China’s infrastructural engagement in Kenya

A summary of China’s megaprojects in Kenya

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Kenya is the largest economy in East Africa, a big regional transport and technology hub, as well as owning the largest port in East Africa, the port of Mombasa. Many international players therefore have an interest in partnering with Kenya. Ever since its independence from Britain in 1963, alongside partners in the West like the EU and USA, Kenya has also worked together with partners like India, Russia, UAE and China. While partners like the EU mainly focus on projects of humanitarian aid and the implementation of democracy, the Chinese-Kenyan relationship is primarily focused on economic and infrastructural cooperation. Therefore, China has financed several “megaprojects”, on which the following article will focus.
China’s Belt and Road Initiative (BRI) in Kenya

„Where the wind changes some build walls and others windmills. “
- Chinese Proverb –

In 2013, the Chinese government adopted the Belt and Road Initiative (BRI), a global infrastructure development strategy that aims to invest in more than 150 countries and international organizations and increase their global leadership role. In the Chinese context, BRI is understood as an inclusive, flexible project that is supposed to be a major component of their global rise. Regarding China, the inclusiveness is therefore divided into three components:

1. a community of common interest

2. respect for the development paths of different countries

3. openness to all countries and international/regional organizations

Even though the goal is to fight poverty and inequality in the world, some significant problems have appeared in the past. A study conducted in 2021 found that 35% of the BRI infrastructure project portfolio has encountered major implementation problems—such as corruption scandals, labor violations, environmental hazards, and public protests. However, Beijing started operating all over the world, including countries on the African continent and is now one of their key investors. Next to growing economic ties, Chinese firms dominate in infrastructure and construction projects. In 2020, nearly one-third of the infrastructure projects in Africa worth at least 50 million USD were built by Chinese companies and 46 out of 54 African states had signed BRI related memoranda of understanding (MoUs) or cooperation agreements with China. Only one year later, 2021, China funded 10.6% of the construction projects in Africa. Although China’s building share dropped from 31.4% in 2020 to 27.1% in 2021, the country remained the largest builder on the continent and still plays a significant role in infrastructure projects on the continent. Furthermore, specifically in the East African market China is the biggest builder making up 50% of the construction projects in the region.

3 ibid.
6 ibid.
9 ibid.
10 ibid. p. 9.
Today there are more than 10,000 Chinese-owned firms operating on the African continent. Ever since former President Mwai Kibaki launched the "Kenya Vision 2030", a development blueprint that aims to transform Kenya into a middle income country and increase overall quality of living by improving the infrastructure in 2008, China has aligned its BRI strategy and implemented large-scale infrastructure projects. Even though Kenya and China's relations include many fields like civil society, military cooperation, education and cultural programs, the most significant are economic and infrastructural cooperation's. Next to South Africa and Egypt, Kenya was the third African country to join the BRI. Ever since the signing of the BRI by Kenyan President Uhuru Kenyatta in May 2017, Chinese companies have both financed and built massive infrastructure projects across Kenya, which will be described in more detail below.

The Thika Super-Highway

The Thika Superhighway is a critical road infrastructure project in Kenya, providing improved transport links between the capital city of Nairobi and the surrounding region. The project was funded and built by the Chinese government and has had a significant impact on the economy and society of Kenya. The 50-km Nairobi–Thika superhighway, described by Kenya's President Mwai Kibaki as a source of "national pride" during its launch on November 9, covers an area that lies within the Nairobi Metropolitan and Central Province, including large sections of the City and Thika district. The road traverses Kasarani, Githurai, Ruiru, Juja and ends at the Thika River Bridge in Thika district. The total population living along the road is approximately 1 million. The Chinese government has played a significant role in the development of the Thika Super-Highway, providing funding and technical support for the project. They also helped to build the infrastructure necessary to support the road, including bridges and toll plazas, as well as Chinese companies setting up operations in the surrounding region, providing employment opportunities and boosting economic growth.

