

WORKING
PAPER

no. 13

JUN 2017

CHINA★AFRICA RESEARCH INITIATIVE

African politics meets Chinese engineers: The Chinese-built Standard Gauge Railway Project in Kenya and East Africa

Uwe Wissenbach and Yuan Wang



JOHNS HOPKINS
SCHOOL of ADVANCED
INTERNATIONAL STUDIES

sais-cari.org

NO. 13 | JUNE 2017:

“African politics meets Chinese engineers: The Chinese-built Standard Gauge Railway Project in Kenya and East Africa”

by Uwe Wissenbach and Yuan Wang

TO CITE THIS PAPER:

Wissenbach, Uwe, and Yuan Wang. 2017. *African politics meets Chinese engineers: The Chinese-built Standard Gauge Railway Project in Kenya and East Africa*. Working Paper No. 2017/13. China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC. Retrieved from <http://www.sais-cari.org/publications>.

DISCLAIMER:

The author writes in his personal capacity and the publication does not reflect European Union views or policy.

CORRESPONDING AUTHOR:

Uwe Wissenbach

Email: uwewi@hotmail.com

NOTE:

The papers in this Working Paper series have undergone only limited review and may be updated, corrected or withdrawn. Please contact the corresponding author directly with comments or questions about this paper.

Editor: Jessica Lasky-Fink

ABSTRACT

**SAIS-CARI WORKING PAPER
NO. 13 | JUNE 2017:**

“African politics meets
Chinese engineers: The
Chinese-built Standard
Gauge Railway Project in
Kenya and East Africa”

by Uwe Wissenbach and
Yuan Wang

On May 31, 2017, Kenya inaugurated its Standard Gauge Railway (SGR) built by China Road and Bridge Corporation and financed largely by Chinese credit lines, closing a 110-year chapter of reliance on colonial infrastructure. The SGR is part of China's new “Belt and Road Initiative” and aims to open East and Central Africa up to international trade and investment. Much like other Chinese infrastructure projects in Africa, the SGR has sparked controversy around its economic viability, corruption, opaque contracting practices, financing arrangements, and community and labor issues. This working paper examines the way local Kenyan politics have affected implementation of the SGR. The paper also points to initial and immediate development opportunities for local content, jobs, and skills while arguing for a more rigorous assessment of the SGR's economic development potential. Unless Kenya overhauls its governance framework on the issues outlined here, infrastructure projects risk overshooting initial budgets and reducing the willingness of neighboring countries or foreign investors to engage in future initiatives in Kenya. This counters widespread rhetoric that cites China's assumed predatory behavior as to blame for many problems. The research presented here was conducted during the construction phase through in-depth interviews, extensive review of publicly available documents and media sources, and three field visits to project sites in 2014-2015.

INTRODUCTION

JUST WEEKS BEFORE THE KENYAN PRESIDENTIAL ELECTIONS, in which incumbent Uhuru Kenyatta was seeking re-election, he inaugurated a new standard gauge railway (SGR) to connect the capital city of Nairobi to the Indian Ocean at the port in Mombasa. The single-track non-electric SGR¹ is now hosting freight trains that can travel at speeds of nearly 80 kilometers per hour and passenger trains that can travel up to 120 kilometers per hour from Mombasa to the Nairobi South Railway Station in Syokimau,² just south of Nairobi and the Jomo Kenyatta International airport, with several stops along the way.³ President Uhuru put substantial pressure on the project to be completed before the August 2017 elections.

This paper is the first detailed case study of a strategic government-contracted Chinese infrastructure project in Kenya. We cover the financing process and the first stages of implementation. We provide an analysis of the project's regional and national economic and political implications for Kenya and East Africa. Given the paucity of detailed case studies, we hope that this paper will serve as a baseline for subsequent studies on the implementation and impact of the SGR as the project advances in Kenya and perhaps extends to neighboring countries. This paper also explores some of the first lessons from field research on the project's local impacts.

This mega infrastructure project is a case of a strategic government-to-government project with major implications for Kenya's economy. Within Kenyan society, the SGR is embroiled in multiple controversies typical of accusations against other Chinese mega-projects, including issues of economic viability, cost, debt sustainability, corruption, and opaque contracting and financing arrangements.⁴ During construction, complaints from the local community surfaced around issues of land compensation, environmental impacts, and imported sourcing of materials and labor. We believe these complaints can be explained in part by the failure of stakeholders to consult with local community needs. We also suspect a tendency by many locals to demand more benefits from the project than is possible, an issue exploited by local politicians to extract political mileage out of the issues surrounding the SGR. We argue that, in most places, the ethnic and neo-patrimonial political culture is behind the controversies and the occasional violence. This is compounded by a deeply entrenched problem of corruption, rent-seeking, and nepotism.⁵

Our findings from this case study indicate that there are implications for the relationship between neo-patrimonialism and the pursuit of national interests observed in local African politics and the various challenges created for outsiders and local communities.⁶ Our findings also suggest that China plays a less influential role in the politics of contract bids and construction management of infrastructure projects than is often assumed.

We also argue that there is no simple paradigm to capture the "Chinese-ness" of the project apart from its distinct financing, contracting and delivery model. Many other large infrastructure projects face similar implementation problems. This paper argues that most controversies from the SGR originate from Kenya's political culture and the uncoordinated disposition of its governance institutions at the national and local levels. Thus, the research on this Chinese project tells us at least as much about

Kenya as it does about China, as well as the contrast between developmental and neo-patrimonial governance.

PROJECT OVERVIEW

THE MOMBASA-NAIROBI STANDARD GAUGE RAILWAY PROJECT is particularly important because it was Kenya's own idea, unlike the Kenya-Uganda Railway built by the British during 19th century colonial rule, which is still in use today.

For China, cooperation on this initiative responds to two political priorities: First, China sees Kenya as part of its "Belt and Road Initiative" because the location serves as a gateway to East and Central Africa. The SGR is intended to open up a fast-growing and progressively-integrating region to Chinese and international trade and investment. Second, railway construction and operation contracts are major international business opportunities for (state-owned) Chinese companies affected by

oversupply in the Chinese domestic market. In May 2014, during his visit to Kenya, Chinese Premier Li Keqiang and Kenyan President Uhuru Kenyatta signed a US\$3.8 billion contract to build the SGR with the China Roads and Bridges Corporation (CRBC), a company that has previously carried out other projects in Kenya. The CRBC's established presence in Kenya was a factor in its successful contract bid for the SGR despite the debarment of its parent company, the China Communications Construction Company (CCCC), by the World Bank in 2013 for fraudulent practices at a project in the Philippines.⁷ In 2016, Kenya's Ministry of Transport awarded the CCCC a contract to operate the new railway for at least five years, a reversal from the original plan to tender the operating contract.⁸

The railway was designed in 2012, but preparatory work started in 2009 as part of a regional Northern Corridor Initiative involving Uganda first and then Rwanda, the so-called "coalition of the willing (CoW)."¹⁰ Burundi, South Sudan, and the Eastern Democratic Republic of Congo (DRC) were part of the broader plan.¹¹

Table 1: SGR project overview

Contract amount	US\$3.804 billion
Funder	The Government of the Republic of Kenya (15%) and the Export-Import Bank of China (85%)
Client	Kenya Railway Corporation
EPC contractor	China Road and Bridges Corporation
Date of commencement	December 12, 2014
Duration of construction	60 months
Operator	China Communications Construction Company

Source: China Road and Bridge Corporation Social Responsibility Report 2015 on Mombasa Nairobi SGR Project

Figure 1: Map of the SGR⁹

However, in the spring of 2016, reports—subsequently denied—suggested that Rwanda would rather build an alternative railway through Tanzania that would link to a refurbished section of the TAZARA Railway.¹² Kenya was quick to announce a new plan of re-routing the railway to the Kenyan town of Kisumu on the shores of Lake Victoria rather than to the Kenya-Uganda border town of Malaba.¹³ This announcement appeared to spite Uganda for canceling the agreement on an oil pipeline through Kenya just a month earlier. If confirmed, Rwanda and Uganda's exit poses a challenge for Kenya as the cost-benefit calculation for the two mega-projects—the SGR and the pipeline—will change dramatically.

LITERATURE REVIEW

THE SGR PROJECT IS ONE OF MANY Chinese-financed infrastructure initiatives in Africa, which have been subject to broader debates over the modalities, motivations, and impact of Chinese finance in Africa. These concerns converged at the first China-Africa (FOCAC) summit in Beijing in 2006, making apparent that interest in Chinese-African partnerships is shared by a diverse and wide-reaching school of researchers around the world. The thrust of these concerns was well-captured by Garth Le Pere in 2007 when he proposed the following issue areas where impacts were believed to be significant: trade, agriculture, FDI, industrialization, migration, and mining, as well as relations with traditional partners of Africa.¹⁴ Most of these issues are relevant in the analysis of the SGR. Our research sheds light on four key debates, which contributes to the ongoing scholarship on impact evaluations of the performance of Chinese-funded projects in Africa: (1) Chinese financing modalities; (2) skills and technology transfer; (3) employment; and (4) the impact of Corporate Social Responsibility (CSR) initiatives focused on social and environmental issues.

Our field research was inspired by approaches used by Giese (2014) who argues that the “positionality of the local African actor is key for understanding the nature of Chinese-African interaction on the ground.”¹⁵ We have added to the existing scholarship with more detailed, inclusive interviews of Kenyan perspectives with politicians across a broad spectrum of administrative authority, Kenyan workers, managers, and dealmakers.

