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**Research Report**

## Assessing Chinese Manufacturing Investments in East Africa: Drivers, Challenges, and Opportunities

Briefing Paper, No. 02/2019

**Provided in Cooperation with:**

China Africa Research Initiative (CARI), School of Advanced International Studies (SAIS), Johns Hopkins University

*Suggested Citation:* Xia, Ying (2019) : Assessing Chinese Manufacturing Investments in East Africa: Drivers, Challenges, and Opportunities, Briefing Paper, No. 02/2019, China Africa Research Initiative (CARI), School of Advanced International Studies (SAIS), Johns Hopkins University, Washington, DC, <http://www.sais-cari.org/publications-briefing-papers-bulletins>

This Version is available at:

<https://hdl.handle.net/10419/248243>

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**We found a considerable disparity** between official registration information and on-the-ground investment activities. Neither MOFCOM nor investment authorities in Kenya or Tanzania have been able to monitor small investment projects that are “flying under the radar” or keep track of any subsequent changes to investment plans.

**Chinese investments** in the manufacturing and agricultural industries in Kenya and Tanzania are dominated by private, migrant entrepreneurs, who have mainly been driven by market considerations, such as production cost and market proximity, rather than government incentives in home or host country.

**Business strategies and decision-making** are usually contingent on entrepreneurs’ prior experience in China and African countries.

## Assessing Chinese Manufacturing Investments in East Africa: Drivers, Challenges, and Opportunities

Ying Xia

OF ALL THE COUNTRIES IN AFRICA, TANZANIA HAS ENJOYED ONE of the most extensive economic linkages with China in part because of its political stability as well as its historical solidarity with China during the socialist era. More recently, Kenya has also witnessed a surge in incoming Chinese investments, due to its comparative strength in economic development and its geographical advantage as the focal point in the extension of China’s Belt and Road Initiative to Africa. In order to investigate the motivations, patterns, and the potential for knowledge transfer of Chinese investment in Africa, we conducted scoping studies in the two countries between 2016 and 2018, surveying Chinese investments in the manufacturing and agro-processing industries in Tanzania and Kenya.

