

**Untangling Chinese Aid in Africa: Does the  
'Aid for Trade' Hypothesis hold True?**

**Samar Tyagi**

**ICS OCCASSIONAL PAPER NO. 18**

Untangling Chinese Aid in Africa: Does the 'Aid for Trade' Hypothesis hold True?

Author: Samar Tyagi

**First published in 2017**

**© Institute of Chinese Studies, Delhi**

Institute of Chinese Studies  
8/17 Sri Ram Road, Civil Lines  
Delhi 110 054, INDIA  
Ph.: +91-11-23938202; Fax: +91-11-23830728  
Email: [info@icsin.org](mailto:info@icsin.org)  
Website: [www.icsin.org](http://www.icsin.org)

## **ABOUT THE AUTHOR**

**Samar Tyagi** is pursuing his Ph.D. in Economics at the Department of Humanities and Social Sciences, Indian Institute of Technology, Roorkee. He was an intern at the Institute of Chinese Studies (ICS) during June-July 2014 and worked on analyzing trends in the Sino–Indian bilateral trade. His other works dealt with the role of currency manipulation in India’s growing trade deficit with China and regional income inequality in China. This paper - originally titled 'Tracking Chinese Aid in Africa: A Panel Data Analysis' - was awarded the Mira Sinha Bhattacharjea Award, given to the best paper presented during the 9th edition of the ICS' flagship All India Conference of China Studies held in Mumbai 2016.

**Contact:** [samartyagi9@gmail.com](mailto:samartyagi9@gmail.com)



# Untangling Chinese Aid in Africa: Does the ‘Aid for Trade’ Hypothesis hold True?

## Abstract

*China’s economic engagements with Africa have generated a great deal of hyperbole. China gives an enormous amount of aid to African countries in the form of grants, interest-free loans and concessional (or preferential) loans. Officially, the total Chinese aid to Africa has increased to US\$10.13 billion (2012) from a paltry sum of US\$ 2.77 billion (2000).*

*Meanwhile, the total bilateral trade between African countries and China has increased 20 times from US\$11 billion (2000) to US\$221 billion (2014). This increased trade is led by African countries and surprisingly, China ran a trade deficit with them. This study tracks Chinese aid flows to each country of Africa during the period 2000-2012 and probes its role in increasing bilateral trade between them. Findings reveal that a one per cent increase in aid allocation to Africa is associated with 0.6 per cent increase in bilateral trade, signifying that the ‘aid for trade’ hypothesis holds true.*

**Keywords:** *Comparative Study, China and Africa, International Trade, Globalisation, Aid, Natural Resources*

## Introduction

“We like Chinese investment because we have one meeting, we discuss what they want to do, and then they just do it... There are no benchmarks or preconditions....” Sahr Johnny, Sierra Leone ambassador to Beijing, 2005 (cited in Zafar 2007).

Chinese foreign aid sparks much debate (Council for International Development 2015). In 2013, the Chinese government provided an annual figure of RMB 40 billion, or US\$6.4 billion,<sup>1</sup> for its global aid budget (Information Office of the State Council 2014). From 1990s onwards China started to play an increasing role as a donor. Chinese aid to Africa increased to US\$10.13 billion (2012) from US\$2.77 billion (AidData 2015). Apart from aid, China’s total multi-lateral trade with African countries has increased from US\$11 billion (2000) to more than US\$221 billion (2014)<sup>2</sup>, an increase of twenty times in a short span of 14 years (UN Comtrade 2015).

This study endeavours to decode China’s ‘aid allocation’ in Africa vis-à-vis sector and across countries. This paper is a preliminary study of China’s aid flows to African countries during 2000-2012. It also tests the ‘aid for trade’ hypothesis and draws implications for African countries. The following section deals with the literature review while the third section lays out the aims, objectives, research design and methodology

---

<sup>1</sup> Transparency and lack of data is an issue. There are different estimates by scholars. Usually, official figures of Chinese aid are underestimated.

<sup>2</sup> Data for aid is available only for the period 2000-2012.

adopted in this study. Section four reveals major findings, followed by policy implications and the conclusion.

## **Literature Review**

Deborah Brautigam (1998, 2009, 2010 and 2011) appreciates China's role as an 'aid-donor' as Africa was deserted by the West on various fronts and China has provided not only monetary help but also technical know-how. Brautigam having made numerous field visits to Chinese sponsored projects in Africa concludes that China's current aid activities are not motivated by short-term commercial or strategic interests.

Pettersson and Johansson (2011) have shown in their study of 184 countries between 1990 and 2005 that bilateral aid is not only positively correlated with donor exports, as suggested by earlier studies, but also positively associated with recipient exports to donors. The aid-trade link is particularly strong for donor exports to Sub-Saharan African countries and for recipient exports of strategic materials.

Strange et al. (2013) have estimated Chinese aid flows to African countries. The paper discusses the challenges of quantifying Chinese development activities, introduces AidData's Media-Based Data Collection (MBDC) methodology, provides an overview of Chinese development finance in Africa as tracked by the new database, and discusses the potential and limitations of MBDC as a resource for tracking development finance.

Rajan and Subramanian (2005) have examined the effects of aid on growth with cross-sectional and panel data. They 'found little robust evidence of a positive (or negative) relationship between aid inflows into a country and its economic growth' and 'no evidence that aid works better in better policy or geographical environments'. They also found no evidence 'that certain forms of aid work better than others'.

Zafar (2007) notes that China presents both an opportunity for Africa to reduce its marginalization from the global economy and also a challenge for it to effectively harness the influx of resources to promote poverty-reducing economic development at home.

Previous studies conducted on China's aid flows to Africa lack a country-wise data approach. Researchers differ if the aid allocation program of China is for gaining access to African markets (Zafar 2007) or for development purposes (Brautigam 2009). This study firstly, endeavours to estimate China's aid to every African country sector-wise and compare with bilateral trade to look for possible links. Second, this study uses the latest data available about Chinese aid flows to Africa extracted from AidData<sup>3</sup>, for which data was compiled using local African media sources.

## **A Critique of China's White Papers on Foreign Aid**

---

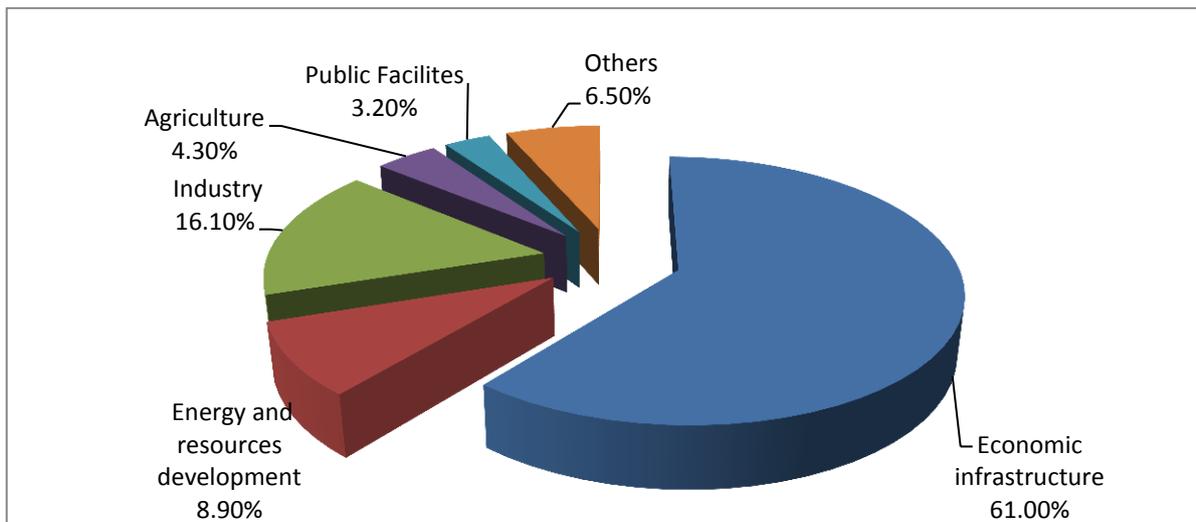
<sup>3</sup> AidData was formed in 2009 as a partnership between three institutions - the College of William and Mary, Development Gateway and Brigham Young University.