THE NATURE OF CHINESE FINANCING FOR INFRASTRUCTURE IN AFRICA

OUR RESEARCH BUILDS UPON THE EFFORTS OF many scholars working to understand the nature of Chinese financing for African infrastructure projects.¹⁶ This literature is concerned with the differences in aid, commercial export credits, commercial finance, and debt sustainability.¹⁷

Some literature ties Chinese finance to Chinese suppliers, as is the case for the SGR project.¹⁸ This illustrates that, at least in this case, Chinese finance cannot be categorized as official development assistance, but rather as export finance that enabled a Chinese company to undertake a major project on behalf of an African government. Bräutigam and Gallagher (2014) explain that controversy surrounding the relationship between Chinese finance and Chinese suppliers often results from the misconception that Chinese financing in developing countries is the same as development aid. In reality, the goal of all export-import banks is specifically to provide access to credit for buyers of a nation's goods.¹⁹

SOCIAL AND ENVIRONMENTAL IMPACT OF CHINESE-FINANCED PROJECTS

LARGE-SCALE CHINESE PROJECTS IN infrastructure, extractives, and agriculture raise concerns of issues of displacement and environmental damage to the livelihoods of African host communities. Ideally, social and environmental impact assessments should be carried out before the project begins to evaluate and mitigate the negative impacts on the local population; however, this is often not done or done inadequately.²⁰ The wider environmental impact of Chinese companies' projects has also been a topic in debates and research, but rarely do these debates touch upon issues of wildlife conservation, which has been a key concern for the SGR project.²¹

Chinese companies have started to pay growing attention to community development projects that address social and environmental issues. Cases are recorded of individual Chinese companies building local facilities, donating to local causes, and sponsoring education in African countries.²²

SKILLS TRAINING AND TECHNOLOGY TRANSFER

OUR RESEARCH ALSO CONTRIBUTES to a growing body of literature on performance evaluation of Chinese-funded projects in Africa. Researchers who study the issue of skills-transfer from Chinese construction companies identify that, as early as the 1970s, during the construction of the TAZARA railway, "African and Chinese workers not only labored side by side but also engaged in what was known as "technical cooperation," as Chinese railway experts trained their African counterparts in the workplace and in technical training shops."²³

Another study also found that Chinese construction companies provide employees with on-the-job training, focusing particularly on machine operation.²⁴ Cheng and

Liang (2011) also calculate that Sinohydro has so far trained 8,200 local workers across 30 projects in Angola.²⁵ However, Shen's (2013) research, based on surveys of government officials from Liberia, Ethiopia, Rwanda, Nigeria and Zambia, suggests the opposite.²⁶ Although three officials admitted that Chinese investment in their country's labor-intensive sectors facilitated local industrialization, none have found substantial technology transfers from Chinese investments.

There are widespread allegations of Chinese companies bringing their own workers, rather than creating local job opportunities.

Wang, Mao, and Gou (2014) provide two potential explanations for limited skills and technology transfer.²⁷ First, Chinese outward direct investment is intended to enhance domestic productivity and strengthen production in China. Therefore, technology transfers to host countries from Chinese investors can be expected to be quite limited. Second, for less-developed recipient economies, technology transfers from Chinese investment are limited in part due to language barriers.

In addition, the skills that are acquired do not always align with the work required to sustain operations in the absence of direct Chinese managerial supervision for similar work in the job market. In this case study, we observed similar reasons behind limited technology transfer, but also find potential avenues to enhance local content and skills transfer provided there is political will.

LOCAL EMPLOYMENT AND LABOR RELATIONS

A FOURTH ISSUE OF CONTROVERSY INVOLVES employment. There are widespread allegations of Chinese companies bringing their own workers for construction projects rather than creating job opportunities for the host community. Yet, Sanghi and Johnson (2016) found that Chinese investors in diverse manufacturing and services sectors of the Kenyan economy “employ a majority of local workers in full-time and part-time roles...and having a policy to localize its workforce, challenging the stereotype that Chinese firms only use Chinese labor.”²⁸ From a survey of 75 Chinese companies in Kenya that oversee an average of 360 total employees, Sanghi and Johnson found that Kenyans represent 78 percent of full-time and 95 percent of part-time workers.²⁹ They also found that the cost of Kenyan labor, with markedly lower productivity and skills, is relatively higher than the cost of labor in China employed in comparable projects.³⁰

In sum, our research builds on, and tests, insights from the existing literature, and fills a gap in research that has largely focused on China's infrastructure construction in resource-rich countries while paying little attention to African agency and regionalism. It also provides a baseline for further research on the broader impacts of Chinese finance on local communities, including in employment and on the environment. Overall, our research seeks to examine whether infrastructure mega-projects, such as the SGR, benefit Kenya and regional integration overall.

METHODS

THIS PAPER CONTRIBUTES TO THE UNDERSTANDING of how capital-intensive Chinese strategic infrastructure projects affect resource-poor African countries in a relatively open and democratic context. Our research avoids speculative modeling of future impacts given the many unknowns. In order to evaluate the different observable impacts during the phases of project design and construction, it is necessary to understand first the policy processes in Kenya. In tracing this process, we used official documents and statements and media reports, and conducted semi-structured interviews with insiders. We also drew on positions expressed in the media by government and opposition parties, commentators, civil society, and interest groups.

Next, to understand Chinese-Kenyan interactions during the construction phase, we conducted field research along the SGR track that allowed us to check official claims about project implementation and obtain primary information on local impacts. These interviews focused on a number of issues: local employment, the degree of local content (i.e., the use of local materials), local community involvement or alienation, technology transfer and environmental governance.

Given resource constraints and lack of access for comprehensive surveys or in-depth interviews with large samples, we used small, but representative, samples of people in our in-depth interviews and gathered further insights from observers with inside knowledge, as well as from media reports. We consider media reports in Kenya to be fairly reliable given the freedom of the press and the high professional standards of Kenyan journalism. We visited construction sites and interviewed Chinese and local managers, workers, as well as two locally-elected county governors. However, in several cases, we experienced a similar challenge as previous researchers have noted: the CRBC was not easily available for interviews. However, it is important to note that the CRBC has made a considerable public relations effort to provide information to the local media, including contributions to the weekly Africa edition of the China Daily, and has issued a corporate social responsibility report for this SGR project in 2015.³¹ This indicates that the company was keen to provide, but also to control, information. The office of the Kenyan President has also publicized his regular visits to project sites.

FIELD RESEARCH (AUGUST 2015): SEMI-STRUCTURED INTERVIEWS

THE 475 KILOMETER SGR PROJECT is divided into nine sections, each varying in length from 5 kilometers to 135 kilometers. The research team visited Section 1 in Mombasa, the Section 2 site at Voi in Taita Taveta County, and the Section 7 site at Emali to collect primary data. Semi-structured interviews were conducted with Chinese and local specialists, government officials from Kenya and China, managers from the CRBC Kenya branch, members from the headquarters, and members of the Kenyan business community. Our field visits sought to vet claims made by media reports of these sites.

FIELD RESEARCH (NOVEMBER 2014, AUGUST 2015, DECEMBER 2015): OBSERVATIONS

OUR EFFORTS TO DOCUMENT THE construction was naturally subject to the short-lived moments in time that we happened to be present for to capture on camera. While observation alone does not allow for detailed quantitative or qualitative analysis, it helped to corroborate statements made by the media on the project's progress, the proportion of local versus Chinese workers, and the efficacy of environmental and social responsibility efforts. Visiting sites and interviewing people during construction was a unique research opportunity that is not available once projects are finished.

PROJECT BACKGROUND

THE SINGLE-TRACK, DIESEL-FUELED SGR was built by the Chinese Road and Bridge Corporation (CRBC) under a government-to-government agreement.³² It was financed largely through Chinese loans.³³ The SGR is only one out of many Chinese-built infrastructure projects in Kenya, but it is by far the most strategic and politically salient investment. The colonial-era railway carries only 0.9 million tons of cargo annually from the Indian Ocean into land-locked cities in Kenya and Uganda, compared to the Mombasa port's throughput of 22 million tons in 2013 at a snail's pace, but it is expected to continue to operate. The new SGR, built mostly alongside the existing track, but without the winding bends, is meant to substantially increase cargo throughput by rail and to lower transport costs and time by as much as 60%.³⁴

The maintenance and operation of the SGR will be initially entrusted to the China Communications Construction Company.³⁵ CCCC won this contract without a tender, which was apparently made possible by a unilateral decision by the Kenyan president. The award of the contract to CCCC is not surprising. Without a new Chinese credit line, financing costs would have had to be found from the national budget in an election year. Moreover, Kenya's private sector has no proven capacity to effectively manage railway operation. Additionally, building and operating within the same company ensures that the contractors can more effectively remedy possible construction defaults.³⁶

The lack of a strong rail infrastructure impedes growth.³⁷ Existing roads cannot cope with the increasing volume of freight hauled through the Mombasa port to places as far as the DRC and Rwanda. Based on our observations, hundreds of thousands of trucks move back and forth on a single 520 kilometer road between Nairobi and Mombasa. As we could observe, thousands of trucks are often stalled for hours in traffic at the entrance of Mombasa to reach the port. Accidents are frequent, and road maintenance is costly.

At the time of our first visit in November 2014, only a few active construction sites could be seen, but Chinese-Kenyan surveyor teams were busy working along the projected track. By August 2015, large sections of railroad dams, bridges, and underpasses were visible along the public road. In December 2015, we saw further

progress and sections of the track being laid, confirming media reports that the SGR was progressing well. Entire sections of rail, locomotives, and carriages were trucked in to be assembled onto the elevated track.