### INFORMATION GAPS

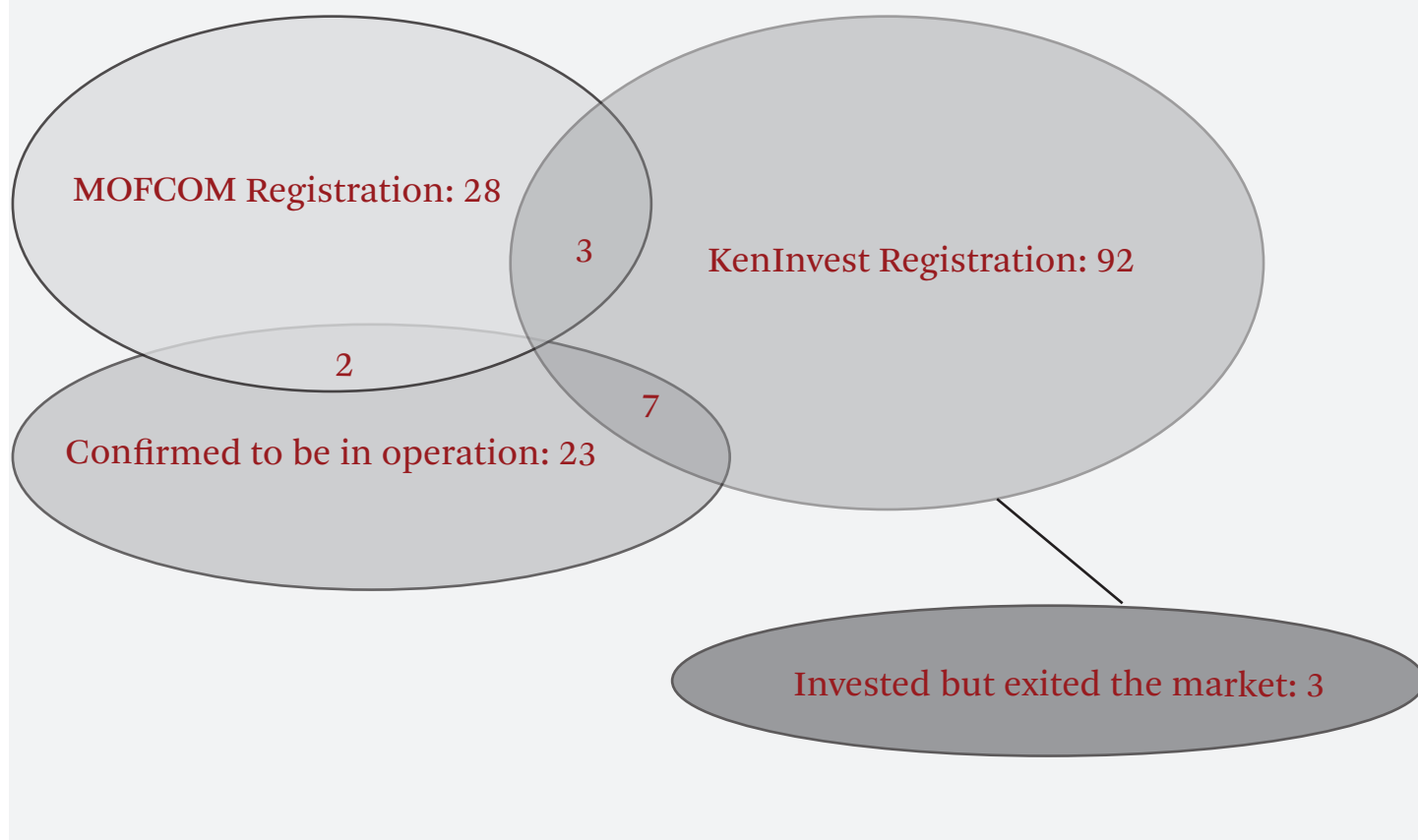
OUR RESEARCH BEGAN WITH A DESK STUDY OF CHINESE investments in Kenya and Tanzania. To begin we looked at the Chinese Ministry of Commerce’s (MOFCOM) registrations of Chinese overseas investment projects, focusing on those that stated an intention of engaging in manufacturing or agricultural activities using the UN Standard of Industrial Classification. Further, using online sources ranging from news articles, academic papers, government documents, and advertisements posted by the companies themselves, we were able to confirm only a small number of the officially “registered” investment projects. During our fieldwork, we visited the respective investment authorities in the two countries, KenInvest and Tanzania Investment Center (TIC), where we obtained a list of registered Chinese companies. Starting with introductions from Chinese Embassies, Economic Consulates, and several business associations serving Chinese expatriate entrepreneurs, as well as cold calls based on information found in local directories, we used snowball techniques to identify additional Chinese companies in these two sectors. Ultimately, we were able to obtain interviews with approximately 70 companies.

We discovered incredible information gaps in both countries. In Kenya, of the 23 active investors identified during our fieldwork, only two were registered with MOFCOM, and only seven had registered with KenInvest. In Tanzania, MOFCOM

registrations showed 49 projects with the intention of investing in manufacturing or agro-processing, while the TIC had records of 471 Chinese investments in the same industries; of these only

Foreign Exchange. Therefore, Chinese expatriate entrepreneurs who have accumulated their capital outside of China, and do not need foreign currency from the government, are not technically

### Kenya Analysis of Agriculture and Manufacturing Firms from MOFCOM, KenInvest, and Fieldwork Data



15 entries matched MOFCOM registrations. Of the 70 active investors confirmed during fieldwork, fewer than one-fifth were registered with MOFCOM, and only about one-third with TIC.

Several factors may account for the enormous information discrepancy. First of all, Chinese MOFCOM registrations only capture outbound investments directly going to Africa. In practice, a large number of investments are rerouted through Hong Kong and other offshore financial centers. Although the Chinese government has recently tightened regulations on outbound investments, requiring that all Chinese investors disclose the final destination of their investment, it remains to be seen how this policy is going to be implemented and to what extent it will reshape the regional distribution of Chinese outbound investment in the official record. Secondly, MOFCOM registration is only mandatory for investment activities that require foreign exchange from China's State Administration of

required to register in China. One such example is the Future Development Group (FDG). Established by a group of Chinese investors in the late 1990s, FDG is involved in building materials and manufacturing with business interests spanning nine African countries.