The Thika Superhighway has had a positive impact on the economy of Kenya, making it easier for businesses to transport goods and services and boosting economic growth. The improved transport links have also made it easier for people to access employment opportunities, leading to increased income and reduced poverty. Furthermore, it has created employment opportunities during the construction phase, further boosting the local economy. Another positive aspect of the Thika Super-Highway is the impact on the social well-being of communities in the surrounding region. The improved transport links make it easier for people to access healthcare and education services, as well as social amenities such as shopping centres and entertainment venues. The project has also reduced travel times.

making it easier for people to spend time with their families and participate in community activities. But while most of the developments seem to be positive for businesses, the expansion of Thika Road has brought with it a negative and less-talked-about problem: Services in many areas along the route are seriously overstretched because their expansion has not been commensurate with the area's population growth.16

**The Standard Gauge Railway (SGR)**

To achieve the goals of the “Agenda 2063”17 an upgraded transportation infrastructure was necessary for competitiveness. Therefore, the Standard Gauge Railway (SGR) is one of the pioneering BRI initiatives of China in East Africa.18 The original idea was part of the Northern Corridor Initiative which was supposed to link Mombasa to the landlocked countries of the Great Lakes Region, provide high capacity and cost effective transport19 as well as replace the old colonial metro gauge railway system.20 Therefore, the railway was the country's biggest infrastructure investment since its independence in 1963.21 The single-track Standard Gauge Railway between Mombasa and Nairobi has a route length of around 480 km and a total length of 609 km. SGR runs through the counties of Mombasa, Kilifi, Kwale, Taita-Taveta, Makueni, Kajiado, Machakos, and Nairobi. Furthermore it was designed to support an axle load of 25 tonnes and projected to transport22 million tonnes of freight annually at top speeds of 100km/hr for freight trains and 120km/hr for passenger trains.23 Compared to USD 900 for freight containers by road it only costs US 500 to convey freight containers through SGR cargo from Mombasa to Nairobi.24 Therefore the SGR reduced cargo transportation costs between Mombasa port and the rest of the East African Region. Because of the large amount of costs in January 2012 Kenya Railways Corporation (KRC) requested financing from China’s Exim Bank to build the SGR. Before granting the loan as well as to comply with the 2007 Guidelines, the China Exim Bank conducted an Environmental and Social Impact Assessment (ESIA) and checked on the potential hazards like pollution, land acquisition problems and forced resettlement.24

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17 Agenda 2063 is a strategic concept for the socio-economic transformation of the African continent by 2063. The agenda was proposed at the 21st Assembly of the African Union on May 26, 2013 and in contrast to many development plans for Africa, the approach comes from African countries.


23 ibid.

After getting the results, they approved the funding. Despite public protests about potential environmental risks of the SRG, the groundbreaking took place on December 12, 2014.\textsuperscript{25} Funded 90\% by the Exim Bank of China and 10\% by the Kenyan government,\textsuperscript{26} the railway was partly operated by the Chinese contractor AfriStar, which is owned by the China Road and Bridge Corporation (CRBC). In 2015 China pledged the extension of the SGR construction project from Nairobi to Rift Valley and received another 1.5 billion USD loan from China.\textsuperscript{27} The first segment, between Mombasa and Nairobi, opened passenger rail service in June 2017, and freight rail service in January 2018. In May 2022 the railway operations and maintenance were fully handed over to the Kenya Railways Cooperation.\textsuperscript{28} In 2019 the SGR transported 4,500 passengers and about 800 cargo containers per day between Mombasa and Nairobi.\textsuperscript{29} Ever since its inception data from Afristar shows that the SGR has transported more than 7.7 million passengers.\textsuperscript{30}

The construction of the SGR has had some positive effects. It brought economic benefits for the Kenyan government as well as local communities. First of all, the SGR provides reliable, fast, and efficient transportation. Compared to bus transportation the SGR reduces travel time by half. Furthermore, it has an average of 99.1\% occupancy rate.\textsuperscript{31} According to the CRBC, the SGR project had a total of 21,858 employees, including 2,000 Chinese management and technical personnel as well as 19,858 local employees\textsuperscript{32} and in total, the SGR project has so far created over 38,000 jobs.\textsuperscript{33} It has also improved efficiency of freight transport by shortening journey time between Mombasa and Nairobi and by reducing freight cost by about 79\%.\textsuperscript{34} The SGR has also helped to reduce carbon emissions and reduced the number of heavy goods. According to the Kenya Truckers Association and the Ministry of Transport over 1300 heavy haulage trucks are off the road.\textsuperscript{35} However the SGR has also been criticized for economic viability, cost, debt sustainability, corruption, opaque contracting and financing arrangements. The SGR is one of the most expensive infrastructural investments that Kenya's government has invested in recent times and has increased Kenya's external debt significantly. The operation between Nairobi to Mombasa costs around 10 million USD to run every month, which makes it one of the most expensive infrastructure projects in the