THE SGR AND KENYAN NATIONAL POLITICS

THE NATIONAL AND LOCAL LEVELS of the Kenyan government differ considerably in their degree of interest and their approaches to the SGR project. At the national level, the controversies plaguing the SGR relate to the overall process of commissioning and contracting the railway, including the costs of opacity. For many observers, these costs suggest that national elites may have benefited illicitly from the contracting process.³⁸ The SGR's original plans were conceived by the previous coalition government under President Kibaki (2008-13), who was notorious for corruption, but were then implemented under the administration of President Kenyatta.³⁹

Political tensions can be attributed in part to the change in the ethnic composition of the government coalition after the 2013 elections. The Kikuyu group, which Presidents Kibaki and Kenyatta belong to, has been dominating both administrations. The Kalenjin group, which has been part of Kenya's ruling Jubilee coalition since 2013, seems unhappy to have been left out of the allegedly illicit arrangements brokered under the previous Kibaki administration—a time when the Kalenjins were part of the opposition. The recent decision to extend the railway to Naivasha in the Rift Valley, a Kalenjin stronghold where much of the 2008 post-election violence broke out between the Kalenjins and Kikuyu communities, may be part of a political strategy to address these ethnic grievances.⁴⁰

Corruption allegations are difficult to corroborate, but the focus here is not on investigating any particular instances of corruption. Rather, the aim is to outline weaknesses in the planning and contracting processes that have been raised by the

Political tensions can be attributed in part to the change in ethnic composition of the government coalition after the 2013 elections.

Kenyan Parliament, of which the most vocal critics are Members of Parliament (MPs) from the Kalenjin tribe. Large-scale corruption is widespread in Kenya.⁴¹ In this sense, the controversy over whether Chinese (and other foreign contractors) are involved in corrupt practices reflects a discussion that consistently plagues the national political culture. Incidentally, in a 2014 survey by the Sino-African Centre of Excellence, 75 Chinese companies singled out corruption as the most important obstacle to doing business in Kenya. Of Chinese companies' representatives surveyed, 53 percent called corruption a "very significant obstacle," while 15 percent called it a "significant obstacle."⁴² There is a widespread perception that established Kenyan political elites have pocketed large sums as kickbacks from the SGR. These perceptions overshadow the overall objectives of the project and its genuine contribution to filling the infrastructure gaps in East Africa.

Controversies surrounding the planning, financing, and implementation of the SGR, albeit rooted in the Kenyan political culture, in turn reflect negatively on Chinese developers who are often seen as colluding with corrupt politicians. As a consequence,

Chinese developers are very cautious in their engagements with researchers, the media, and even with Parliament, ignoring summons to testify at the Public Investments Committee. This then contributes to a perception of opacity and elite collusion, despite the CRBC's regular PR and CSR efforts.⁴³

PLANNING, FINANCING, AND CONTRACTING

IN THIS SECTION, WE OUTLINE specific decisions made by the Government of Kenya (GoK) on the planning, financing, and contracting of the SGR. These decisions were made with little concern for economic benefits or for maintaining accountability to the public at large.

The absence of competitive and transparent bidding

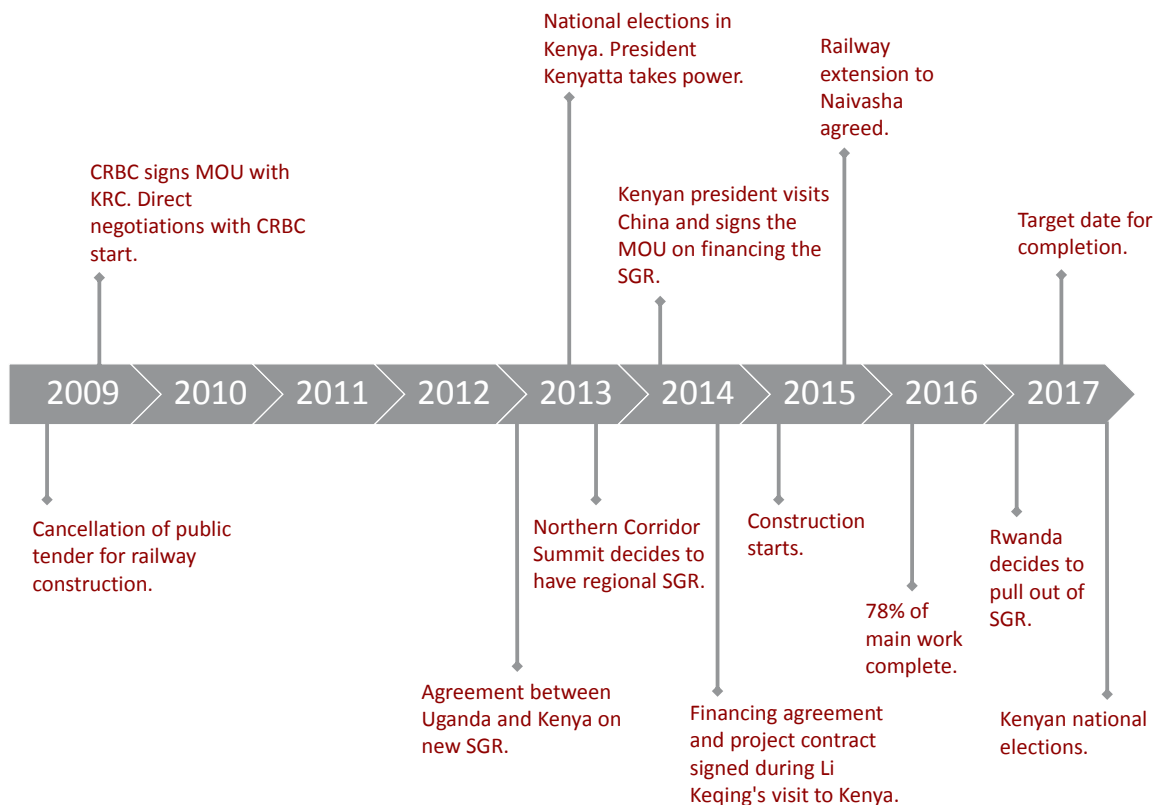
Controversy over the SGR began over concerns of alleged fraud and doubts over CRBC's capacity to construct the railway, the price-setting scheme of the project, and the overall high cost. The Government of Kenya justified its selection of the CRBC without competitive tender by citing Section 6(1) of the Public Procurement Act that allows awards without competitive bidding for government-to-government agreements, arguing that the non-competitive procedure minimizes costs. However, critics argue that the absence of a competitive bidding process has cost Kenyan taxpayers more money given the potential for kickbacks in such a process, and the opportunity cost of forgoing alternative plans to upgrade the existing colonial railway or pursue a previously planned public tender project (this project was cancelled by the Transport Ministry in 2008 to begin negotiations with the CRBC).⁴⁴

The World Bank Africa Transport Unit carried out a cost-benefit analysis of four alternatives to the SGR in August 2013: (1) rehabilitating the existing meter-gauge network; (2) upgrading the existing network to a higher standard with the same gauge; (3) upgrading the existing network to standard gauge on the same alignment; and (4) constructing a SGR on a new right-of-way (the option eventually chosen by Kenya).⁴⁵ The report compares the estimated investment cost per kilometer to the expected benefits in terms of freight volume and estimated revenue. It cites a demand forecast estimate that freight traffic would reach 14.4 million tons per year by 2030 for the entire East African Community (EAC) rail network, yet concludes that the SGR would require a volume of 55.2 million tons (mt) per year to be economically viable. Thus, there was no economic or financial case for SGR construction in the EAC area at this time, while the refurbished meter gauge network would have been the most appropriate option in economic and financial terms for a volume of up to 6.2 mt.⁴⁶ Now, with a Tanzanian-Rwandan project in planning, it appears that there will be two new SGRs for the EAC area, casting further doubts on the economic wisdom of African leaders and the expectations by UNCTAD and others that the rejuvenation of Africa's regional agenda would stem from the provision of common regional public goods along regional industrial value chains.⁴⁷

Financing issues

To meet its financial responsibility for the project, which includes costs of land acquisition and compensation, and the repayment of the Chinese loans, the GoK began to levy a new tax of 1.5 percent on any goods imported into Kenya for the Railway Development Fund (RDF). According to the financial model by the GoK, the RDF will be funded via nine revenue schemes, including increasing existing levies and taxes, such as the port traffic tax. This financing model invites controversy as it increases the cost of doing business in Kenya. The other controversial aspect was the initial incompatibility of these levies with the EAC protocol (and with agreements related to diplomatic missions and foreign aid also subjected to that levy).⁴⁸ We estimate that the Kenyan government cannot secure funding to repay the Chinese loan through the freight revenue alone, so the RDF will likely be called upon to also reimburse the loan to cover the Kenyan share of the cost.⁴⁹ The RDF was initially intended to cover the land compensation costs, which is the Kenyan government's responsibility. According to some reports, those costs apparently doubled from initial planning, at least partly due to corruption.⁵⁰

Figure 2: Timeline of the SGR



Sustainable cost management issues

Kenya's ability to sustain the debt from the costs of the project and exchange rate risks are cause for concern to the economy and future trade opportunities.⁵¹ Currently, Kenya has an enormous trade deficit with China.⁵² The imports of railway construction-related equipment and supplies has led to a temporary import surge from China in 2015 due to imports of steel materials, locomotives and wagons worth around 20 billion Kenyan Shillings (KES) (approximately US\$193 million),⁵³ deteriorating further the bilateral trade imbalance. That should, however, rebalance after the construction-driven import surge.⁵⁴

ENGAGING WITH THE LOCAL COMMUNITY

WE FOUND THAT CRBC HAS MADE a visible effort to set up mechanisms to help them engage with local communities and address their concerns. It has published a CSR report to showcase these efforts.

Liaison officers

In Voi County, we met with two liaison officers to whom we were introduced by the county government from CRBC Section 2. Liaison officers have been assigned to every section by the SGR and CRBC as part of CRBC's CSR strategy. These officers serve as liaisons between the contractors and local community. Given their advisory roles, their effectiveness depends on the political will and support of the county government and their networks within the community.