Further, neither MOFCOM nor local African investment authorities have been able to accurately reflect the status of small investment projects that are "flying under the radar" or keep track of any subsequent changes to originally registered investment plans. In Kenya, as indicated by KenInvest registrations, we confirmed that the top five (by capital) Chinese manufacturing investments have either terminated their operations or operations had never even materialized. Very few companies bother to update government authorities when changes in the ownership or legal status take place. In both Kenya and Tanzania, we found several companies had changed their legal names so

as to evade paying taxes; this is likely because several African countries limit tax breaks for investments in export processing industries to the first five to ten years of operation. Adding to the confusion, Africa's local investment authorities typically have much higher numbers of registered Chinese manufacturing investments. Investors, even when they are merely conducting import and export business, are inclined to report that they will be engaged in local manufacturing because they believe this will facilitate government approval procedures in host countries.

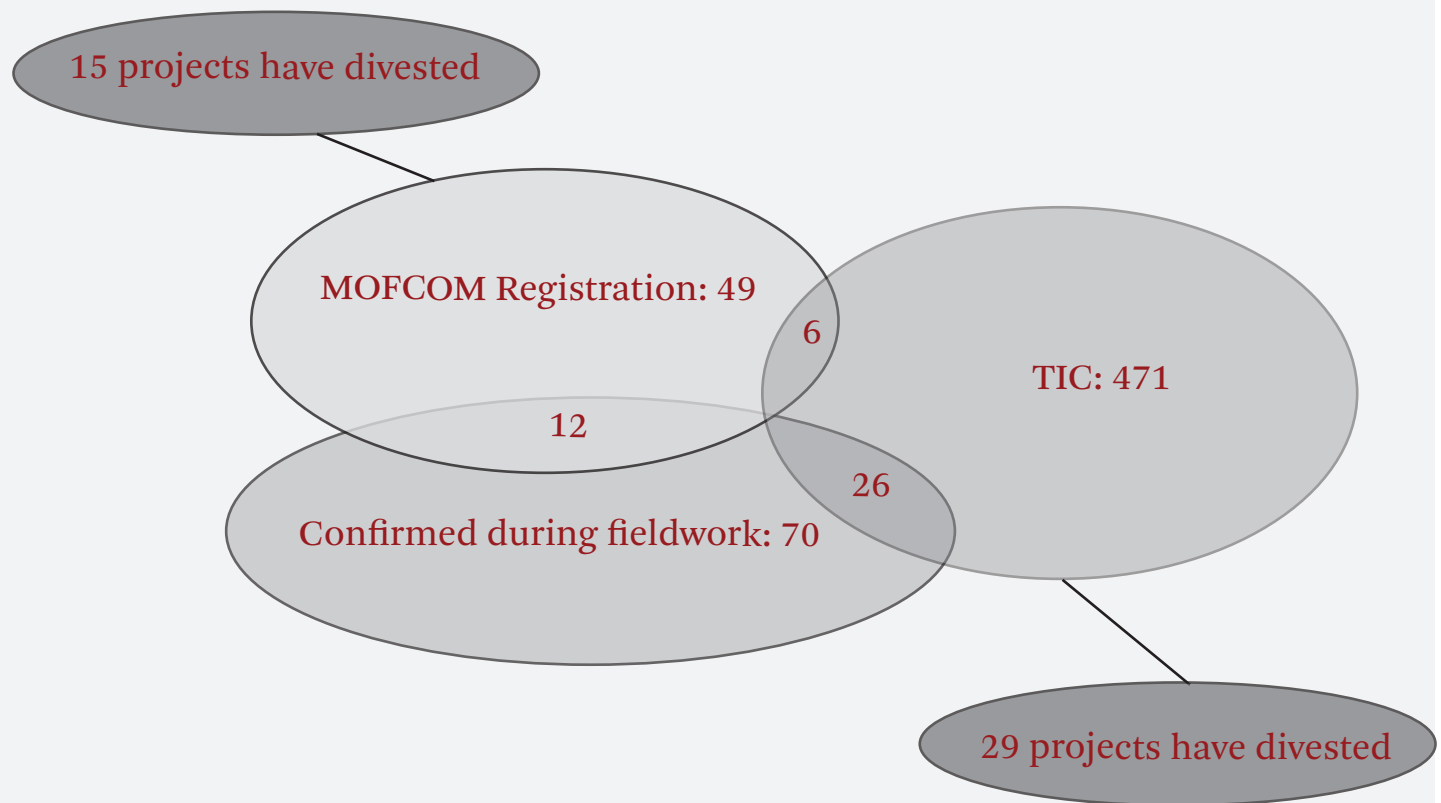
Moreover, Chinese expatriate industrial associations in Tanzania also estimated that more than one third of Chinese investors, particularly small manufacturers and traders, relocated to other African countries due to the increasing policy uncertainties in Tanzania; these were not captured in the official records.<sup>1</sup> Given these findings, there is an urgent need for more empirical-based research efforts to validate (or invalidate) official sources and media reports.

