



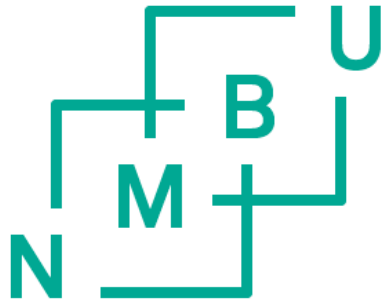
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Sinorail and its contribution to socio-economic development in Kenya

A case study of the Kenyan Standard Gauge
Railway.

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Global Development Studies



**Norwegian University
of Life Sciences**

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Master Thesis



(Photo credit: KRC)

Global Development Studies – Norwegian University of Life Sciences

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Abstract

The standard gauge railway connecting the port city of Mombasa to the capital of Nairobi was finished in 2017. With a 90% financing from the China Export-Import Bank (EXIM Bank), the ambition was to reduce cost, and travel time for passengers and cargo. Initially, the railway was planned to run from the coast, all the way to Uganda. However, high costs have seen the project scale down, and currently ends at Naivasha Dry Port Container Depot just outside of Nairobi. This thesis examines the projects' impact on the socio-economic development of Kenya and highlights some key drivers for Kenya's multi-billion-dollar gamble.

The SGR can be seen in connection to China's 2013 Belt and Road Initiative (BRI) to increase connectivity by land, air, and sea to provide easier and more efficient trade routes in central and south-east Asia, Africa, and Latin America. Ports, railways, airports, and other big infrastructure projects has been constructed in more than 165 countries and is estimated to reach \$2 trillion dollars by the 2030s (Nugent & Lu, 2021). Kenya's development plan Vision 2030 aims to increase its economic growth and battle the country's poverty and governance challenges. Borrowing from China is a key to achieve these goals.

This thesis finds that Kenya might have over-reached in its ambition to modernize, and to close its infrastructure gap. The country's debt to foreign lenders has increased dramatically, forcing its way into budgetary prioritizations. Concerns that the SGR might become a very expensive white elephant is found to be partially justified, but there is hope that Kenya will overcome its fiscal challenges in the years to come.

Key drivers for the SGR are identified as political optics, Chinas expansion through the Belt and Road Initiative, corruption, and regional geopolitical competition.

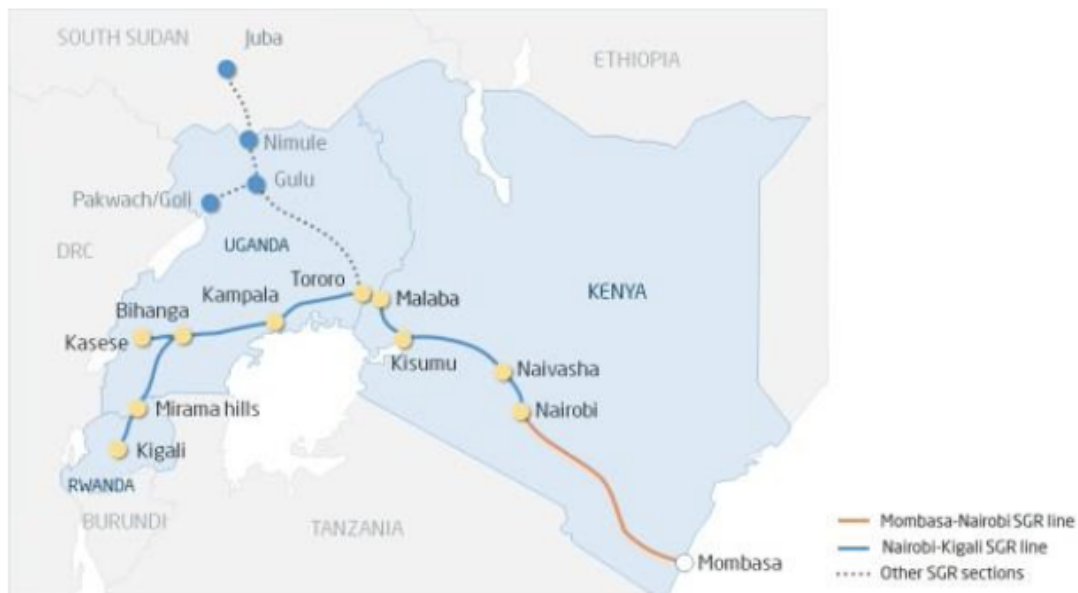
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1. Introduction

In 2017, the new megaproject with the promise of greatly increasing capacity and efficiency of the transportation of goods and people between the port city of Mombasa to the inland capital Nairobi in the Kenyan highlands was inaugurated. The 480 kilometer long Standard Gauge railway (SGR) between the two cities was the first of several phases which has the aim to connect the geopolitically strategic port of Mombasa to the inlands of Kenya and the Great Lakes Region of Uganda, Rwanda, and Burundi. Currently, the railway runs from Mombasa to the outskirts of Nairobi. The great lakes countries are also referred to as the Hinterlands by Kenyans.