The Chinese Government released its [first White Paper on Foreign Aid](#) in April 2011, and a [second one in July 2014](#).<sup>4</sup> The first White Paper gives an overview of Chinese foreign aid from the 1950s to 2009. The second White Paper provides the same for the period 2010-2012. China says it is providing foreign aid to ‘help recipient countries to strengthen their self-development capacity, enrich and improve their peoples’ livelihood, and promote their economic growth and social progress’ (Information Office of the State Council 2011). Chinese aid is provided in three main forms: grants, interest-free loans and concessional (or preferential) loans. The key actors are the Ministry of Commerce (MOFCOM), China Eximbank, and China’s state-owned enterprises (SOEs) (Information Office of the State Council 2011).

By the end of 2009, China had provided a cumulative total of RMB 256.29 billion (US\$39.3 billion) of aid, with approximately 41 per cent in grants, 30 per cent in interest-free loans and 29 per cent in the form of concessional loans (Information Office of the State Council 2011). It also provides a breakdown of Chinese aid resources according to its geographical distribution (Figure 2), and distribution according to income level for the year 2009 (Figure 3).

**Figure 1**

**Sectoral Distribution of Concessional Loans from China at the end of 2009**



*Source:* Information Office of the State Council 2011

Major sectors, i.e., economic infrastructure (61 per cent), industry (16.1 per cent), energy and resource development (8.9 per cent), agriculture (4.3 per cent) among others have received the major chunk of the total Chinese aid to all the countries in the world (Figure 1).

A part of the conclusion is worth quoting:

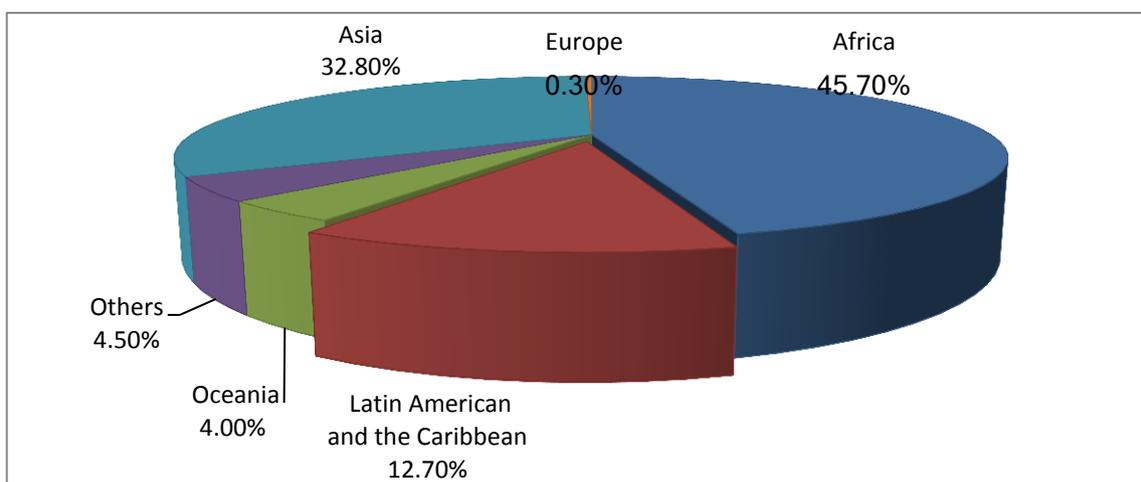
<sup>4</sup> Both White Papers do not reveal aid allocation at country-level. Instead, they give aggregate figures for all recipient countries. The two White Papers were released by the Information Office of the State Council in China, under the name ‘China’s Foreign Aid’ in 2011 and 2014 respectively.

‘China has a long way to go in providing foreign aid. The Chinese government will make efforts to optimize the country’s foreign aid structure, improve the quality of foreign aid, further increase recipient countries’ capacity in independent development, and improve the pertinence and effectiveness of foreign aid (Information Office of the State Council 2011).

This first White Paper has certain limitations. There is no mention of aid effectiveness, monitoring and evaluation strategies or result-based management. There is also no clear statement defining what China considers and calculates as ‘aid’ although on initial reading the terminology and details seem comparable to the OECD/DAC (Development Assistance Committee) definitions that are used for aid from ‘traditional donors’ (Brant 2011).

**Figure 2**

**Geographical Distribution of China’s Foreign Aid Funds in 2009**



*Source:* Information Office of the State Council 2011

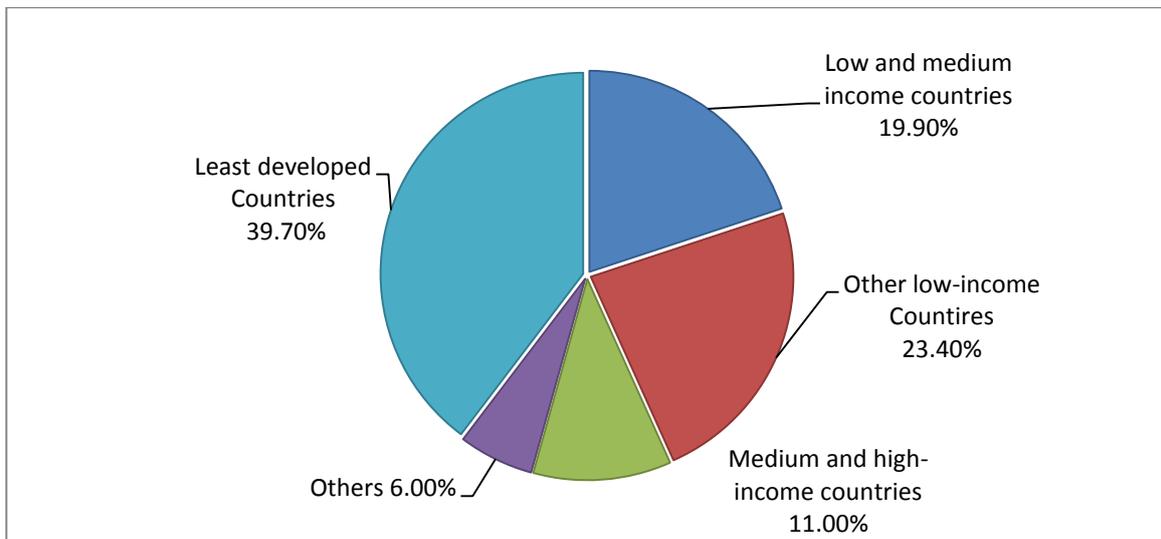
As Figure 2 shows, Africa alone got 45.7 per cent of the total Chinese aid in 2009 as per China’s White Paper on Aid (2011). Other beneficiaries includes Asia (32.8 per cent) and Latin America and the Caribbean countries (12.7 per cent) while figure 3 below shows that China has given 39.7 per cent share of its total aid to least developed countries.

During 2010-12, China provided US\$14.41 billion of aid in three forms: grant, interest-free loan and concessional loan (Figure 4). Chinese aid reached 121 countries, including 51 in Africa, 30 in Asia, 19 in Latin America and the Caribbean, 12 in Europe and 9 in Oceania.

The White Paper focuses on two key themes: ‘helping improve people’s livelihood’ and ‘promoting economic and social development’. The second emphasises on improving infrastructure, strengthening capacity building, promoting trade development, and strengthening environmental protection.