## BREAKDOWN BY INDUSTRY

### BUILDING MATERIALS

IN TERMS OF SUB-SECTORAL DISTRIBUTION, building materials has emerged as the main sub-sector of Chinese manufacturing investment in both countries. Several large ceramics and steel projects have been established in the past few years, which have been driven by the growing demand for raw material supplies from the infrastructure industry in African countries, as well as the regulatory pressure in China to relocate excess production capacity and polluting industries. Twyford Ceramics is a joint venture between Sunda International, a trading company with extensive experience and distribution networks in Africa, and Keda Energy, a listed equipment manufacturer in Guangdong. Twyford has set up production plants in five African countries since 2015, including in Kenya and Tanzania. Additionally, investments in steel smelting and recycling have been established in Tanzania by investors from the Hebei Province, which since 2016, has introduced aggressive

### Tanzania Analysis of Agriculture and Manufacturing Firms from MOFCOM, TIC, and Fieldwork Data



targets for capacity reduction in the domestic Chinese steel industry.<sup>2</sup> Companies, like FDG and CADASP, that have engaged in the assembly of aluminum structures have also benefited from large-scale infrastructure projects undertaken by international Chinese contractors.

#### AGRO-BUSINESS

ABOUT A DOZEN CHINESE INVESTORS have invested in the agro-business industry. Most of them were established after 2010 and motivated by the potential of exporting African agricultural products, such as sisal, flower, pyrethrum, aloe vera, cashew nut, and cotton yarns to China. While many of the Chinese agricultural investors are migrant entrepreneurs, there are several large-scale agricultural investments in Tanzania. For example, Sunshine Group has invested in half a dozen agricultural projects in various regions of Tanzania, and its activities range from processing cashew nuts for exports to producing edible oil from sunflower seeds and milled rice for the local market. Another Chinese investor, Jiangsu Overseas Corporation, has been developing an agricultural industrial park in Shinyanga, which now hosts three factories: a spinning factory owned by the developer itself, Jielong Holdings, which runs a sunflower seed oil processor in the park, and a small animal feed producer from China. Chinese investors in the agricultural industry often cited late entry and cultural difference as the barriers to their expansion.

#### GARMENT & APPAREL

THERE ARE ALSO SEVERAL EXPORT-ORIENTED garment and apparel factories in the two countries, owned by mainland Chinese and Taiwanese investors. Stimulated by the cheap labor supply as well as preferential market entry to the US and European export markets, these factories have relocated their operations from Asian to African countries. Due to its labor-intensive nature, the export-processing industry provides the largest number of jobs among all the Chinese investments. For example, even the smallest factory employs about a thousand local workers. However, along with providing the greatest number of jobs, this industry has also faced numerous challenges in regard to labor. Between 2015 and 2017, production at several ethnic Chinese-owned factories in Kenya was interrupted by widespread strikes in the garment industry, where workers were demanding unionization and pay raises. Some factories were willing to accommodate these requests, while other factories have relocated their operations back to Asia or to other African countries as a result.