Before becoming the liaison officer in Voi, one of them served the local community as a pastor. He also has experience with international NGOs. Since taking the position, he has continued to host events in local churches where he also promotes the potential life-changing benefits this railway will bring to the local people. The other officer served Voi County as a civil servant for 15 years, and then became a counselor in the local government before taking the position as a liaison officer. Having been born and raised in Voi, and currently working there, both believe that they are trusted by the local community.

The two liaison officers serve as the bridge between the local community in Voi and the CRBC. The two liaison officers collect appeals and complaints from the local community to discuss with the CRBC. In response to some of the feedback, the CRBC has helped renovate schools, health centers, churches, and mosques. The company built small roads and bridges at the request of the local community. The liaison officers also advise CRBC managers on how best to deal with the ethnic diversity of the local communities to ensure broad representation among the employees.

Hiring recognized liaison officers seems to have been an effective strategy for gaining greater acceptance of the SGR by the local community and for reducing the friction over land, employment, and communication issues between CRBC and local

residents and workers. To substantiate this preliminary finding, the government or CRBC could organize population surveys.

PROJECT IMPACT

BASED ON OUR FIELD RESEARCH, it is clear that different people have different views of and opinions toward the SGR. Notable positive impacts include job creation, skills transfers, and greater income generation from CSR projects. In Voi, for example, according to the liaison officers, the salaries of thousands of newly recruited local workers—nicknamed “Chinas”—have induced the creation of new businesses and bank branches. However, the project has also bred tensions over the impact of construction on livelihoods. In particular, there has been tension within local communities between Kenyan ethnic and socioeconomic groups. Not all local groups enjoy equal employment opportunities or share other economic benefits from the SGR equally. Disputes over wages, employment benefits, land compensation, environmental impacts, and supply contracts all can cause disagreement within and between the local communities, the local authorities, and the Chinese managers.

Tension between ethnic and socioeconomic groups has largely stemmed from pre-existing grievances, which have been exacerbated by the SGR project. In some cases, such as in Mombasa, longstanding political struggles over land ownership were projected onto the SGR. In other cases, such as in Taita Taveta, the governor used his political power to create ambitious local development plans taking advantage of the new railroad. Tensions also rose due to high expectations over jobs, supply contracts, and compensation for land. For example, different ethnic groups each expected jobs to go to their community. Land disputes, notably over compensation payments, galvanized locals, pitting them against both local authorities and Chinese managers.

Another source of tension was the extent to which local industry could benefit or not from the project. Local industry has struggled to enhance local content with only limited support by Kenya’s leadership. There is minimal interest at the top for enhancing local content since their priority is finishing the project early. Moreover, international law does not favor furthering local industry as local content provisions are not allowed under the WTO’s trade related investment measures (TRIM). Local suppliers are also resentful of having to pay a Kenyan value-added tax (VAT) while suppliers of Chinese imports of comparable materials are exempt from the tax; this puts local suppliers at a clear disadvantage in pricing their products and generating profits.⁵⁵ Such problems were often beyond the CRBC to address and required political intervention by the national or local governments.

LOCAL SOURCING

IN SOME INTERVIEWS IT WAS ALLEGED that there was an informal understanding that the CRBC was expected to procure 40 percent of the construction materials from Kenyan suppliers, but that is not reflected in the contract. Local content, as far as we

could find, included cement, railway sleepers, pebbles, and sand, as well as selected services, including slope protection, drainage work, transportation, telecommunication, and banking.

In some instances, Kenyan suppliers have been able to extract increasing shares of the supply chain contracts. Organized pressure by Kenyan cement manufacturers directed to the President successfully resulted in the reversal of a previous agreement

Positive impacts of the SGR project included job creation, skills transfers, and greater income generation from CSR projects.

with Chinese stakeholders to import cement from China. All the cement used for the project was subsequently purchased from Kenyan cement industries. Some of the construction services (slope protection, drainage works, supplies, vehicle hire), as well as the telecom, banking, and other services to the contractors and their camps, were also sourced locally. However, CRBC has had to cope with frequent lack of capacity among local providers. The managing director of Kenya Rail reported in a meeting with representatives of Kenya's private sector association that

many local companies were unable to honor contracts to term and that many laborers “run away after a week or two,” forcing the CRBC to sign short-term trial contracts.

Yet, Kenyan cement producers are still among the few local manufacturers supplying materials to the SGR. Steel parts like the rails, railway engines, construction machines, and many other products that cannot currently be produced in Kenya are shipped in from China.

However, beyond the construction phase, further benefits are expected to come to local producers who can produce or supply brake blocks, lubricants, fuels, or those who can take advantage of advertising space on trains, ticket sales, catering, cleaning, waste disposal, warehousing, and local distribution of goods shipped in through the trains at the various stations.⁵⁶

THE FUTURE OF THE LOCAL TRUCKING INDUSTRY

TRUCKING COMPANIES ACTIVELY LOBBY against government measures, including freight quotas for the future railway, but we are unsure whether the SGR will actually replace trucks for transporting freight—the issue will come down to price. The governor of Mombasa, where most of the trucking companies are based, is confident that the SGR will not put local trucking firms out of business, whereas business interlocutors told us that trucking companies, which make up an influential, politically-connected interest group, are diversifying their business models to take advantage of the infrastructure boom sparked by the SGR, the LAPSET project and other rail projects. Nevertheless, truckers and port worker unions have repeatedly warned of strikes against the SGR. The PIC calls for intermodal transport planning that treats road transport as complementary instead of as a competitor to rail transport.⁵⁷

INDIRECT IMPACTS: THE LOCAL ECONOMY

THE SGR CONSTRUCTION SEEMS TO HAVE HAD a considerable positive impact on the local economy. From our interviews with local liaison officers, we learned that the patronage of SGR workers to local businesses has driven up demand for goods for daily consumption. Several banks opened new branches to provide services to these employees, some of whom are starting their own small businesses. In optimistic scenarios, train stations could lead to the establishment of economic clusters, special economic zones (SEZ), or business parks, although there is currently little evidence that zoning, let alone construction, for such parks has started. For instance, a SEZ was proposed to be built in Naivasha to justify extending the SGR phase 2A.⁵⁸

SGR construction has positively impacted local economies by supporting local businesses and creating new business opportunities.

Expenses related to acquiring land

Much of the land that the railway passes through has to be expropriated from private owners. The Kenyan government is in charge of this. An estimated 10 percent share of the total US\$3.8 billion from the Kenyan government was allocated towards resettlement and compensation.⁵⁹ The National Land Commission (NLC) is accountable for managing the valuation of, and the compensation claims deriving from, the acquisition and leasing of these lands.

The NLC's land valuation process generates most of the disputes. The NLC assesses each individual property that the railway line goes through, and residents have complained about the respective valuations of their lands relative to that of their neighbors. Residents who own the land can appeal the valuations in court, but it can take months or even years to resolve disagreements over compensation. Railway construction continues during the appeal. Unfortunately, the budget allocated for resettlement and compensation has proved insufficient due to issues of land governance in Kenya.

Influence of local politics on land issues

Land issues have been politically sensitive in Kenya for decades. Moreover, land ownership has traditionally been subject to nepotism, corruption, and manipulation by elites in a neo-patrimonial political culture. On April 12, 2016, the Managing Director of Kenya Rail, a public organization that manages some of the compensation funds for the SGR on behalf of the Kenya National Lands Commission, complained that dealing with land acquisition issues and the legal rights of owners was a "nightmare."⁶⁰ At the time of his comment, approximately KES 30 billion (approximately US\$290 million) had already been spent towards issues of land acquisition, double the initial budget allocation for land issues. He raised the question of whether the country could afford such a generous land compensation scheme and argued that further extensions of the railway would be even more costly.⁶¹

In Mombasa County, the land compensation disputes, backed by political power, have posed significant obstacles to the railway construction. According to the Daily Nation, the CRBC has accused the government of Mombasa County of interfering in the acquisition of land and the construction process.⁶² Muhammad Swazuri, the Chairman of NLC, blamed the problems on the project compensation of local political leaders, an issue that has incited resentment from the people.⁶³ The governor of Mombasa County, Hassan Ali Joho, who is from the opposition party, argued that resettlement and compensation issues should be viewed from a historical context, and that “ancestral interest” should be included in the evaluation by the NLC and Kenya Railway Corporation (KRC).⁶⁴ One longstanding source of political grievance on the Kenyan Coast stems from land ownership disputes between the traditional local community members, who live on the land without title deeds, and migrants from other parts of Kenya who were issued title deeds by the government without considering incumbents’ traditional forms of land ownership.

Similarly, in Embakasi, the Nairobi County government obtained a court order to prevent residents on the construction site from claiming compensation, as the owner of the land was the county government. While the residents had settled on it illegally, no one had objected to the illegal settlements for decades.