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  \item ibid.
  \item ibid.
  \item ibid.
  \item ibid p. 469.
country.\textsuperscript{36} Besides, in the first year of its operation, the SGR incurred a loss of about 100 million USD.\textsuperscript{37} There are disputes over wages, land compensation, supply contracts and environmental impacts and there have been disagreements within and between the local communities, the local authorities, and the Chinese contractors.\textsuperscript{38} The potential inability of Kenya to pay back China may also lead to a lower debt ranking by donor agencies, thereby worsening Kenya’s credit ranking at the international level.\textsuperscript{39} Even though the project has stalled for a couple of years now and Kampala recently abandoned its Chinese partners and turned to Turkey to build a new railway line to Kenya\textsuperscript{40}, it’s further planned to connect Kenyan cities to neighbouring countries like South Sudan, Rwanda, Democratic Republic of Congo (DRC), Burundi and Ethiopia.\textsuperscript{41}

The Lamu Port-South Sudan-Ethiopia Transport (LAPSSET)

The Lamu Port South Sudan Ethiopia Transport (LAPSSET) project is a critical infrastructure project in East Africa, aimed at improving transport links between Kenya, South Sudan, and Ethiopia. The project is being funded and built by the Chinese government and has the potential to transform the economy and society of the region. LAPSSET is one of 124 flagship projects under Kenya’s Vision 2030. Through its components—the Lamu Port, regional highways and a railway line, oil pipelines, refineries and resort cities in Lamu, Isiolo and Lake Turkana—LAPSSET is expected to generate at least 3% of Kenya’s Gross Domestic Product.\textsuperscript{42} The 200m-wide LAPSSET corridor will link Lamu on Kenya’s coast to Juba, South Sudan, 1,700 km away, with expectations that this corridor will form part of a future equatorial ‘land bridge’ linking eastern and western Africa via Juba, and Bangui in the Central African Republic, to Douala, Cameroon. There are also road links planned to Addis Ababa via Moyale in Kenya. The Chinese government helped to build the infrastructure necessary to support the transport links that will ultimately create innovative sets of roads and many more infrastructural projects. Therefore, it is playing a critical role in the development of the LAPSSET project, providing funding and technical support. The Chinese influence is also evident in the local economy, with Chinese companies setting up operations in the region and providing employment opportunities.\textsuperscript{43}

The LAPSSET project has the potential to significantly boost the economy of the region, making it easier for businesses to transport goods and services and increasing trade. The improved transport links could also make it easier for people to access employment opportunities, leading to increased income and reduced poverty. The project is also expected to boost the local economy. It has the potential to have a positive impact on the social well-being of communities in the region and improve transport links, which will make it easier for people to

\textsuperscript{38} ibid. p. 471.
\textsuperscript{39} ibid.
\textsuperscript{41} ibid.
\textsuperscript{43} ibid.
access healthcare and education services, as well as social amenities such as shopping centres and entertainment venues. Challenges facing LAPSET include concerns over land rights, population displacement and pastoral migration routes. Concerns have increased when communities started complaining about inadequate information and suggested that a steering committee, which would serve as a link between the community and LAPSET, be set up to facilitate dialogue. Another expressed concern is that families displaced by the construction of the Lamu Port are yet to be compensated. It is to be noted that there is a need for the Kenyan government to take into account the potential cumulative effects of LAPSET on local communities instead of only focusing on those who will be directly affected. It also highlighted the situation of marginalised communities, such as the Boni in Lamu, who she said should be assisted to safeguard their land.