#### PLASTIC RECYCLING & MANUFACTURING

FINALLY, TANZANIA HAS HOSTED A CLUSTER of Chinese investors in the plastic recycling and manufacturing industry since the 2000s. About half were exporting plastic flakes (PET materials) to China as raw materials for polyester fiber factories in the coastal region, while others focused on producing plastic shopping bags, household items, such as pipes or buckets, and footwear for the local and regional markets in Africa. Such investment, however, has not been seen in Kenya, either because of a lack of historical linkage in the relevant activities, or because of the stricter policy restrictions Kenya has imposed on plastic recycling and reprocessing in recent years. Since 2017, investments in the plastic recycling and manufacturing industry have been transformed by the adoption of the Chinese foreign waste ban, which has prohibited the export of unprocessed waste plastics to China among other waste materials since late 2017. These investments have faced increasing pressure to upgrade their local manufacturing activity in order to cope with the policy change in China.

#### OWNERSHIP

IT IS WORTH NOTING THAT THE MAJORITY of these manufacturing and agricultural investments are privately owned, rather than state-owned. Ownership is predominantly private, likely, because investments in these industries require extensive knowledge of the local market and network, and many private entrepreneurs from China arrived overseas earlier than Chinese state-owned enterprises, with the only exception being among construction companies. Further, since the Chinese government tightened its control on foreign exchange in 2016, state-owned enterprises have faced more restrictions to investing overseas. In the manufacturing and agricultural industries, for example, many expatriate entrepreneurs began in the importing and exporting business. Through the importing and exporting business these entrepreneurs have accumulated both the capital and network resources necessary for launching their investments in the manufacturing and agro-processing industry.

Very few investors reported having received financial incentives from Chinese governments, either central or provincial. Amongst the few firms that had received some sort of government support, most were large, leading companies in the relevant industry back home, such as Twyford Ceramics and Jiangsu Overseas Corporation. The latter is a provincially-owned enterprise from Jiangsu Province that has been running an agricultural industrial park in the Shinyanga region of Tanzania.

According to these few firms, they reported that the amounts received were modest; typically, only enough to cover a portion of pre-establishment expenses or the interest payments from their Chinese bank loans; they also reported that the application processes were very time-consuming. Overall, they didn't consider Chinese government financial incentives to have had a significant impact on their investment decision-making.

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Several small private companies relied on Sinasure, a policy insurance company established by the Chinese government in 2001, for credit. Sinasure offers market-based interest rates and conditions. Additionally, host country governments have provided various preferential policies to attract foreign investments, including tax breaks, expedited administrative procedures, and public investment in local infrastructure to facilitate factory operations. However, some of these measures have been undermined by the lack of transparency in decision-making and enormous implementation gaps. In one case, during an official visit from top Chinese leaders to Tanzania in 2006, Hongda Steel promised to invest US\$ 3 billion to develop iron mining and smelting in Tanzania; ten years after signing the MoU, due to disagreements on infrastructure construction, technical challenges, and the Chinese investor's financial difficulties, construction of the project has not yet started.<sup>3</sup>

## DRIVERS OF INVESTMENT

IN A NUTSHELL, MANUFACTURING AND AGRO-PROCESSING investments from China have mainly been driven by market considerations, such as cheap labor, supply of raw material, and market potential in Africa, as well as increasingly tighter regulatory enforcement in China. Because it reduces the costs and uncertainties associated with international shipment, manufacturing in Africa has the advantage of lowering production costs. More importantly, by manufacturing locally, investors are able to avoid the high import duties levied on manufactured products. The East African Community Customs' tariff scheme charges zero import duty on raw materials and machinery used for production, 10 percent for intermediate goods, and 25 percent for finished products.<sup>4</sup> This gives manufacturers a price advantage when competing with traders who import manufactured products. For example, proximity to raw materials is the primary driver for Chinese agricultural investments. In addition, the export of certain agricultural products, such as sesame and sisal from Tanzania to China, is exempt from Chinese import duty. For export-oriented garments factories, cheap labor in African countries, and duty exemption for exports to the US (through the African Growth and Opportunity Act) and Europe (through the Everything but Arms scheme) have underlined their decision to relocate their operations from China and Southeast Asia to Africa.<sup>5</sup> In addition, Chinese business networks, particularly familial bonds and personal networks based on the investors' geographical origin, have also been a crucial factor in investment decision-making, as evidenced by Chinese investments in the plastic recycling and manufacturing industry in Tanzania.<sup>6</sup>

With that said, government support, financial or non-financial, is still regarded as very important to achieving success in overseas investment operations. For example, agricultural investments often require efforts from both home and host country governments to sign bilateral agreements in order to legalize the export of certain agricultural products to China. In 2017, the Chinese and Tanzanian governments signed an MoU to legalize the export of maize products to China, and in 2018, a similar MoU was signed between China and Kenya to facilitate the export of Kenyan agricultural products to China, including avocados, donkey hides, and donkey meat.