In conclusion, the land disputes are largely a reflection of long-standing local political conflicts that have plagued Kenya for decades. They were not addressed in the national government’s contract with the Chinese company, but remained the responsibility of the government. Nevertheless, Chinese employees have faced hostility from the local community during construction. In general terms, local communities were often not informed about the SGR.⁶⁵ These issues are not unique to Chinese projects; this should concern potential Western foreign investors as well.⁶⁶

ENVIRONMENTAL IMPACT

ACCORDING TO THE PIC, an Environment Impact Assessment was carried out and a National Environment Management Authority (NEMA) certificate was obtained with mitigation measures for the project.⁶⁷ However, local sourcing of sand has led to environmental controversies and the National Environment Tribunal revoked the NEMA license for CRBC, suspending sand sourcing from a location near beach resorts until a new Environmental Impact Assessment could be carried out.⁶⁸

The railway cuts through the Tsavo National Park, and in order to reduce the railway’s disturbance of the migration route of elephants, giraffes, and other wildlife between the two sides of the National Park, CRBC designed wildlife corridors under the railway dam. Animals can also pass under the Voi River Super Bridge.⁶⁹ The bridge cuts through the Tsavo National Park’s elephant corridor, and has a length of two kilometers and an elevation of 5.5 meters.⁷⁰ Conservationists are concerned that the frequent passage of trains may have a negative impact on some species and eventually affect the National Park’s tourism. However, politicians, such as the governor of Taita Taveta, argue that “animals will have to adapt just like people.”⁷¹ A similar attitude

prevails in the discussions about the extension (phase 2A) from Nairobi to Naivasha which may raise tourism issues for the Nairobi National Park. It can be assumed that one reason why the government prefers the route through the National Park is to save money on the land compensation that would be required for alternative routes. Consultations with Kenya Wildlife Service, conservationists, Kenya Rail, the government, and the CRBC seem to have produced a new design of bridges with noise screens to reduce negative impact on wildlife and tourism.⁷²

Our findings indicate that limited efforts at minimizing environmental impacts were made during the design phase, but perhaps insufficiently researched on the local level. During implementation, some corrections could be made, but overall keeping construction on schedule seems to be a higher priority.

EMPLOYMENT ISSUES

A SURVEY SHOWS THAT CHINESE FIRMS in general hire higher proportions of local workers than most other foreign businesses.⁷³ According to the CRBC (2016), the SGR project had a total of 21,858 documented employees, including 2,000 Chinese management and technical personnel and 19,858 local employees. Among local employees, 4,690 were technical workers, 907 were management personnel and 14,261 were ordinary laborers. Kenyan workers worked as machine operators, truck drivers, surveyors, as other specialists, and as casual workers. In total, over time, the SGR project created over 38,000 employment positions.⁷⁴

CLASHES BETWEEN KENYAN AND CHINESE EMPLOYEES

MOST CHINESE EMPLOYEES ARE ENGINEERS and speak very little English or Kiswahili, and it can be assumed that they are at a loss to understand local politics. Their sole recourse in employment disputes is to rely on the faithful application of Kenyan laws and regulations. Kenyan employees unable to extract desired concessions on employment benefits perceived Chinese employers as rigid and tough on local communities. Overall, the national authorities seemed responsive to distress calls from Chinese employers over tense incidents, but sometimes they clashed with the local authorities or the tribal chiefs. In each camp, the Kenyan government stationed police officers to ensure security. According to Kenya Rail, about 1000 police officers in total were enlisted to ensure security on the SGR construction work. Additionally, as is normal practice in Kenya, the camps were fenced off and guarded by private Kenyan security companies.

ISSUES BETWEEN KENYAN EMPLOYEES OF DIFFERENT TRIBAL AND SOCIOECONOMIC GROUPS

LOCAL POSITIONS ON THE SGR SECTION 7 site in Emali that require higher skill levels, and are compensated with higher pay, were filled mostly by Kenyan employees

from Nairobi. Those employees were referred to as “outsiders” and resented by the local community. We believe the resentment builds upon pre-existing ethnic grievances in Kenya towards outsiders.

The recruitment and employment of unskilled labor also led to conflicts. For example, Section 7 cuts through land occupied by two tribal areas, the Kamba and the Maasai. During recruitment, the Chinese managers in Emali found that the Maasai have steeper learning curves and higher compensation demands compared with the Kamba people. A Maasai worker’s employment termination was perceived as discrimination against the whole tribe, and the Maasai workers went on strike, hindering construction work. The Chinese manager we interviewed noted an incident in August 2015 when “the Maasai workers brought people from their tribe, gathered at the camp site, and destroyed the water pipe at the construction site, and now we are running out of water, just because we want to move a Maasai worker from the electricity team to another team, and he is thus receiving less wages.”⁷⁵ The policemen at the camp site had to use tear gas to expel the intruders and control the situation.

In contrast, in Voi County, around 3,000 local people, representing 70 percent of the total local employees in the Section 2 project site, were recruited to work for the railway construction. They were supervised by both Chinese and Kenyan engineers. The other 30 percent of employees were in positions that required higher skill levels, and these skilled workers were also recruited from other counties such as Nairobi and Mombasa. However, in this section, a local agency was appointed to mediate selection and recruitment issues. These local agents worked very closely with the county government and local chiefs to ensure that, in each sub-section, the various tribes were represented proportionally among the recruits so as to avoid potential tribal conflicts. The wages of the railway workers vary according to their different types of works, but all hiring decisions were made according to local laws.

Labor strikes

Worker strikes that disrupt operations were often employed to force management to re-negotiate on wages and benefits. Worker strikes are an issue that Chinese managers are ill-equipped to deal with and are a source of tension that reveal large cultural and management gaps. Chinese managers interviewed in Section 7 insisted that they abide by the law and project agreements, and mention that they cannot understand why local workers strike over seemingly “trivial” issues—such as over workers’ request for CRBC to provide milk instead of water at lunch—rather than negotiating. Chinese and Kenyan industrial cultures clearly differ. Notably, the CRBC managers have never seen strikes in China before.

Views on fair wages also differ. While the Chinese managers and the liaison officers interviewed argued that the CRBC pays higher than average wages and overtime compensation, individual workers interviewed said they should be paid and treated better. These disagreements related to interpretations of Kenyan labor laws.

TECHNOLOGY AND SKILLS TRANSFER

In this sensitive area, our field research seems to indicate that there were “normal” labor tensions between workers and employers exacerbated by different management cultures and expectations. The CRBC followed the law and the agreements with the government and labor unions, and expected hard work and discipline in order to meet project costs and schedules. The local workers expected higher benefits and better treatment than agreed upon. They seemed to lack knowledge of the contracts and local laws, and they resented differentiated treatment. As most workers were unskilled, they were mostly recruited directly at designated sites based upon their physical appearance. Such workers, lacking a formal qualification, were not members of trade unions. Only the minority of skilled professionals were members of unions.

TECHNOLOGY TRANSFER IS AN IMPORTANT expectation that local populations, businesses, and the Kenyan government have of multinational enterprises’ overseas operations. In the SGR case, much of that occurred for unskilled laborers through learning by doing. In addition, a Technology Transfer Competence Training facility in Voi was financed by the CRBC’s CSR budget, and training started in August 2015. The private technical training school is owned by the CRBC, which runs the school jointly with a local private training institute, the Descartes Training Institute.⁷⁶ The lecturers are provided by CRBC staff. Successful graduates from the school will obtain a certificate recognized by the Kenya Ministry of Education, Science, and Technology. The two major sources of students are the local workers employed by CRBC in Voi, whose tuition is paid by CRBC, and students from the rest of the country who are interested in going through the training, and who thus cover their own tuition. There are 100 students currently in training in the school. The disciplines offered are not railway-specific, but focused on training large equipment operators, laboratory technicians, construction engineers, and more.⁷⁷ According to the liaison officers and the governor, the courses vary between six months to two or three years, depending on the trade. The training institute was welcomed by the Taita Taveta Governor, John Mruttu, who claimed responsibility for its initiation.⁷⁸

From July to December 2015, CRBC sent 13 local employees to the 2015 Seminar on Railway Project Management and Construction for Developing Countries sponsored by

MOFCOM and organized by Southwest Jiaotong (Transportation) University. The employees received a certificate upon completing training.⁷⁹ CRBC also held talks with KRC and the University of Nairobi and reached a preliminary agreement that CRBC will assist in the construction of a teaching building at the University dedicated to a railway academic major, which will be launched with the help of a leading university.⁸⁰ As part

of efforts to train local engineers for maintaining and operating the SGR, President Kenyatta and President Xi agreed on the sidelines of the 2015 FOCAC in South Africa that China will sponsor 25 Kenyan students as part of the Railway Talents Cultivation

Much of the technology transfer during the SGR project occurred for unskilled workers through “learning by doing.”

Programme to study at Jiaotong University in Beijing. They are to be followed by another batch of students.⁸¹

KENYAN EFFORTS TO BUILD CAPACITY

KENYAN BUSINESSES ARE PUSHING FOR USE of locally-sourced materials, products, and services in future construction phases including the Naivasha extension. Kenyan businesses and universities have created a special interest group, the Regional Mega-Projects Coordination Council (RMPCC), to enhance local content and skills transfer while trying to upgrade their own capacity to deliver. This is a remarkable development.

Through the aforementioned breakthrough on local sourcing of cement, the Kenyan manufacturers could also benefit from technology transfer and new business opportunities. This cement deal involved transfer of manufacturing standards to upgrade local capacity. From private sector sources, we were told that the upgrading of the cement quality was not very challenging since the Chinese standards were close to the British standards that Kenyans had already applied. The private sector generally feels that the CRBC should contribute more to upgrading skills related to construction and operation of the railway system.⁸²

Most of the skills transfer thus far has happened informally for thousands of unskilled workers within temporary employment, and these skills will likely be useful in other infrastructure projects, whether in the maintenance of the SGR or through self-employment. We think the vocational training facility, if continued and financed, is likely to meet industry demands for producing graduates with vocational training that better meets market needs than other vocational curricula in Kenya.

POLICY IMPLICATIONS

THE PLANNED EXTENSION PHASES OF THE SGR could benefit from lessons learned from the current project, such as managing expectations of different stakeholders, localization of supplies, skills training for workers, as well as day-to-day project implementation issues as reviewed above.

RECOMMENDATIONS FOR CHINESE PARTNERS

1. Understanding the political background of the host country is crucial for Chinese companies' operations, especially to manage local expectations and grievances. In the SGR case, even though this was not supposed to be its responsibility, the CRBC was still confronted with the land compensation issue, tensions in labor relations, and tribal conflicts. The local population was not well-informed that their national government was responsible for all land issues, and usually CRBC construction sites are more accessible to them. The CRBC tended to view potential solutions

from a top-down perspective, often relying on national government interventions to solve problems.