**Figure 3**

**Distribution of China's Foreign Aid according to the Income Level of Recipient Countries in 2009**

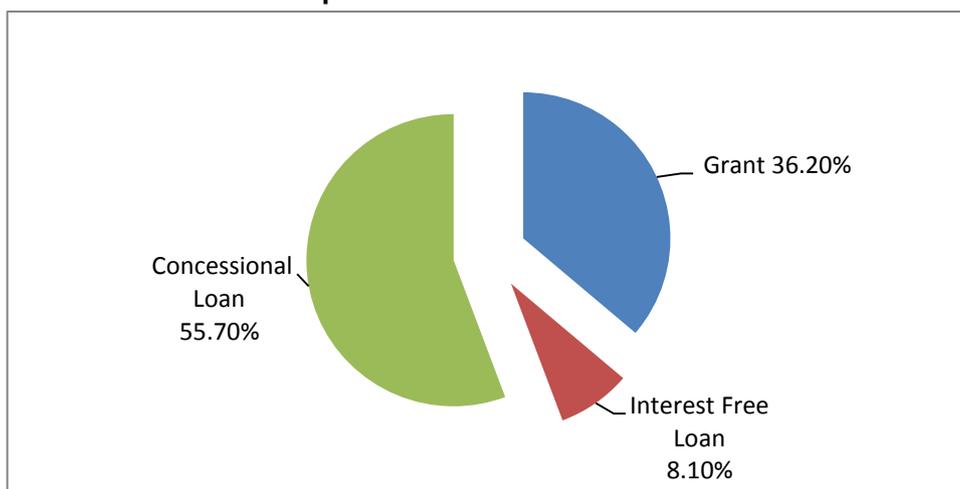


Source: Information Office of the State Council 2011

Finally, the White Paper devotes significant attention to regional and international cooperation. In 2010-2012, China contributed a total of US\$285 million to multilateral organisations, including the UN, the World Bank, IMF and Global Fund to Fight AIDS, Tuberculosis and Malaria (Information Office of the State Council 2014).

**Figure 4**

**Decomposition of Chinese Aid Flows**



Source: Information Office of the State Council 2014

In brief, the 2014 White Paper is heavy on cumulative detail and light on country specifics, but it is a definite improvement on the broad overview of the first White Paper (Brant 2014)

## Aims, Objectives and Methodology

This paper aims to estimate China's aid flow to each African country sector-wise during 2000-2012 and correlate the results with trade data to look for possible links. Objectives are:

- a) Testing of 'aid for trade' hypothesis.
- b) Finding how aid is allocated on a cross-country and sector basis
- c) Composition of China's trade with top aid recipient countries of Africa

In terms of methodology, this empirical study relies on the data compiled by the College of William and Mary (USA),<sup>5</sup> in the form of a database<sup>6</sup> by using thousands of media reports on Chinese-backed projects in Africa from 2000-2012. The database includes information on 1,954 projects in over 50 African countries and on US\$84.81 billion in commitments of official finance.

Another important variable is trade. Data for trade is extracted from various editions of China Statistical Yearbook released by China's National Bureau of Statistics and UN Comtrade. Next, the share of each African country in the total Chinese aid flow to Africa during 2000-2012 is calculated and top five countries are selected for further analysis. Then, aid and trade data is correlated to estimate association and to see whether trade flows determine aid allocation. Further, bilateral trade is analysed to assess the nature of trade and economic relationship.

### *China's Aid Flows to Africa*

Total aid flows from China to Africa during 2000-2012 reached US\$84.81 billion<sup>7</sup> in 2009 currency rates (AidData 2015). China gave the maximum aid in 2007, totalling US\$15.2 billion (see Figure 5). In the following year, aid flows declined to US\$3.38 billion, rising again in 2009 to reach US\$13.2 billion. In subsequent years, annual flows moderated to US\$10 billion with minor fluctuation of 10 per cent in both directions.

A simple correlation coefficient<sup>8</sup> between Chinese aid to Africa and their bilateral trade for the period stood at 0.6. For aid and Chinese exports to Africa the coefficient stood at 0.65 and 0.56 for aid and Chinese imports from Africa. Put differently, 1 per cent increase in Chinese aid to Africa is associated with 0.6 per cent increase in bilateral trade, 0.56 per cent increase in Chinese imports from Africa and 0.65 per cent increase in Chinese exports to Africa.

---

<sup>5</sup> This database is freely accessible at <http://china.aiddata.org/>

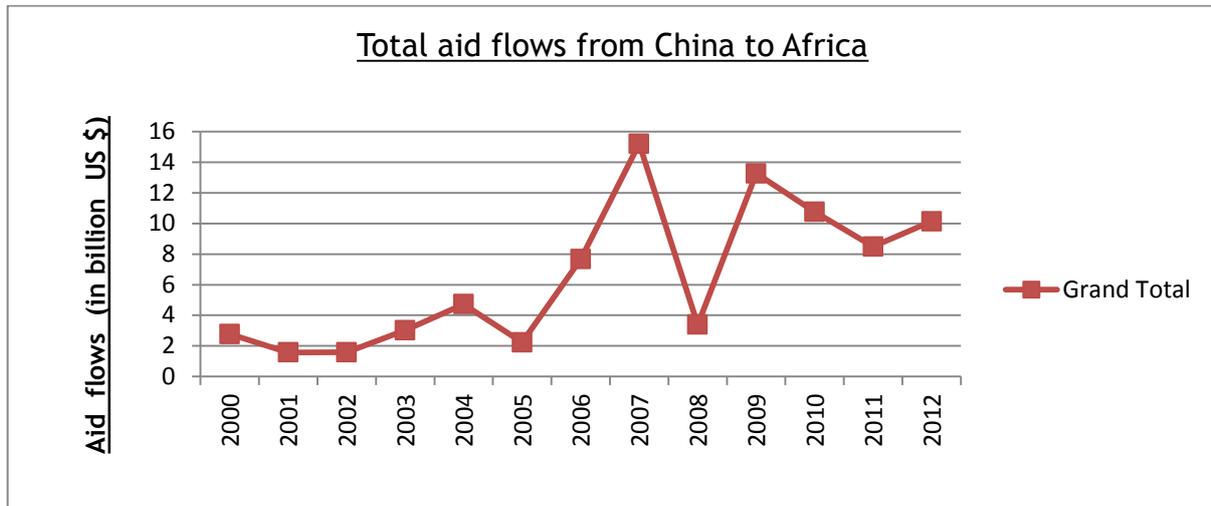
<sup>6</sup> China has not revealed country-wise aid details. Therefore, this database prepared out of news media articles published in local African countries is an appropriate approach to deal with China's aid flows.

<sup>7</sup> It also includes concessional loans and all aid flows from China to Africa.

<sup>8</sup> Simple correlation coefficient is used to measure association between two variables, i.e., quantum of change in one variable with one per cent change in another variable. Here, simple correlation coefficient is estimated for China and Africa as a whole. When it was computed for China and individual African countries, the results were spurious as aid allocation in subsequent years was not uniform. A more standard panel data regression model can be applied to capture the causal relationship between aid and trade, which is beyond the scope of the present work.

**Figure 5**

**China's Aid Flows to Africa, 2000-2012**

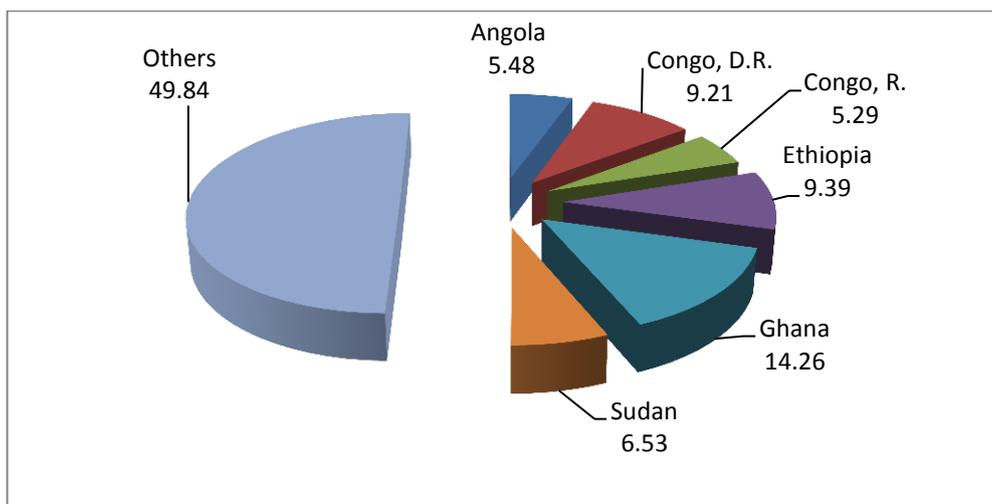


Source: AidData (2015)

A further decomposition of Chinese aid flows to Africa (Figure 6) reveals that only six countries of Africa, i.e., Ghana, Ethiopia, Democratic Republic of Congo, Sudan, Angola and the Republic of Congo, accounted for half of China's total aid flows to Africa during 2000-2012. This means that Chinese aid is unevenly distributed across Africa. The nature of economic engagements of top five countries with China is studied intensively through bilateral trade relationship for the period 2000-2014.