The Nairobi Express Way

Regarding Kenya's Vision 2030, former President Uhuru Kenyatta signed several deals with Chinese private investors when he went to visit Beijing in September 2018. One of the first major projects that was implemented was the construction of the Nairobi Expressway. The 27.1-km-long expressway links Mlolongo to the Nairobi-Nakuru highway via the Jomo Kenyatta International Airport (JKIA) and was launched on July 31, 2021. The four-lane dual has 11 toll stations and 54 toll plazas that are equipped with a total of 126 cameras. Ever since the trial operation in May 2022, in the first six months at least 10 million vehicles have passed through the Nairobi Expressway. Reports indicate that the initial cost of the project was estimated at 559 million USD but increased to roughly 750 million USD at the time of completion in May 2022. The project was financed and constructed by the CRBC. Therefore Moja Expressway, a subsidiary of the CRBC, will operate the toll stations of the highway for the next 27 years to recover the costs of its construction. The project was carried out under a public-private partnership, which means that the four- and six-lane dual carriageway, with 10 interchanges along the route, isn't free to use. Instead, drivers must pay a toll ranging from 0.9 to 14.18 USD.

Positive aspects about the Expressway are more than 6,000 directly created jobs, as well as over 200 jobs for subcontractors and hundreds of jobs for local suppliers of building materials such as steel, sand, cement, and ballast. The highway provides greater safety, convenience and connectivity for the transport of goods, services and people. Therefore, one of the biggest benefits is the amount of saved time which also makes it easier to calculate journeys. Travel time to the city from around two hours was shortened to about 20 minutes which makes it a

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45 ibid.
46 ibid.
49 ibid.
very efficient transportation system. Furthermore, the construction contributed to the industrial as well as technical skill capacities of Kenya. The knowledge gained during construction can also be applied in future constructions. Because the Expressway makes traffic on the highway but especially under the highway smoother it reduces pollution and due to the faster locomotion less greenhouse gases are emitted. However, one should also mention that because of the toll costs the highway is not really accessible for everyone. Furthermore, the project caused high costs and the displacement of people. According to Amnesty International Kenya, schools, businesses and 13,000 homes spread across nearly 40 hectares of the Mukuru Kwa Njenga slum have been demolished, clearing land for a link to the Nairobi expressway. In addition, there are high debts to China and building the expressway caused high pollution. Finally, public reviews criticized the Mandarin language on signboards by the Chinese contractor during the operational testing phase.

The Port of Mombasa

The Mombasa Port is a major port located on the Kenyan coast, serving as a key economic hub in East Africa. The port is one of the busiest in Africa, handling a large portion of the region's imports and exports, including containers, vehicles, and bulk cargo. It plays a critical role in the economic development of Kenya and the surrounding region, facilitating trade and providing employment opportunities and has a significant impact on the economy of Kenya and the surrounding region. The port is a major source of employment, providing jobs for thousands of people in the construction, transport, and service industries and also facilitates trade, making it easier for businesses to import and export goods and services, boosting economic growth in the region. Furthermore, the Mombasa Port is a major contributor to the national economy, generating revenue for the government through taxes and fees.

It has a positive effect on the social well-being of communities in the surrounding region, because the port provides employment opportunities, making it easier for people to earn a living and support their families. The improved transport links also make healthcare and education services more accessible, as well as social amenities such as shopping centres and entertainment venues. While the Mombasa Harbour has positive impacts on the economy and society, it also has negative environmental impacts. The operations and the increased shipping traffic lead to air and water pollution, as well as the destruction of natural habitats and the displacement of wildlife. To mitigate these impacts, the government has implemented measures to protect the environment, including the regulation of shipping traffic and the implementation of environmental protection practices at the port. In December 2018, a leaked letter from the Kenyan auditor-general’s office sparked a rumour that Kenya had staked its bustling Mombasa Port as collateral for the Chinese-financed Standard Gauge Railway. New research shows why the collateral rumour is wrong. The former auditor-general, Edward Ouko, was completing the 2017/18 audit of the national ports authority. He warned that the

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57 ibid.
port authority’s assets, of which Mombasa Port is the most valuable, risked being taken over by China Eximbank if Kenya defaulted on the US$3.6 billion railway loans. The Kenyan fears mirrored another tale widely circulated earlier in 2018. In that story, China was said to have “seized” Hambantota Port in Sri Lanka when the island nation had trouble repaying Chinese loans. This “debt trap diplomacy” allegation was later shown to be a myth, but not before it sparked fears about other large Chinese projects. The ports authority is thus the Standard Gauge Railway’s major client, not its collateral. The treasury also pledged that the railway development levy, a 1.5% tax on Kenya’s imports, would support the project.  

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58 ibid.
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