbosch, August 2009

"Norwegian Consumption, Chinese Pollution (summary)", WWF, 2008

"EU consumption, Global Pollution (summary)", WWF, 2008



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WWF China Programme Beijing Office

Wen Hua Gong
Beijing Working People's Culture Palace
(Laodong Renmin Wenhua Gong Dongmen)
100006 Beijing, PR China

Telephone: 010 - 65116211 Telefax: 010 - 65116222

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