Route of the SGR



ORIGINAL PLANNED ROUTE OF THE SGR. MOMBASA-NAIVASHA IS FINISHED BY 2022. CREDIT: IAN TAYLOR, 2019, P. 31

Kenya has a long history with railways. The location of its capital, Nairobi, can largely be attributed to the location of a train station constructed by the British in the beginning of the 20th century, connecting Uganda with the coastal city of Mombasa (Jedwab, Kerby & Moradi). As rail transport has played an important role in Kenya's development in the last century, this thesis seeks to examine how rail contributes to its development in the 21st century.

The new SGR railway has a 90% financing from the China Export-Import Bank (Exim Bank). The China Road and Bridge Corporation (CRBC), a subsidiary to the state-owned China Communications Construction Company (CCCC) was handed the tender to construct and operate it. The Standard Gauge is linked to a modern type of railway, able to carry more cargo, compared to the Metre-Gauge used in old railways. The British built a Metre-gauge railway in the beginning of the 20th century from Mombasa to Uganda, but due to poor management and acute need of maintenance, the decision was made to build a completely new one (Taylor, 2020). The SGR was constructed in just over three years, from December 2014 to May 2017, just in time for the presidential elections later that year, being used as a political win for the re-elected Uhuru Kenyatta (Wang & Wissenbach, 2019). The transportation of passengers and goods commenced in January 2018 by the train company subsidiary of CRBC, Afristar. A transfer of operations to the Kenyan Railway Corporation (KRC) is scheduled in May 2022 (Guthaiga & Bing, 2019; Otele, 2021). Ever since the memorandum of understanding (MoU) between Kenya's Ministry of Transport (MoT) and CRBC in August of 2009, the project has been contentious and haunted by controversy. Some argue that East Africa is in dire need of a modernization of its infrastructure to increase its access to the global markets. Others argue that this project was too expensive, its procurement was untransparent and unsustainable both in terms of operationality and debt management (Taylor, 2020). This thesis seeks to critically analyze the to which extent the SGR is contributing to socio-economic development of Kenya through a systematic review of existing literature, and qualitative interviews with different stakeholders through a field work, conducted for four weeks from February to March 2022. It will also identify some of the key drivers behind the megaproject.

Why infrastructure?

Infrastructure in a country can be regarded as the artery of the economy. Economic powerhouses and its people need ways to communicate and transport goods and services seamlessly from one location to the other, and to have easy access to international markets for imports and exports. Heavily investing in infrastructure is a policy which has been utilized to varying degrees all over the world in the post-industrial history of the global development, with the following rationale:

“Infrastructure development can contribute to growth and development through several channels, such as reducing transaction costs, increasing durability of capital goods, fostering higher trade and investment, expanding demand and supply diversification and achieving economies of scale and scope.” (UNCTAD, 2013).

The Hoover Dam and the interstate network of highways in the United States following the Great Depression in the start of the 20th century is perhaps the clearest example of a policy aimed at providing jobs, while laying the foundation for future economic growth (Little, 2021; National Archives, 2016). Good prioritizations and planning, timely and well dimensioned infrastructure can increase mobility, provide cheaper and more stable energy supply and better access to telecom and financial services. The aim is that this in turn will lower costs of living, increase productivity in production, manufacturing, and industries, integrating the area in question into the market in a more effective manner, and improving access to jobs, wages and products (Yoshino, Hendrietty & Lakhia, 2019).

The success story of the “Asian Tigers”, the economic wonders of the late 1900s; Hong Kong, Taiwan, South Korea and South Singapore, all implemented policies aimed at boosting their economies’ resilience and economic growth, has inspired many developing countries. Land reforms, carefully managed subsidies, market reforms and heavily investing in public services and physical infrastructure for increased economic activity has become an important budgetary post in many countries in Africa, Asia and Latin-America (Augustine & Ozor, 2018). As the Kenyan president Uhuru Kenyatta announced “the big four” focal points of development in the Vision 2030 development policy, some argue this is a direct inspiration from the Asian Tigers (Ayieko, 2020).