**Figure 6**

**China's Aid Flows to Major African Countries, 2000-2012**



Source: AidData (2015)

Out of the top six aid recipient countries, Angola, Republic of Congo and Democratic Republic of Congo are also the top African exporters to China.

### ***China's Trade with African countries***

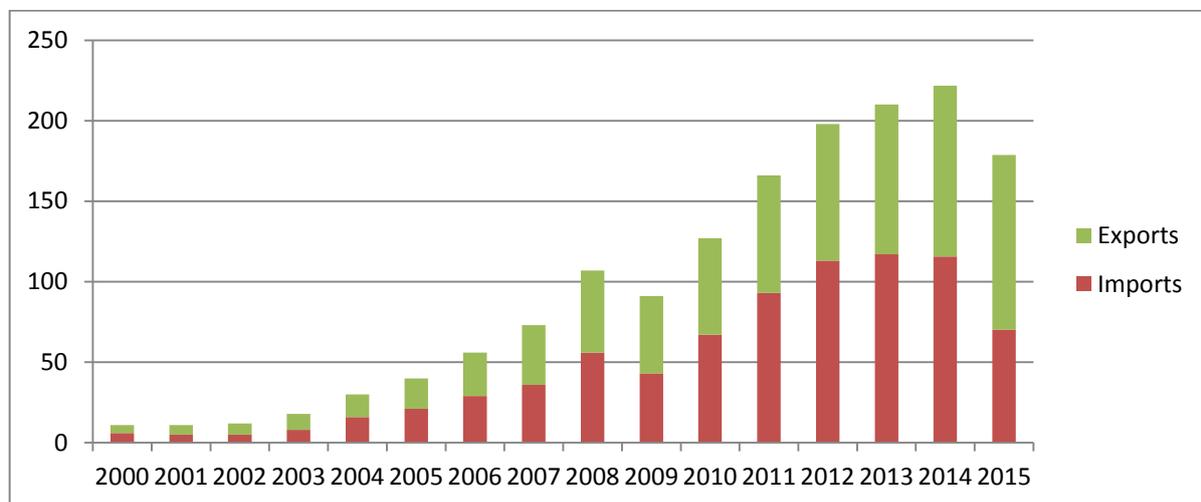
China's bilateral trade with Africa (see Figure 7) has increased from US\$11 billion (2000) to US\$221.66 billion (2014) and then decreased to US\$178.79 billion (2015). China, the world's largest trade surplus country, surprisingly ran a trade deficit with Africa to the tune of US\$9.6 billion in 2014 and enjoyed a surplus of US\$38.28 billion in 2015. This is possibly due to the crash in the prices of oil and other minerals which China buys from Africa.

A further disaggregation of Sino-African bilateral (China Statistical Yearbook 2014) trade reveals that only five countries accounted for 63.33 per cent of the total Sino-African bilateral trade in the year 2012. South Africa leads the list with 31.02 per cent of the total bilateral trade, followed by Angola (17.09 per cent), Nigeria (6.46 per cent), Egypt (4.86 per cent) and Algeria (3.89 per cent).

The list of countries remains the same when we rank the countries in terms of top market destinations for China. China's top five export destinations (China Statistical Yearbook 2014) in Africa account for only 50.89 per cent of its total exports to whole Africa. The list is topped by South Africa, cornering 18.14 per cent of total African imports from China, followed by Nigeria (12.98 per cent), Egypt (9.01 per cent), Algeria (6.49 per cent) and Angola (4.27 per cent).

**Figure 7**

**Sino-African Trade, 2000-2015**



*Source:* National Bureau of Statistics of China (various years)

However, the order changes when all African countries are ranked on the basis of top exporters to China. The top five African countries have a share of around 75 per cent of the total African exports to China. Again, South Africa leads with a 41.2 per cent share, followed by Angola (27.22 per cent), Republic of Congo (4.86 per cent), Zambia (2.59 per cent) and Democratic Republic of Congo (2.34 per cent).

It is noticeable that China's trade flows to and from Africa is restricted to a small set of countries. Similarly, half of the total Chinese aid flows to Africa accrued to only six countries.

In the following section, China's trade with top aid recipient countries in Africa is studied more intensively. This will help us in assessing the true nature of the economic relationship between China and the African countries.

### What does China Trade with Top Aid Recipients in Africa?

#### Ghana

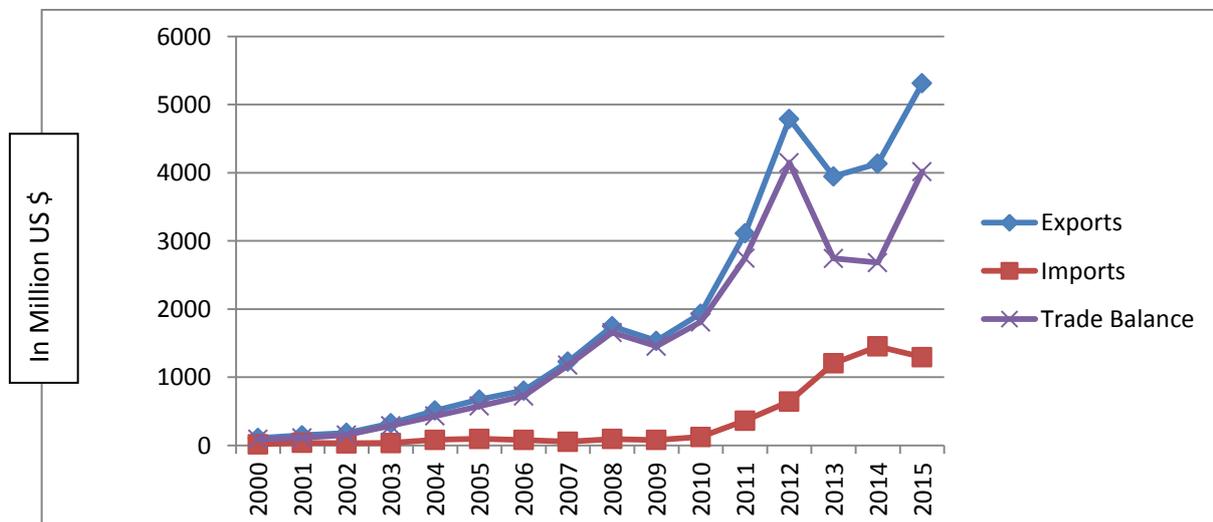
Ghana, with a per capita annual income of US\$1620 in 2014 (World Bank 2015), equivalent to India's per capita income, has grown at a remarkable pace. Its per capita income was only US\$340 in 2000 (World Bank 2015). Ghana achieved a maximum GDP growth rate of 14 per cent per annum in 2011 but slowed down to 4.2 per cent per annum in 2014. The role of aid and trade cannot be negated in this growth journey. Apart from Chinese aid, Ghana has received development assistance from the World Bank and other countries too.

Ghana received the highest share (14.26 per cent) of the total Chinese aid flows to Africa during 2000-2012 (see Figure 6), totalling US\$12 billion (2009 currency rates). China exported goods worth US\$5.31 billion and imported goods worth around US\$1.29 billion and enjoyed a trade surplus of US\$4.02 billion, i.e., a trade deficit for Ghana (Figure 8).

China's trade with Ghana resembles a typical colonial relationship; buying raw materials and selling back manufactured items. China's top exported commodities to Ghana fall within the following categories: a) electrical equipment, b) nuclear reactors, boilers, machinery, c) articles of iron and steel and other such categories which constitute value added products.