2. At the technical level, hiring local liaison officers, as in the innovative case with the CRBC office in Voi, could be an effective way of improving communication between Chinese companies and local communities. Liaison officers who had roots in the local community served as the bridge between the company and the community, building buy-in from the local residents for the company's projects, and conveying residents' needs to the company. The CRBC also employed CSR activities to rectify minor local issues to demonstrate care for the well-being of local communities. This effort seems to have led to improved relations, although it has not solved all problems.
3. Chinese companies should increase transparency around projects, in particular to researchers and media professionals, to avoid perceptions that there is something to hide.

Chinese companies should increase transparency around projects, while Kenyan politicians and planners need to improve their communication with local communities.

RECOMMENDATIONS FOR KENYAN POLICY MAKERS

1. Kenyan politicians and planners need to improve their communication with local communities to better convey the rationale behind a major project, especially in the early phases of the project. They need to address local content, as well as environmental and other mitigation measures in the negotiations leading to the contract rather than having to re-negotiate after the fact. Local consultation and participation in discussions of land issues and labor recruitment would also ensure fewer construction disruptions and relieve undue pressure on Chinese managers that are focused on completing construction phases under deadlines. The top-down approach produces conflicts and leads to non-negotiable standard packages since it prioritizes speed and political expediency over quality and local issues.
2. Locally-organized industry efforts to enhance local content can make a positive difference, as the cement manufacturers' case shows. The success of that negotiation, however, relied on self-organization and political pressure. Kenyan policy makers should consult with industry already in the planning phases of projects.
3. Transparency around the financing and cost valuation of the project should be increased to avoid criticism and to improve overall cost control. An independent study for project feasibility and cost, for example, could have been done and compared to the Chinese feasibility study carried out by the contractor. However, this assumes that political will exists to enhance transparency, which is doubtful given rent-seeking opportunities.
4. Long-term fiscal and economic impact should be rigorously assessed. If an infrastructure project is not economically viable it will leave the host country with a high debt burden and little development benefit. Viability and impact are

difficult to assess given the large number of factors to consider, but not much effort was made in this case, especially given the political nature of the project.

RECOMMENDATIONS FOR POLITICIANS CONCERNING REGIONAL ISSUES

1. If infrastructure is supposed to be cost-efficient and geared to market needs, binding agreements and regional contracting agencies flanked by private sector organizations such as the RMPCC should be set up and given budget and planning oversight. This would help prevent instances of individual countries pulling out.

CONCLUSION

THE SGR IS THE ONLY MEGA PROJECT to be finished on time during the first term (2013-17) of President Kenyatta. It has been presented as a flagship project of a government committed to economic development and as a result of Kenyan agency, symbolically closing a 110-year chapter of reliance on colonial infrastructure. Hence, it was baptized the *Madaraka Express*, beginning service on Madaraka Day, Kenya's national holiday commemorating self-rule on June 1, 1963.

However, in order to be economically viable, the SGR operation has to be competitive with road transport. Local and national governments could take advantage of the SGR by creating economic clusters. Further construction phases should strive to increase local content and improve social and environment impact assessments through local consultation. The land compensation costs are likely to be even more complex to manage in the further extension in more populated areas. Unless Kenya radically overhauls how it governs its legal framework on many issues we researched, infrastructure projects risk overshooting initial budgets and reducing the willingness of neighboring countries or foreign investors to engage in future initiatives in Kenya.

Most of these issues addressed in our research, from the contracting to the construction processes, are a matter for the Kenyan actors. This contradicts a widespread assumption that China is responsible for causing, or at best ignoring, many of the problems in Kenya and other African countries. Such assumptions probably stem from a paternalistic development aid perspective that is difficult to reconcile with what is in fact a Chinese-financed Kenyan investment project. Development aid literature often invokes the idea of "African ownership," referring to the need for locally-driven accountability and responsibility in African development, as opposed to externally-driven foreign solutions. This idea is reflected in the long list of issues and recommendations outlined in this case study. The Chinese contractors, like the CRBC, whose commercial and political interests are protected by Chinese political leaders, aligned themselves with the priorities that were defined by Kenya's President – the "owner" of the project. Many issues we identified in our research may have been dealt with differently if the "ownership" of the SGR had been extended to or consulted with a broader spectrum of Kenyan society. As shown above, through self-organization and lobbying, Kenyan businesses have been able to secure a modest

increase of local content, but the limited capacity to provide more local content on the Kenyan side has been a major obstacle. Kenyan conservationists by contrast have been largely overruled by their own government in their emphasis on wildlife conservation. The CRBC tried to address community concerns by hiring liaison officers and creating a vocational training facility, but the company has demonstrated less flexibility on the main contract provisions, explained in part by the Kenyan government's pressure to finish construction on time and within budget. The land issue has proved the costliest and most contentious issue to deal with the local community over, but this issue is the responsibility of the Kenyan government and the conflicts have played out along tribal and political lines as in past decades. The "China factor" has played no role in these long-standing land-related grievances.

As the Kenyan example shows, Chinese investors in Africa are not neo-colonial predators; they can help transform African visions into concrete reality, but African agency is still critical to make infrastructure projects work for inclusive development and profitable economic growth. The reality of a wide-spread neo-patrimonial political culture on the continent—with the ethnic component particularly problematic in Kenya, as we have seen—is a major challenge for any outside partner, not just China, in overseas investment.⁸³ ★

ENDNOTES

1. At the time of research, this project was under construction management by the CRBC. The SGR opened on May 31, 2017.
2. Elvis Ondieki, "Uhuru Breaks the Ground for Nairobi New Railway Hub," *Daily Nation*, September 19, 2015. <http://www.nation.co.ke/news/Uhuru-breaks-the-ground-for-Nairobi-new-railway-hub/1056-2877614-format-xhtml-ydjgyoz/index.html>.
3. Lucie Morangi, "Rail Project an Engine of Learning," *China Daily Africa*, July 10, 2015, http://africa.chinadaily.com.cn/weekly/2015-07/10/content_21242975.htm.
4. V. Foster, W. Butterfield, C. Chen, & N. Pushak, "Building Bridges: China's Growing Role as Infrastructure Financier for Sub-Saharan Africa," *Trends and Policy Options* Vol. 5 (Washington, D. C.: World Bank Publications, 2009).
5. Bach (2013) reviews the old concept of patrimonialism in an international, not exclusively African context and points to the mixed and ambivalent nature of neo-patrimonialism. In his view of neo-patrimonialism in the state rather than the patrimonial state per se, personalized power relations and appropriation of state resources co-exist with legal-rational and developmental models of public policy. Our research on the SGR finds precisely a mixture of such processes; Daniel Bach, "Régimes politiques, pratiques systémiques et dynamiques de l'émergence dans les états africains et post-soviétiques" [Political Regimes, Systemic Practices and Dynamics of Emergence in African and Post-Soviet States], *Revue internationale de politique compare [International Review of Comparative Politics]* 20, no. 3 (2013): 153-169; Michaela Wrong, *It's Our Turn to Eat: The story of a Kenyan whistleblower* (London: Fourth Estate, 2009).
6. Jan Vanheukelom, Bruce Byiers, San Bilal, & Sean Woolfrey, "Political Economy of Regional Integration in Africa: What drives and constrains regional organizations?," Synthesis report, The European Centre for Development Policy Management, 2016, <http://ecdpm.org/wp-content/uploads/ECDPM-2016-Political-Economy-Regional-Integration-Africa-Synthesis-Report.pdf>.
7. The Public Investments Committee, National Assembly [PIC 2014], "Special Report on the Procurement and Financing of the Construction of Standard Gauge Railway from Mombasa to Nairobi (Phase 1)," April 29, 2014, 73.
8. Kiarie Njoroge, "Why Chinese Bank Imposed SGR Line Operator on Kenya," *Business Daily*, May 18, 2016, 6, http://www.ipsos.co.ke/NEWBASE_EXPORTS/Banking/160518_Business%20Daily_6_b49af.pdf.
9. "Rail in Ethiopia Riding High while Kenya Still Lagging Behind," *The Nairobi Network*, March 25, 2014, <http://www.thehabarinetwork.com/wp-content/uploads/2014/03/Kenya-Regional-Transportation-Map.jpg>.
10. At the time, Tanzania was considered the "unwilling" member of the East African Community.
11. Jan Vanheukelom, et al., "Political Economy of Regional Integration in Africa," 19; Daniel Bach, *Regionalism in Africa: Genealogies, institutions and trans-state networks* (London: Routledge, 2016): 126.
12. "Rwanda Wants the Best of Both SGR Worlds, North and Central," *Trade Mark East Africa*, June 13, 2016, <https://www.trademarka.com/news/rwanda-wants-the-best-of-both-sgr-worlds-north-and-central/>.
13. Gerald Andae, "Kenya to terminate railway at Kisumu after Rwanda exit," *Business Daily*, May 18, 2016, 15, <http://www.business-dailyafrica.com/corporate/Kenya-to-terminate-railway-at-Kisumu-after-Rwanda-exit/539550-3207470-lrw47y/index.html>.
14. Garth Le Pere, "China in Africa: Mercantilist Predator, or Partner in Development?," Midrand Institute for Global Dialogue, The South African Institute of International Affairs (Johannesburg, 2007); Uwe Wissenbach, "The EU's Response to China's Africa Safari: Can Triangular Co-operation Match Needs?," *The European Journal of Development Research* 21, no. 4 (2009): 662-74.