## KNOWLEDGE SHARING AND TECH TRANSFER

IN OUR FIELD RESEARCH, we found evidence of subcontracting, imitation, and backward as well as forward linkages between Chinese companies and local firms in both countries.



Since 2015, at least one Chinese investor in Kenya, Yishan Agriculture, has engaged in subcontracting with more than 8,000 local households to plant pyrethrum, aloe vera, and muringa. Several other Chinese investors in the Tanzanian agriculture industry have also been exploring opportunities for subcontracting in order to ensure a stable supply of raw materials. Some Chinese investments are among the earliest manufacturing investments in the respective industry and have facilitated knowledge transfer in the local industry. For example, BETT is the first cement pole producer in Kenya. After BETT had successfully persuaded the local government to shift from using wooden poles to cement poles instead, more than a dozen factories were opened to cater to the increasing market demand with most of these factories being owned by local investors rather than Chinese.<sup>7</sup> Another example is a Chinese-owned aluminum recycling plant in Tanzania, which is also the first

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*In a nutshell, manufacturing and agro-processing investments from China have mainly been driven by market considerations, such as cheap labor, supply of raw material, and market potential in Africa, as well as increasingly tighter regulatory enforcement in China.*

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and only aluminum recycling plant in the country. Before this aluminum recycling plant was established, aluminum waste was exported to South Africa and the Middle East for recycling and reuse. Since opening the Tanzanian based recycling plant, the Chinese investor has assisted its local suppliers in improving recycling techniques, teaching them sorting techniques and knowledge about different kinds of metal materials – for instance, magnesium and silicon contents differ in aluminum products and will affect the quality of reprocessing.

Forward linkages were most extensive in the assembly business. In Future Development Corporation, CADASP, and several motorcycle assembly plants in Tanzania, local employees have started their own businesses as subcontractors, distributors, or agents of their former Chinese employers. In addition, we also found evidence of forward and backward linkages in the Chinese-dominated plastic recycling industry in Tanzania. Owners of several dozen local waste transfer stations have

bought second-hand shredding machines from Chinese plastic plants and started their own recycling workshops – often with financial and technical assistance from their Chinese buyers. A few of them have even purchased machines from China to produce plastic household items for the local market, thanks to their interaction with and learning from Chinese plastic factories. However, development of these linkages continues to be constrained by the financial and technical capacity of African employees and suppliers.

All the interviewed Chinese companies provide learning-by-doing or on-site training opportunities to their employees, and a few large factories have offered more formal training programs. Large firms like Twyford Ceramics, Tooku Garments, and Jiangsu Overseas Corporation, offer in-class or video-taped sessions on topics like corporate culture, workplace safety, and machine operation. Tooku Garments brought experienced personnel from its mainland Chinese and Cambodian operations to train workers in Tanzania. Tooku has sent about a dozen Tanzanian workers to Kenyan garment factories for two-to-four-week trainings and organized short visits for selected local employees to go to China, as both an incentive for local managers and production leaders and an opportunity for them to learn the company culture. Twyford Ceramics has developed an evaluation system, under which all the local workers are supposed to take examinations on their respective operating skills and receive salary adjustments based on the results of those examinations.

However, the level of training does vary across different manufacturing activities. In plastic and metal recycling plants, workers are first trained to sort and clean different types of materials; those who work in production workshops learn more complicated technology such as temperature control and adjustment. In plastic slipper manufacturing, local workers are taught to operate injection molding machines, but formulas are developed and implemented by Chinese technicians. In motorcycle assembly plants, while most workers are only trained for basic assembly, some are also trained to understand the mechanics and skills required for providing post-sale services, which may provide opportunities for their elevation as branch managers or local distributors. Overall, Chinese investors are willing to train more local workers to replace Chinese employees in order to reduce operational costs or to mitigate the difficulties of obtaining work permits for Chinese nationals. Over time, most Chinese firms interviewed have gradually reduced their Chinese workforce.