Figure 8

China's Trade with Ghana, 2000-2015



Source: UN Comtrade Database (2017)

On the other hand, Ghana sold raw materials which fall under a) Mineral fuels, b) ores, slag, c) wood and articles of wood, d) cocoa and other such categories which are just raw materials and command a very low price compared to the imported Chinese products. Table 1 lists major export and import items from China to Ghana during the year 2015.

**Table 1**  
**Top Export and Import Items in China-Ghana Trade, 2015**

<i>S.No.</i>	<i>Export item</i>	<i>Value in million US\$</i>	<i>Import Item</i>	<i>Value in million US\$</i>
1	Electrical, Electronic Equipment	800.78	Mineral Fuels, oils, distillation products, etc.	968.59
2	Nuclear Reactors, boilers, machinery, etc.	430.18	Ores, slag and ash	108.45
3	Articles of iron or steel	287.97	Commodities not specified according to kind	96.52
4	Iron and Steel	279.50	Wood and articles of wood, wood charcoal	55.86
5	Vehicles other than railway tramway	254.40	Cocoa and cocoa preparations	52.93
6	Furniture, lighting, signs, prefabricated buildings	246.71	Oil seed, oleagic fruits, grain, seed, fruit, and others	5.50
7	Plastics and articles thereof	246.50	Fish, crustaceans, molluscs, aquatic invertebrates	3.11
8	Footwear, gaiters and the like, parts thereof	242.83	Copper and articles thereof	1.59
9	Ceramic Products	214.17	Edible vegetables and certain roots and tubers	0.87
10	Articles of apparel, accessories, knit or crochet	169.98	Rubber and articles thereof	0.81

Source: UN Comtrade Database (2017)

During 2000-2012 China financed (or is still financing) around 114 projects<sup>9</sup> in Ghana. Major sectors included agriculture, forestry and fishing, communications, energy generation and supply, education, water supply and sanitation, transport and storage, government and civil society activities. Similarly, there are a number of other projects that are being financed through loans, with repayments being made in the form of minerals that are extracted with China's help.

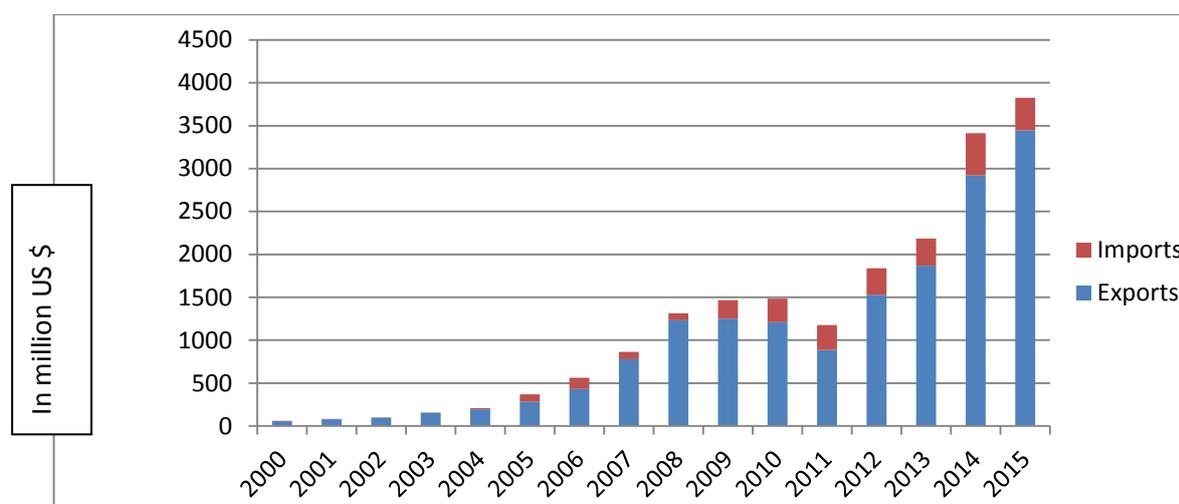
### Ethiopia

Ethiopia was the second-largest aid recipient of China's total aid flows to Africa during 2000-2012. China exported goods worth US\$3.44 billion and imported around US\$380.29 million, enjoying a trade surplus of US\$3.06 billion vis-à-vis Ethiopia in 2015. Major items among China's exports to Ethiopia included value-added manufactured products like electrical equipment, nuclear reactors, iron and steel, vehicles and railways among others. Ethiopia exported oilseeds, fruits, raw hides and skins, leather, animal fodder, mineral ores, footwear, lac, gums, resins, coffee, tea and spices to China. None of the top ten goods sold to China belonged to the value-added category. Like Ghana, Ethiopia too sold raw materials to China and purchased manufactured items from them.

Ethiopia accounted for 9.39 per cent of the total Chinese aid flows to Africa during 2000-2012, totalling US\$7.96 billion. China has financed (or is financing) around 106 projects during this period. Major sectors include transport and storage, energy generation and supply, health, agriculture, forestry and fishing, banking and financial services, trade and tourism, communications, government and civil society, education, industry, mining and construction.

Figure 9

China's Trade with Ethiopia, 2000-2015



Source: UN Comtrade Database (2015)

<sup>9</sup> Henceforth, data drawn for all aid projects discussed in subsequent country-wise analysis is from AidData (2015).

Table 2

## China's top traded items with Ethiopia, 2015

S. No.	Export Item	Value in million US\$	Import Item	Value in million US\$
1	Electrical, Electronic Equipment	869.36	Oil seed, oleagic fruits, grain, seed, fruit, etc.	289.12
2	Nuclear Reactors, boilers, machinery, etc.	414.65	Raw hides and skin (other than fur skins) and leather	54.31
3	Articles of apparel, accessories, not knit or crochet	365.96	Footwear gaiters and the like, parts thereof	13.86
4	Articles of iron or steel	307.34	Ores, slag and ash	6.60
5	Vehicles other than railway tramway	233.01	Coffee, tea, mate and spices	6.34
6	Articles of apparel, accessories, knit or crochet	227.48	Lac, gums, resins, vegetables saps and extracts	3.41
7	Railway, tramway locomotives, rolling stock, equipment	221.23	Cotton	3.00
8	Iron and Steel	91.64	Plastic and articles thereof	1.95
9	Aluminium and articles thereof	79.92	Articles of iron or steel	0.67
10	Rubber and articles thereof	58.45	Live trees, plants, bulbs, roots, cut flowers etc.	0.24

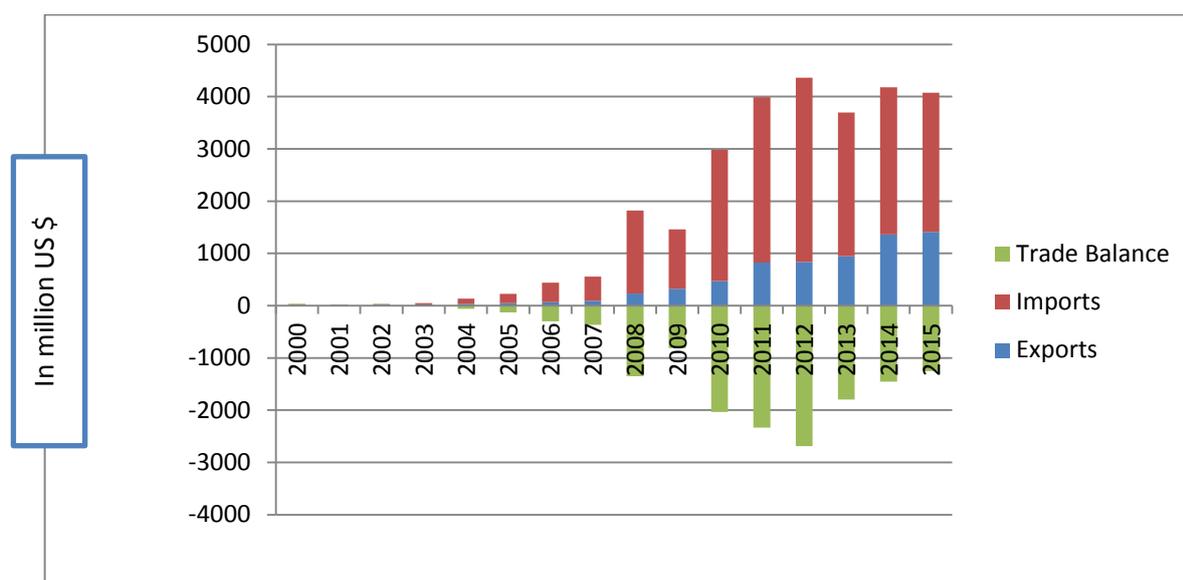
Source: UN Comtrade Database (2017)

### *The Democratic Republic of Congo (DRC)*

It was the third-largest recipient of the total Chinese aid flows to Africa during 2000-2012. In 2015, China exported goods worth US\$1.41 billion and imported the goods for US\$2.66 billion, registering a trade deficit of US\$1.5 billion in 2015 (Figure 10).