15. Karsten Giese, "Perceptions, Practices and Adaptations: Understanding Chinese-African Interactions in Africa," *Journal of Current Chinese Affairs* 1 (2014) 4.
16. L. Chandy & H. Kharas, "Why Can't We All Just Get Along? The Practical Limits to International Development Cooperation," *Journal of International Development* 23, no. 5 (2011): 739-51; Uwe Wissenbach, & Eun-mee Kim, "From Polarisation towards a Consensus on Development? The EU and Asian approaches to development and ODA," in *The Palgrave Handbook of EU-Asia Relations*, eds. T. Christiansen, E. Kirchner, P. Murray (London, 2013).
17. Jyhjong Hwang, Deborah Brautigam, & Janet Eom, "How Chinese Money is Transforming Africa: It's Not What You Think," China-Africa Research Initiative, Johns Hopkins School of Advanced International Studies, Policy Brief 16, 2011, https://static1.squarespace.com/static/5652847de4b033f56d2bdc29/t/5768ae3b6a4963a2b8cac955/1466478245951/CARI_PolicyBrief_11_2016.pdf.
18. Deborah Bräutigam & K.P. Gallagher, "Bartering Globalization: China's Commodity Backed Finance in Africa and Latin America," *Global Policy* 5, no. 3 (2014), 346-352, doi:10.1111/1758-5899.12138; V. Foster, et al., "Building Bridges," 27.
19. D. Bräutigam & K.P. Gallagher, "Bartering Globalization," 351.
20. B. Tilt, Y. Braun, & D. He, "Social Impacts of Large Dam Projects: A Comparison of International Case. Studies and Implications for Best Practice," *Journal of Environmental Management*, 90 (2009): 249-257.
21. "China Development Bank's Outward Investments: An Assessment of Environmental and Social Policies and Practices," *Friends of the Earth*, 2012, http://www.foe.org/system/storage/877/2b/2/2245/China_Development_Banks_overseas_investments_-_An_assessment_of_environmental_and_social_policies_and_practices.pdf; "China's Mining Industry at Home and Overseas: Development, Impacts, and Regulation," The Climate and Finance Policy Centre, Greenovation Hub, 2014, www.github.org/cfc_en/mining2014 (English), www.github.org/cfc/mining2014.
22. F.L. Cooke, "The Globalization of Chinese Telecom Corporations: Strategy, Challenges, and HR Implications for the MNCs and Host Countries," *The International Journal of Human Resource Management* 23, no. 9 (2012): 1832-1852, doi:10.1080/09585192.2011.579920; Huawei, "Bridging Spaces, With You," 2009, p.70-71, retrieved from http://www.huawei.com/ucmf/groups/public/documents/attachments/hw_193077.pdf.
23. Liu Haifang & Jamie Monson, "Railway Time: Technology Transfer and the Role of Chinese Experts in the History of Tazara," in *African Engagements*, eds. Ton Dietz, Kjell Havnevik, Mayke Kaag, and Terje Oestigaard (Brill, 2011), 226-251.
24. L. Corkin, C. Burke & M. Davies, "China's Role in the Development of Africa's Infrastructure," Working Papers in African Studies, 2008, <https://www.sais-jhu.edu/sites/default/files/China's-Role-in-the-Development-of-Africa's-Infrastructure.pdf>.
25. S. Cheng & G. Liang, "Social Responsibility of Chinese Investment in Africa: What Does it Mean for EU-China Cooperation on Development Policy Towards Africa?," International Centre for Trade and Sustainable Development, May 6, 2011, <http://www.ictsd.org/bridges-news/trade-negotiations-insights/news/social-responsibility-of-chinese-investment-in-africa>.
26. X. Shen, "Private Chinese Investment in Africa: Myths and Realities," *Diplomatic Policy Review* 33, no. 1 (2013): 17, <http://onlinelibrary.wiley.com/store/10.1111/dpr.12093/asset/dpr12093.pdf?v=1&t=ijjhp7qe&s=3732100660f5906bd4db5328b48e52bc49c914>.
27. B. Wang, R. Mao & Q. Gou, "Overseas Impacts of China's Outward Direct Investment: China's Outward Direct Investment," *Asian Economic Policy Review* 9, no. 2 (2014): 239, doi:10.1111/aepr.12065.
28. Apurva Sanghi & Dylan Johnson, "Deal or No Deal. Strictly Business for China in Kenya?," Policy Research Paper 7614, (Washington: The World Bank Group, March 2016): 2.
29. A. Sanghi & D. Johnson, "Deal or No Deal," 27.

30. A. Sanghi & D. Johnson, "Deal or No Deal," 1.
31. See, for example, "Chinese-Build Modern Railway Unleashes Huge Benefits in Kenya: Official," *China Daily*, Feb. 27, 2016, http://www.chinadaily.com.cn/world/2016-02/27/content_23663172.htm; Hou Liqiang, "Chinese Company Building Kenyan Rail Link," *China Daily*, Dec. 8, 2015, http://europe.chinadaily.com.cn/world/2015-12/08/content_22653656.htm; and Hou Liqiang, "Chinese Company to Complete Cross-Kenya Railway," *China Daily*, Dec. 9, 2015, http://africa.chinadaily.com.cn/africa/2015-12/09/content_22671055.htm.
32. "Mombasa-Nairobi Standard Gauge Railway Project, Kenya," *Railway-Technology*, accessed Nov. 1, 2016, <http://www.railway-technology.com/projects/mombasa-nairobi-standard-gauge-railway-project/>.
33. A MoU between the Government of Kenya and CRBC was signed in August 2009 to carry out a feasibility study and preliminary design. This was accepted as part of "a standard requirement for Chinese funded projects to establish the feasibility themselves before involving their treasury and banks" (PIC 2014, 74). The Attorney General approved two commercial contracts for civil works between Kenya Railway Corporation and CRBC after Cabinet approval for a government-to government financing agreement in 2012 subject to identifying a financier and obtaining a funding commitment, which was agreed in 2014.
34. This old railway network is operated by the private company Rift Valley Railways (RVR) and is 85 percent owned by the Egyptian equity fund Qalaa Holdings. Recently, it increased its investment in locomotives manufactured from the U.S. and in new, bigger wagons from the China CNR Corporation Limited to compete with the SGR. RVR increased its share in freight from Mombasa to Uganda to 1.883 million tonnes in 2015. RVR is urging for measures to level the playing field, such as amendments to the RVR's August 2010 concession agreement and debt repayment scheduling. RVR also plans to shuttle passengers from the SGR terminal near Nairobi to the city centre on an existing commuter rail track.
35. The CCCC is a parent company of the CRBC.
36. Allan Olingo, "RVR Loses Deal to Run Standard Gauge Railway to Chinese Contractor," *The East African*, May 7, 2016, <http://www.theeastafrican.co.ke/news/RVR-loses-deal-to-run-standard-gauge-railway-to-Chinese/2558-3193710-hgntoc/index.html>.
37. According to Kennedy Senelwa in *The East African*, "Transport costs in East Africa can account for up to 30 to 50 percent of export value and up to 75 percent for landlocked countries. Delays add additional costs of \$400 to \$500 per trip for freight forwarders crossing borders." Kennedy Senelwa, "Kenya's New Northern Transport Corridor Promises Region \$2.6bn," *The East African*, August 22, 2016, <http://www.theeastafrican.co.ke/business/Kenya-new-northern-transport-corridor-promises-region-2-6bn/2560-2842106-hx2te3/index.html>.
38. These costs are higher relative to other railways lines in Ethiopia, for instance. See Nancy Kacungira, "Will Kenya Get Value for Money from its New Railway?," *BBC News Africa*, June 8, 2017, <http://www.bbc.com/news/world-africa-40171095>.
39. M. Wrong, *It's Our Turn to Eat*.
40. Charles Hornsby, *Kenya: A History Since Independence* (London: Tauris, 2013); Adams Oloo, "The Triumph of Ethnic Identity over Ideology in the 2013 General Election in Kenya," in *Kenya's 2013 General Elections. Stakes, Practices and Outcomes*, eds. Kimani Njogu & Peter Wafula Wekesa (Nairobi: Twaweza Communications, 2015), 48-63.
41. M. Wrong, *It's Our Turn to Eat*.
42. A. Sanghi & D. Johnson, "Deal or No Deal," 26.
43. PIC 2014, 71-3.
44. PIC 2014, 26-31.