Although collaboration between Chinese and African governments on local training is uncommon across the manufacturing industry, there are some encouraging examples. Tooku Garments has been cooperating with the Tanzanian government to improve its vocational training since 2012. Between 2012 and 2018, Tooku has provided machines to local vocational training institutes, with subsidies provided by the Tanzanian government. However, machinery provision has proven inefficient because teachers at these institutes often lack knowledge on how to operate, maintain, and repair the imported machines and, as a result, the machines have simply ended up collecting dust in school workshops. A new agreement was reached in 2017, under which the Tanzanian government subsidizes the cost of the first three months of new employee training (about 90,000 TZS or US\$ 400 per person) which should serve as an incentive for Tooku to focus on recruitment and training. So far, more than 500 university graduates were said to have received training under this program.<sup>8</sup>

In addition, the China State Farm, which has been planting and processing sisal in Morogoro, Tanzania since the late 2000s, also collaborates with China's State Council International Poverty Alleviation Center and the Tanzanian Ministry of Industry and Commerce to run an agricultural technology demonstration program in Peapea village. Agricultural technology experts from China Agriculture University arrive in Peapea twice a year to provide short-term training programs on how to improve planting and harvesting techniques. According to a manager from China State Farm, to date, over 640 local households have participated in the program.<sup>9</sup> This program also provides summer internships to students from China Agriculture University to gain first-hand experience in the Tanzanian agricultural industry. To date, eight Tanzanian employees from the sisal farm have been sent to China Agriculture University to receive short-term training on agricultural management and technology.

## CHALLENGES AND CONSTRAINTS

ALL THE CHINESE EMPLOYERS INTERVIEWED mentioned the underdevelopment of local supply chains as a main obstacle for upgrading to more sophisticated production activities. For example, the local supply of spare parts for machinery is almost non-existent, and international shipping and customs clearance for imports from Asian or European countries is costly and time-consuming. In Tanzania, companies like Tooku Garments and Jiangsu Overseas Corporation have revealed plans to transplant the supply chain of the industry from China to Africa, by bringing

more upstream and downstream companies to host countries through the effort of industrial parks – in light of the spirit of promoting China's Overseas Special Economic Zones – but so far, very little has been achieved in this respect.

Another constraint for some Chinese employers to invest in local training is the difficulty in retaining skilled labor. Frequent occasions of poaching by competitors, Chinese or non-Chinese, or cases of skilled laborers moving on to higher-paying jobs are the most often cited issues in more competitive industries such as building materials and garments. Nonetheless, we also found that investors' contribution to training and employee loyalty programs are somewhat reciprocal in many situations. Employee turnover rate is significantly higher in unskilled, labor-intensive jobs that require minimum training than in more skilled positions such as electricians, mechanists, and production leaders, who have received more training from the company. Many Chinese employers have come to realize the positive correlation between investing in local training and employee loyalty.

Regulatory risks such as policy uncertainty and implementation gaps have affected manufacturing firms' productivity in both Kenya and Tanzania. In Kenya, concerns about political stability before and after the 2015 Presidential Election have also prompted many Chinese investors to withhold their investment projects. The implementation of some large-scale projects, such as Wuyi's mega-supermarket for building materials, was delayed. In Tanzania, the current administration has tightened government review procedures for large investment projects, approval processes for work permits for non-Tanzanian workers, as well as tax enforcement in foreign investments, and reportedly, many Chinese investors have relocated to other African countries.<sup>10</sup> However, one Chinese investor underlined that:

“Many Chinese companies operating in Africa have assumed that African governments will not enforce tax, immigration, or environmental regulations; therefore, they treated non-compliance as a strategy for increasing their profit margin and competitive advantage *vis-à-vis* the law-abiding companies. It's time for them to change their mindset and way of doing business.”<sup>11</sup>

Environmental controversies surrounding the operation of Chinese-owned donkey abattoirs in Kenya and Chinese investments in the plastic recycling industry in Tanzania have raised the regulatory concerns facing African host governments



about the enforcement of environmental and health provisions, and highlight the challenge of balancing economic and non-economic consequences of foreign investments in Africa and developing countries in other parts of the world.