Figure 10

China's trade in goods with the Democratic Republic of Congo, 2000-2015



Source: UN Comtrade Database (2017)

Unlike other countries, like Ghana and Ethiopia, the DRC exported more than it imported from China. At a more disaggregated level, major items among China's total exports to the DRC included value-added products like electrical equipment, nuclear reactors, iron and steel, vehicles and railways, and other manufactured goods. While China imported Copper, mineral fuels, ores, woods and articles of wood, rubber and articles, nickel and articles, pearls and precious stones, coffee, tea, mate and spices.

Table 3

China's Top-Traded Items with the Democratic Republic of Congo, 2015

S. No.	Export Item	Value in million US\$	Import Item	Value in million US\$
1	Electrical, Electronic Equipment	253.44	Copper and articles thereof	1315.46
2	Nuclear Reactors, boilers, machinery, etc.	169.91	Other base metals, cermet's, articles thereof	746.35
3	Vehicles other than railway tramway	82.99	Ores, slag and ash	496.66
4	Bird skin, feathers, artificial flowers, human hair	79.83	Mineral fuels, Oils, distillation products, etc.	57.25

5	Footwear, gaiters and the like, parts thereof	75.90	Wood and articles of wood, wood charcoal	44.11
6	Articles of iron or steel	72.39	Inorganic chemicals, precious metal compound, isotope	4.47
7	Furniture, lighting, signs, prefabricated buildings	52.54	Pearls, precious stones, metals, coins, etc.	0.21
8	Plastics and articles thereof	51.06	Live animals	0.08
9	Iron and Steel	43.20	Raw hides and skins (other than fur skins) and leather	0.04
10	Pharmaceutical products	36.51	Products of animal origin, n.e.s.	0.03

Source: UN Comtrade Database (2017)

The DRC received 9.21 per cent (US\$7.80 billion) of aggregate Chinese aid flows to Africa during 2000-2012. China is involved in around 38 projects. Major sectors included government and civil society, health, industry, mining and construction, agriculture, forestry and fishing, education, communications, energy generation and supply.

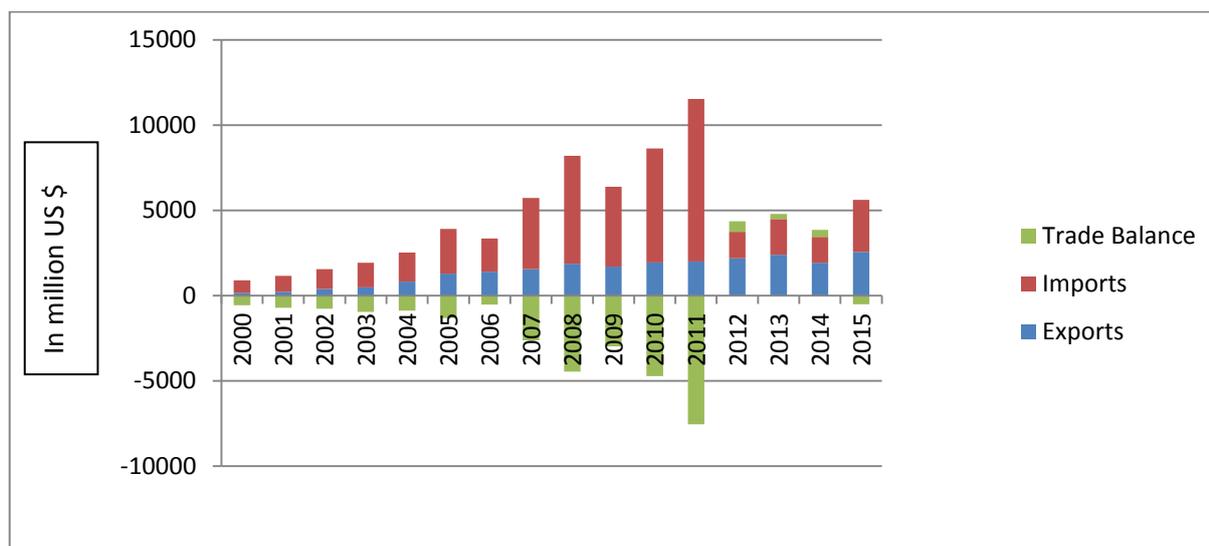
### ***Sudan***

Sudan stood fourth among African countries in terms of receiving Chinese aid during 2000-2012. In 2015 Sudan exported goods worth US\$3.05 billion and imported around US\$2.55 billion, running a trade surplus of US\$0.40 billion i.e., a trade deficit for China (Figure 11). China's top export items under major categories were nuclear reactors, boilers, machinery, electronic equipment, articles of iron or steel, footwear, vehicles other than railways, rubber and articles thereof among others to Sudan (Table 4). It imported mineral fuels, oils, ores, slag, cotton, animal fodder, copper and live animals among others from Sudan. Here again China imported raw materials from its African counterpart and exported value-added manufactured goods.

Sudan received a total of 6.53 per cent (US\$5.53 billion) of the total Chinese aid flows to Africa during 2000-2012. China is involved in around 85 projects. Major sectors include government and civil society, health, agriculture, forestry and fishing, education, energy generation and supply, and transport and storage.

Figure 11

China's trade with Sudan, 2000-2015



Source: UN Comtrade Database (2017)

Table 4: China's top traded items with Sudan, 2015

S. No.	Export Item	Value in million US \$	Import Item	Value in million US \$
1	Nuclear Reactors, boilers, machinery, etc.	263.60	Mineral fuels, Oils, distillation products, etc.	1349.81
2	Electrical, Electronic Equipment	215.00	Oil seed, oleagic fruits, grain, seed, fruit, etc.	101.91
3	Articles of iron or steel	158.31	Ores, slag and ash	24.52
4	Footwear, gaiters and the like, parts thereof	151.10	Cotton	17.29
5	Vehicles other than railway tramway	121.89	Residues, wastes of food industry, animal fodder	16.01
6	Rubber and articles thereof	98.18	Plastics and articles thereof	5.30
7	Iron and Steel	90.17	Raw hides and skins (other than furskins)	3.39

			and leather	
8	Articles of apparel, accessories, knit or crochet	75.29	Lac, gums, resins, vegetable saps and extracts nes	1.43
9	Plastics and articles thereof	71.88	Copper and articles thereof	0.99
10	Other made textile articles, sets, worn clothing etc.	63.22	Live animals	0.20