45. “The Economics of Rail Gauge in the East Africa Community. World Bank-Africa Transportation Unit,” World Bank, August 8, 2013, http://bodmastec.com/sgr1/wp-content/uploads/2014/06/World_bank_Report_on_the_Standard_Gauge_Railway.pdf.
46. Ibid. Of course this paper relies on assumptions and estimates that can be disputed, or refined, but the scale of the differences in cost-benefit terms makes it hard to justify the new SGR on economic terms.
47. D. Bach, *Regionalism in Africa*, 113.
48. According to Part D, Article 10 of the EAC Protocol on the Establishment of the East African Customs Union, “the Partner States shall, upon the coming into force of this Protocol, eliminate all internal tariffs and other charges of equivalent effect on trade among them.” Kenya’s 1.5 percent Railway development Levy (RDL) on all imported goods is in conflict with this article and Kenya was forced to suspend the levy on all imports to Kenya from other EAC member states in March 2014 after the East African Business Council—a private sector organization—filed a complaint with the EAC Council of Ministers arguing the levy was equivalent to such internal tariffs and other charges. The levy still applies to goods entering Kenya and shipped on to the other countries. In fact, in June 2014, the EAC decided to introduce a 1.5 percent infrastructure development levy (IDL) EAC-wide to replace RDLs, but Kenya continued RDL while Uganda and Rwanda adopted the IDL. In 2015 Tanzania introduced a national RDL also at 1.5 percent. Kenya’s RDL surpassed its target in 2014. See “Freight Shipping Logistics News,” Press Center, Aero Marine Capital, May 21, 2014, <http://aeromarine.co.ke/news/1166/76/Rail-levy-collection-exceeds-target-despite-EAC-deal/>; Boaz Langat, “Long Way to go in Curbing Trade Barriers within EAC,” *Business Daily*, June 14, 2016, 9, http://www.ipsos.co.ke/NEW-BASE_EXPORTS/Unilever/160614_Business%20Daily_9_b69ao.pdf; PIC 2014, 54.
49. See PIC 2014, 50-54, for the Treasury’s cost and debt sustainability calculations.
50. Complaints in court suggest that earmarked funds have been misappropriated or delayed. Bernard Mwinzi, “Petitioner Stops Uhuru’s Railway Project over Unpaid Sh1.4 billion,” *Daily Nation*, June 29, 2016, 3, <http://www.nation.co.ke/news/Land-owners-derail-Uhuru-s-biggest-project/1056-3271824-nr8iw8/index.html>; Paul Wafula, “Court Slams Brakes on SGR in Compensation Row,” *The Standard*, June 29, 2016, 7, <https://www.standardmedia.co.ke/article/2000206921/court-slams-brakes-on-sgr-in-compensation-row>.
51. Jaiindi Kisero, “Are the Chinese-Funded Projects Worth Debts we are Sinking In?,” *Daily Nation*, March 30, 2016, 14, <http://www.nation.co.ke/oped/Opinion/Are-the-Chinese-funded-projects-worth-debts-we-are-sinking-in/440808-3138554-8tagk7z/index.html>.
52. A. Sanghi & D. Johnson, “Deal or No Deal.”
53. Calculated using USD/KES exchange rate of 103.4, as of June 3, 2017.
54. Neville Otuki, “China’s Exports to Kenya Reach Sh295bn on Railway Construction,” *Business Daily*, Feb. 4, 2016, 7, <http://www.businessdailyafrica.com/news/Kenya-reach-Sh295bn-on-railway-construction/539546-3062852-format-xhtml-jvh22x/index.html>.
55. A. Sanghi & D. Johnson, “Deal or No Deal,” 2; 35-36.
56. Presentation by Kenya Rails to KEPSA, Nairobi, Kenya, April 12, 2016.
57. PIC 2014, 83.
58. Interview with Kevit Desai, Chairman of RMPCC, Nairobi, Jan. 1, 2016; Presentation by Kenya Rails to KEPSA; Jaiindi Kisero, “Are the Chinese-Funded Projects Worth Debts we are Sinking In?”
59. “Mombasa-Nairobi Standard Gauge Railway Project, Kenya.”
60. John Njagi, “Sh11bn Already Paid to Railway Beneficiaries, Land Records Show,” *Daily Nation*, March 28, 2016, 13, <http://www.nation.co.ke/news/Firms-receive-Sh11bn-pay-out-as-queries-rage-on/-/1056/3136002/-/qud8lvz/-/index.html>.

61. Presentation by Kenya Rails to KEPSA, Nairobi, Kenya, April 12, 2016; Roselyne Obala, "Audit report reveals Sh500m Lost in SGR Land Compensation Scheme," *The Standard*, June 27, 2016, 6, <https://www.standardmedia.co.ke/article/2000206693/audit-report-reveals-sh500m-lost-in-kenya-s-sgr-land-compensation-scheme>.
62. Daniel Tsuma Nyassy, "Hands Off Railway Project, Firm Tells County Officials," *Daily Nation*, June 22, 2015, <http://www.nation.co.ke/counties/mombasa/Mombasa-Standard-Gauge-Railway-CRBC/-/1954178/2761446/-/ymg500z/-/index.html>.
63. Daniel Tsuma Nyassy, "Swazuri Tells Off Politicians on Rail Project," *Daily Nation*, July 2, 2015, <http://www.nation.co.ke/news/Swazuri-tells-off-politicians-on-rail-project/-/1056/2773434/-/nt5k5uz/-/index.html>.
64. Interview by authors with Hassan Ali Joho, Mombasa, August 9, 2015.
65. See, Liz Mahiri, "Community's Anxiety about LAPSSET Fueled by Lack of Information," *Rift Valley Institute*, January 6, 2017, <http://riftvalley.net/news/community%E2%80%99s-anxiety-about-lapsset-fueled-lack-information>.
66. Eliza Johannes, Leo Zulu & Ezekiel Kalipeni, "Oil Discovery in Turkana County, Kenya: A Source of Conflict or Development?," *African Geographical Review* 34, no. 2 (2014), doi: 10.1080/19376812.2014.884466.
67. PIC 2014, 36.
68. Kennedy Senelwa, "Building of Railway Terminal Delayed as Firm Loses Crucial License," *The East African*, February 13, 2016, <http://www.theeastafrican.co.ke/news/Building-of-SGR-terminal-delayed-as-firm-loses-crucial-licence/2558-3075342-f5ngca/index.html>.
69. In Tsavo, the "Man Eaters Lodge" offers a reminder that human conflict was present even when the colonial railway was built: a number of mostly Indian workers were killed by two male lions during the construction. However, the old railway had less of an impact on wildlife corridors than the new SGR project with its elevated dam.
70. BD Reporter, "Talks to Extend Standard Gauge Railway to Naivasha Begin," *Business Daily*, May 26, 2015, <http://www.businessdailyafrica.com/China-set-to-extend-Nairobi-Naivasha-railway/-/539546/2730512/-/pml8a3/-/index.html>.
71. Interview with Mr. John Mruttu, Governor of the Taita Taveta County, Mwatate, August 7, 2015.
72. Kurgat Marindany, "Chinese 'Crooked SGR Surveyors' Harass Farmers," *Star*, March 30, 2016, http://www.the-star.co.ke/news/2016/03/30/chinese-crooked-sgr-surveyors-harass-farmers_c1321437.
73. A. Sanghi & D. Johnson, "Deal or No Deal."
74. Lilian Ochieng, "Kenya Hunts for New Railway Line Operator," *Daily Nation*, March 20, 2016, 41.
75. Interview with the Chinese manager from CRBC, Emali, Kenya, August 7, 2015.
76. Lucie Morangi, "Rail Project an Engine of Learning."
77. Ibid.
78. Interview with Mr. John Mruttu, Governor of the Taita Taveta County, Mwatate, August 7, 2015.
79. China Road and Bridge Corporation, The Social Responsibility Report 2015 on Mombasa-Nairobi SGR Project.
80. Ibid.
81. "Railway Engineers to Train in China," *Daily Nation*, March 24, 2016, 11; "China Grants Kenya Sh1bn for Training of Railway Engineers," *Business Daily*, March 22, 2017, <http://www.businessdailyafrica.com/magazines/China-grants-Kenya-training-railway-engineers/1248928-3859652-tovlxez/index.html>.
82. Interview with Kevit Desai, Chairman of RMPCC, Nairobi, Jan. 1, 2016.

83. D. Bach, “Régimes politiques, pratiques systémiques et dynamiques.”

AUTHOR BIOS

UWE WISSENBACH:

Dr. Uwe Wissenbach has carried out doctoral research at the University of Duisburg and works for the European Union's European External Action Service.

YUAN WANG:

Yuan Wang is currently a MSc candidate at Oxford University. She holds a Master of Public Policy from the Harvard Kennedy School, and has previously worked in China and Kenya.

ALSO FROM SAIS-CARI

POLICY BRIEFS:

The United States and China in Africa: What does the Data Say?

Policy Brief 18/2017, Janet Eom, et al.

Creating a Market for Skills Transfer: A Case Study of AVIC International

Policy Brief 17/2017, Irene Yuan Sun and Lin Qi

Local Politics Meets Chinese Engineers: A Study of the Chinese-Built Standard Gauge Railway Project in Kenya

Policy Brief 16/2016, Uwe Wissenbach and Yuan Wang

WORKING PAPERS:

Diffusing Chinese Rice Technology in Rural Tanzania: Lessons from the Dakawa Agro-technology Demonstration Center

Working Paper 12/2017, Hezron Makundi

China and Uranium: Comparative Possibilities for Agency in Statecraft in Niger and Namibia

Working Paper 11/2017, Peter Volberding and Jason Warner

We are not so Different: A Comparative Study of Employment Relations at Chinese and American Firms in Kenya

Working Paper 10/2017, Zander Rounds and Hongxiang Huang

View the complete list of SAIS-CARI publications: www.sais-cari.org/publications



ABOUT THE SAIS CHINA-AFRICA RESEARCH INITIATIVE

Launched in 2014, the SAIS China-Africa Research Initiative (SAIS-CARI) is based at the Johns Hopkins University School of Advanced International Studies in Washington D.C. SAIS-CARI was set up to promote evidence-based understanding of the relations between China and African countries through high quality data collection, field research, conferences, and collaboration. Our mission is to promote research, conduct evidence-based analysis, foster collaboration, and train future leaders to better understand the economic and political dimensions of China- Africa relations and their implications for human security and global development. Please visit the [SAIS-CARI website](http://www.sais-cari.org) for more information on our work.

SAIS China-Africa Research Initiative
1717 Massachusetts Avenue NW, Suite 733
Washington, DC 20036
www.sais-cari.org
Email: sais-cari@jhu.edu



Support for this working paper series was provided by a grant from Carnegie Corporation of New York. Carnegie Corporation of New York is a philanthropic foundation created by Andrew Carnegie in 1911 to do “real and permanent good in this world.”



JOHNS HOPKINS
SCHOOL of ADVANCED
INTERNATIONAL STUDIES

© 2017 SAIS-CARI. All rights reserved. Opinions expressed are the responsibility of the individual authors and not of the China-Africa Research Initiative at the School of Advanced International Studies, Johns Hopkins University.