## CONCLUSION

OUR FIELD RESEARCH FOUND A CONSIDERABLE disparity between official registration information and on-the-ground investment activities. Neither the Chinese government nor the local investment authorities have been able to monitor small investment projects that are “flying under the radar” or keep track of any subsequent changes to investment plans. Moreover, Chinese investments in the manufacturing and agricultural industries in Kenya and Tanzania are dominated by private, migrant entrepreneurs, who have mainly been driven by market considerations, such as production cost and market proximity, rather than government incentives in home or host country. Regulatory uncertainty, gaps in policy implementation, and underdeveloped local supply chains in host countries have posed the main restrictions to further development of the manufacturing industry. We have found evidence of knowledge transfer from Chinese investments to the local industry, including job training, supply chain development, sub-contracting, and technology cooperation with local governments and firms. The establishment of a few large manufacturing projects in the past few years may provide more opportunities for employment creation and knowledge transfer, but more practical policies and coordination plans on behalf of host governments are required before systematic knowledge transfer can take place. ★

## ENDNOTES

1. Interview with Jinfeng Zhu, President of Tanzania-China Business Council for Expatriate Chinese, July 2, 2017, Dar es Salaam, Tanzania.
2. Interview with Wang, general manager of Kiluwa Steel, July 5, 2017, Dar es Salaam, Tanzania.
3. Interview with Hongda Steel, Dar es Salaam, June 20, 2017.
4. Ministry of Finance and Planning of Tanzania, [http://www.mof.go.tz/index.php?option=com\\_content&id=41:import-duty&Itemid=56](http://www.mof.go.tz/index.php?option=com_content&id=41:import-duty&Itemid=56) (last visited: August 26, 2017).
5. For more information about AGOA, please refer to: <https://agoa.info/about-agoa.html>. For further information about the “Everything but Arms” agreement, please refer to: <https://www.un.org/ldcportal/preferential-market-access-european-union-everything-but-arms-initiative/>.
6. Ying Xia. 2019. *Wealth from Waste? Chinese Investments and Technology Transfer in the Tanzanian Plastic Recycling Industry*. Working Paper No. 2019/27. China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC. Retrieved from <http://www.sais-cari.org/publications>.
7. According to managers at the BETT plant, this was quite important in the government's decision to use concrete poles. Kenya's forest coverage rate is 7.8 percent in 2015, lower than that of Ethiopia (12 percent), Tanzania (52 percent), Uganda (10.4 percent), Rwanda (19.5 percent) and Zambia (64 percent). Source: World Bank data on forest area, <http://data.worldbank.org/indicator/AG.LND.FRST.ZS> (last accessed on August 23, 2016).
8. Interview with TUICO, Dar es Salaam, June 15, 2017.
9. Interview with China State Farm, Morogoro, July 15, 2017.
10. Interview with Interview with Jinfeng Zhu, President of Tanzania-China Business Council for Expatriate Chinese, July 2, 2017, Dar es Salaam, Tanzania; Interview with Fu, general manager of F&S Footwear Manufacturers, July 10, 2017, Pwani, Tanzania.
11. Interview with a Chinese investor in the manufacturing industry, Dar es Salaam.

## AUTHOR

**YING XIA** is a sixth-year S.J.D. candidate at Harvard Law School and a fellow at SAIS-CARI. Ying has written on the implications for technology transfer from Chinese investment to local economies in Africa and the interplay between China's domestic regulatory change and the global recycling industry. Ying has a LL.M. from Harvard Law School, and a Master of Laws, Bachelor of Law and B.S. in Economics from Peking University.

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This research was funded by research grant ES/M004074/1 from the UK's Department for International Development and the Economic and Social Research Council (DFID/ESRC), which supports research to provide evidence-based analysis of technology transfer, linkages, learning, and spillovers associated with Chinese investment in African manufacturing, agribusiness, and construction industries.