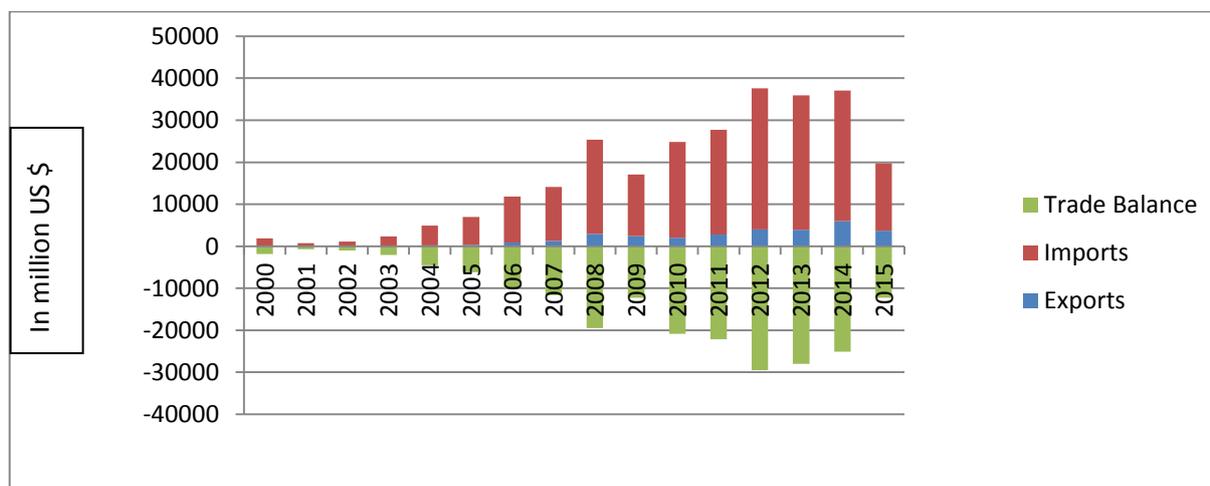
Source: UN Comtrade Database (2017)

### Angola

Angola exported goods worth US\$15.99 billion and imported goods worth US\$3.72 billion in 2015. It also enjoyed a trade surplus over China of US\$12.27 billion in 2015 and US\$25.13 billion during 2014 (Figure 12).

Figure 12

China's trade with Angola, 2000-2015



Source: UN Comtrade Database 2017

Table 5

China's Top Traded Items with Angola, 2015

S. No.	Export Item	Value in million US\$	Import Item	Value in million US\$
1	Electrical, Electronic Equipment	555.13	Mineral fuels, Oils, distillation products, etc.	15955.37

2	Furniture, Lighting, signs, prefabricated buildings	373.39	Pearls, precious stones, metals, coins, etc.	18.09
3	Nuclear Reactors, boilers, machinery, etc.	362.18	Wood and articles of wood, wood charcoal	12.46
4	Articles of iron or steel	253.08	Salt, sulphur, earth, stone, plaster, lime and cement	11.05
5	Iron and Steel	216.63	Plastics and articles thereof	0.14
6	Vehicles other than railway tramway	199.21	Products of animal origin, nes	0.05
7	Ceramic Products	187.79	Electrical, electronic equipment	0.04
8	Plastics and articles thereof	184.41	Beverages, spirits and vinegar	0.03
9	Footwear, gaiters and the like, parts thereof	166.70	Optical, photo, technical, medical, etc. apparatus	0.01
10	Articles of apparel, accessories, knit or crochet	111.94	Printed books, newspapers, pictures etc.	0.00

Source: UN Comtrade Database (2015)

China's exports to Angola mainly included manufactured goods like vehicles other than railways, furniture, electrical equipment, nuclear reactors, iron and steel among others (see Table 5). Angola's top exports to China included mineral fuels, oils, pearls, salt and wood and articles of wood among others (Table 5).

Angola received 5.48 per cent (US\$4.64 billion) of the total Chinese aid to Africa during 2000-2012. Major sectors included health, agriculture, forestry and fishing, communications, education, government and civil Society, water supply and sanitation, trade and tourism.

This analysis, based on time series data of aid and trade, makes a strong case about the nature of economic relationship of Africa and China. It resembles a typical colonial relationship i.e., importing raw materials and exporting value added manufactured items. Aid flows reveal that China's aid is not uniform across the whole of Africa. A small subset of Africa receives a significant pie of the total aid. Similarly, a few countries have a major share in bilateral trade. Further, trade decomposition gives a

vivid account of what China sells and what it buys after giving aid i.e., after building critical infrastructure like roads and railways, it has confined to buying raw materials and selling back manufactured items.

## Policy Implications

*Aid for Trade:* China's aid disbursement to Africa is positively correlated to bilateral trade. One per cent of increase in aid is associated with 0.60 per cent increase in bilateral trade.

No doubt China has provided help in building schools, sending medical teams, training thousands of people from African countries and has provided humanitarian help many times. This has helped the Chinese in building a good image among African countries, and in getting an upper hand in securing contracts for mining ventures i.e., entering Africa.

*Trade decomposition:* China mainly imported raw materials like mineral oils, agricultural products, wood articles among others and major exports fall under major categories of value-added manufactured items like electrical equipment, nuclear reactors, vehicles, plastic items, footwear apparel and other accessories. This trade relationship resembles a typical colonial interaction similar to the British importing raw materials from its colonies and selling back manufactured items.

*Aid composition:* Officially, China has not disclosed the total amount of aid disbursed to each country. It remains unknown how China distributes its aid sector-wise in African countries. However, based on AidData estimates, it can be estimated that China's significant aid accrue to the economic infrastructure sector. A small portion is devoted to building human capital and genuine development assistance. A total of 88 projects of military finance have also come to light. Exact details of these projects remain unknown. Scholars are divided whether China has misused its aid program to enter African markets and fulfil its own energy needs. A large group of Western scholars allege that China's main intention to provide aid is to get access to African markets and mines (Evans et al. 2006; Zafar 2007). However, Deborah Brautigam (2009), who has closely watched these aid projects on the ground, dispels these arguments and appreciates China's development assistance to Africa.

*Impact on African economies:* There have been tremendous job losses reported across Africa, especially in the textile sector, due to liberalisation of trade policies (Mutume 2006). Generally, it is believed that investments by foreign companies create ample job opportunities in host countries but Chinese SOEs also bring Chinese labour with them. This may be for two reasons:

- a) Chinese SOEs do not get skilled workforce in host countries and therefore, they have to bring their own workforce. Also top managers of ongoing projects speak only Chinese, so it may be difficult for them to communicate quickly and effectively with an African workforce.

- b) China has deliberately taken its unemployed workforce to foreign destinations. Existing industrial towns in China are unable to create adequate job opportunities, thereby compelling many unemployed to seek overseas opportunities.

If a foreign country's investments do not lead to job creation in African countries, already ridden with massive unemployment, then such investments are of limited use. How much revenue would be generated if these African countries developed their own capacity remains to be studied.

*Impact on domestic producers:* Reports indicate that China's cheap items have significantly harmed domestic producers in African countries. Labour intensive sectors like clothing and textiles have seen a reduction in sales on account of cheap Chinese substitutes. Mutume (2006) notes that the phasing out of the old system has already cost Africa more than 250,000 jobs over the last few years, reports the International Textile, Garment and Leather Workers' Federation (ITGLWF), leaving more than a million family members without stable incomes. Most jobs have been lost in Lesotho, South Africa, Swaziland, Nigeria, Ghana, Mauritius, Zambia, Madagascar, Tanzania, Malawi, Namibia and Kenya. African countries must create safeguard mechanisms so that the interests of domestic producers are protected.

## **Conclusion**

China's flourishing bilateral trade with African countries has significantly benefitted from its aid programme to these same countries. It is providing enormous capital in the form of concessional loans to capital-starved and labour-surplus African countries. However, the usage of this capital is restricted to selective sectors that directly supplies natural resources to China.

Repayment patterns show that aid recipient countries pay the donor country i.e., China in the form of minerals. China's bilateral trade shows a relative increase for those countries that also saw an increase in aid allocation. Trade flows show that China's multilateral trade with African countries has increased significantly; however, Africa's top export items include mostly raw materials while import items include mostly value-added manufactured items. In fact, Africa has become a source of natural resources and a consumer of Chinese finished goods, to feed its own strong economic growth establishing the fact that 'aid for trade' hypothesis holds true. Thus, it can be said that China has used aid as a tool to enter African countries. At the same time, China's role as a development partner cannot be nullified completely.

## REFERENCES

- AidData. 2015. <http://china.aiddata.org/>
- Brautigam, Deborah. 2010. 'The Dragon's Gift: The Real Story of China in Africa' (Video file), 21 January, <https://www.youtube.com/watch?v=Cq6Ks3ROiCg> (accessed on 8 August 2017)
- \_\_\_\_\_. 2011. 'Aid With Chinese Characteristics: Chinese Foreign Aid and Development Finance Meet the OECD-DAC Aid Regime', *Journal of International Development*, Vol. 23, No. 5, 752-764.
- \_\_\_\_\_. 2009. *The Dragon's Gift: The Real Story of China in Africa*. New York: Oxford University Press.
- \_\_\_\_\_. 1998. *Chinese Aid and African Development: Exporting Green Revolution*. Basingstoke: Macmillan Press.
- Brant, Philippa. 2011. 'China releases first White Paper on Aid', *The Interpreter*, 27 April, <http://aidreview.lowyinterpreter.org/post/China-releases-first-White-Paper-on-Aid.aspx> (accessed on 8 August 2017)
- \_\_\_\_\_. 2014. 'China's Foreign Aid White Paper: Quick Overview', *The Interpreter*, 10 July, <https://www.lowyinstitute.org/the-interpreter/chinas-foreign-aid-white-paper-quick-overview> (accessed on 8 August 2017)
- Council for International Development. 2015. 'Chinese Aid in the Pacific: A New Interactive', <http://www.cid.org.nz/news-old/chinese-aid-in-the-pacific-a-new-interactive/> (accessed on 8 August 2017)
- Evans, Peter C. and Downs, Erica S. 2006. *Untangling China's Quest for Oil through State-Backed Financial Deals*, Brookings Policy Brief Series, The Brookings Institution: Washington.
- Information Office of the State Council of the People's Republic of China, Beijing. 2011. 'China's Foreign Aid', [http://www.gov.cn/english/official/2011-04/21/content\\_1849913.htm](http://www.gov.cn/english/official/2011-04/21/content_1849913.htm) (accessed on 8 August 2017)
- Information Office of the State Council of the People's Republic of China, Beijing. 2014. 'China's Foreign Aid', [http://english.mofcom.gov.cn/article/zt\\_foreignaid/](http://english.mofcom.gov.cn/article/zt_foreignaid/) (accessed on 8 August 2017)
- Mutume, Gumisai. 2006. 'Loss of textile market costs African jobs', *Africa Renewal*, April, <http://www.un.org/africarenewal/magazine/april-2006/loss-textile-market-costs-african-jobs> (accessed on 8 August 2017).
- National Bureau of Statistics of China.n.d. *China Statistical Yearbook* (Various editions),<http://data.stats.gov.cn/english/index.htm>
- Pettersson, Jan and Lars Johansson. 2013. 'Aid, Aid for Trade, and Bilateral Trade: An Empirical Study', *The Journal of International Trade and Economic Development*, Vol. 22, No. 6, 866-894.
- Rajan, Raghuram G. and Subramanian Arvind. 2005. *Aid and growth: What does the cross-country evidence really show?*, National Bureau of Economic Research, Working Paper 11513, <http://www.nber.org/papers/w11513.pdf> (accessed on 8 August 2017).
- Strange, Austin et al. 2013. *China's development finance to Africa: A media-based approach to data collection*, Center for Global Development, Working Paper 323, [https://www.cgdev.org/sites/default/files/chinese-development-finance-africa\\_0.pdf](https://www.cgdev.org/sites/default/files/chinese-development-finance-africa_0.pdf) (accessed on 8 August 2017).
- UN Comtrade Database. 2017. <http://comtrade.un.org/>

World Bank Data. 2015. <http://data.worldbank.org/>

Zafar, Ali. 2007. 'The Growing Relationship between China and Sub-Saharan Africa: Macroeconomic, Trade, Investment, and Aid Links', *The World Bank Research Observer*, Vol. 22, No. 1, 103-130.

## **ICS OCCASSIONAL PAPER *Back Issues***

ICS Occasional Papers showcase ongoing research of ICS faculty and associates on aspects of Chinese and East Asian politics, international relations, economy, society, history and culture.

<b>Issue No/ Month</b>	<b>Title</b>	<b>Author</b>
No. 17 Oct 2017	China's Growth Transitions: Implications and Outlook	Anoop Singh
No. 16 Nov 2017	China's Belt and Road Initiative (BRI): Implications, Prospects & Consequences: Impact on India & its China Diplomacy	Kishan S Rana
No. 15 Aug 2017	Acquisition of Syngenta by ChemChina: Implications and Lessons for India	Alagu Perumal Ramasamy
No. 14 Jul 2017	China's Global Internet Ambitions: Finding Roots in ASEAN	Dev Lewis
No. 13 Nov 2016	Exploring Trade and Investment Patterns of ASEAN in Africa: Are they limited by the Bigger Asian Powers?	Veda Vaidyanathan

# COLLABORATIONS



**ADMINISTRATIVE STAFF COLLEGE OF INDIA (ASCI), HYDERABAD**



**CHINA INSTITUTE OF CONTEMPORARY INTERNATIONAL RELATIONS (CICIR), BEIJING**



**CENTRAL CHINA NORMAL UNIVERSITY, WUHAN**



**DEPARTMENT OF NATIONAL SECURITY STUDIES, CENTRAL UNIVERSITY OF JAMMU**



**GUANGDONG RESEARCH INSTITUTE FOR INTERNATIONAL STRATEGIES**



**HARVARD-YENCHING INSTITUTE, HARVARD, US**



**INSTITUTE OF FAR EAST STUDIES, MOSCOW**



**INDIAN INSTITUTE OF TECHNOLOGY, GUWAHATI**



**SCHOOL OF PUBLIC HEALTH, FUDAN UNIVERSITY, SHANGHAI**



**SHANGHAI ACADEMY OF SOCIAL SCIENCES (SASS)**



**VIETNAM INSTITUTE OF INDIAN AND SOUTHWEST ASIAN STUDIES, HANOI**



**YUNNAN ACADEMY OF SOCIAL SCIENCES (YASS)**

# Principal Contributors to ICS Research Funds

**TATA TRUSTS**  
Development Partner



**MINISTRY OF EXTERNAL AFFAIRS  
GOVERNMENT OF INDIA**



**INDIAN COUNCIL OF  
SOCIAL SCIENCE RESEARCH**

**GARGI AND VIDYA  
PRAKASH DUTT FOUNDATION**



**JAMNALAL BAJAJ  
FOUNDATION**

**PIROJSHA GODREJ FOUNDATION**

# ICS PUBLICATIONS



A short brief on a topic of contemporary interest with policy-related inputs.



Platform for ongoing research of the ICS faculty and associates.

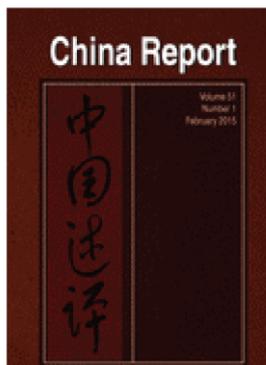


Authored by the faculty, also emerging from research projects and international conferences.



Draft paper of ongoing research.

## JOURNAL



In its 53rd year of publication, *China Report* is a quarterly refereed journal in the field of social sciences and international relations. It welcomes and offers a platform for original research from a multi-disciplinary perspective in new and emerging areas by scholars and research students.



INSTITUTE OF CHINESE STUDIES  
8/17, Sri Ram Road, Civil Lines,  
Delhi-110054, INDIA  
Tel: +91 (0) 11 2393 8202  
Fax: +91 (0) 11 2383 0728  
<http://www.icsin.org/>  
[info@icsin.org](mailto:info@icsin.org)

[twitter.com/ics\\_delhi](https://twitter.com/ics_delhi)  
[In.linkedin.com/icsdelhi](https://in.linkedin.com/icsdelhi)  
[youtube.com/ICSWEB](https://youtube.com/ICSWEB)  
[facebook.com/icsin.delhi](https://facebook.com/icsin.delhi)  
[soundcloud.com/ICSIN](https://soundcloud.com/ICSIN)  
[instagram.com/icsdelhi](https://instagram.com/icsdelhi)