[Introduction to the SGR in Kenya](#)

At the time of writing, the Standard Gauge Railway has been constructed from the port of Mombasa to the inland container depot dry port in Naivasha, some 50km north-west of Nairobi. The Mombasa-Nairobi phase (phase 1) costed around 3.8 billion USD. Phase 2A was constructed from 2016 to 2019, at a final cost of 1.5 billion USD. Further phases plan to run the railway all the way to the border of Uganda (Construction Review Online 2021; Ndi, 2018). Funding on this later stage has been controversial, something we will get back to later. It was estimated at the time that building a Standard Gauge Railway would lower the cost of transport and clearing the congested roads of Nairobi and other hubs drastically. Original

estimates indicated that the new railway would be able to transport nearly all of Mombasa's container freight at the time (20+ tonnes), at a lower cost and faster rate than the existing metre-gauge railway and trucks (Ndi, 2018). Trucks did at the time before the SGR transport 95% of cargo heading from Mombasa port and caused both rapid wear and tear of the roads, as well as congestion (The Economist, 2016). As we'll get more into in the analysis section of this thesis, the passenger numbers were satisfying up until the global pandemic, and had an average occupancy rate of 90% according to Yifeng and Ong'yo (n.d.). But the alleged 20 million tons of freight announced to be transported within a matter of years seem increasingly unlikely (Ndi, 2019). The shift from road to rail, cost management and government policies are also points of great contention, as we will discuss in greater detail later.

As the rationale of any infrastructure project is to promote economic growth, trade and facilitate a competitive business environment, the Kenyan authorities are attempting to boost its economy, and to attract more foreign direct investments (FDI) to obtain its key ambitions in the country's development plan "Vision 2030". Becoming a "... newly industrializing, middle-income country providing high quality of life to all its citizens by 2030 in a clean and secure environment" (Vision 2030, n.d.). As a key part of the East African Railway Masterplan, to connect the countries of the East African Community (EAC) by rail, Kenya's ambition is to be transporting goods from the hinterland countries of Kenya (The Democratic Republic of the Congo, Rwanda, Burundi and Uganda) to its Mombasa port on the coast of the Indian Ocean. However, the vast and expensive project has run into an array of difficulties, especially surrounding financial sustainability. Until feasibility reports are delivered, the import-export bank of China (Exim Bank) will not lend Kenya more money, thus delaying the construction of the SGR in Uganda and Rwanda (SOURCE). If Kenya cannot provide a financially viable way to construct the remainder of the railway from Naivasha to Malaba, the whole project risks to become one of history's largest white elephants, as an important part of the budgeting and prospect of future profits were to transport goods to and from the Hinterlands, or the Great Lakes Region (The Economist, 2016; Ndi, 2018; Yoeli, 2021).

It's not uncommon for large infrastructure projects often go beyond projected budgeting and timeframes. The new Elisabeth Line in London was supposed to open in December in 2018 at a cost of 14.8 billion GBP, but ended up costing 18.9 billion GBP, and will not open until June 2022 (Jones, 2022). The 800km high speed rail connecting the California cities of San

Francisco and Los Angeles was first proposed at 40 billion USD back in 2008. Now, it is estimated that the total cost will be more than 100 billion USD (Obando, 2022). For Kenya, it is argued that the issue might be more precarious, as debts are stacking up, putting a strain on the relatively modest national budget, compared to the countries mentioned above. Like many developing countries, Kenya needs multiple improvements and investments to facilitate its socio-economic development. It needs to increase its productivity in order to fund social programs such as education and health services, and its infrastructure is far from adequate to provide its companies and economic powerhouses any comparative advantages. A report by two World Bank representatives for the Africa Infrastructure Country Diagnostic (AICD) from 2011 (Briceno-Garmendia & Shkaratan, 2011) indicated that the GDP of Kenya would benefit from a 3 percent point increase annually in its GDP, if its “infrastructure gap” was addressed. Mirroring this report, the Kenya Revenue Authority quotes these numbers in its rationale for infrastructure spending:

“Kenya faces a huge infrastructure gap which constrains both growth and development. It is estimated that the country is likely to improve its per capita growth rate by three (3) percentage points if there is sustained investment to reduce the infrastructure gap” (The National Treasury and Planning, 2021, p.10).

To argue that making transport of goods, services, and people more effective, cost-efficient, and reliably would benefit the country’s economic growth is hardly controversial. Economic reforms and cross-border collaboration such as the European Economic Area, Schengen, Association of Southeast Asian Nations (ASEAN) and Southern Africa Customs Union (SACU) are just a few examples in which cross-border trade and transportation is a mutual benefit to all parties involved. To which extent, and how this should be done however, is a more interesting question. This thesis wishes to examine how large-scale infrastructure projects impacts the socio-economic development of Kenya by looking into, and debating the Standard Gauge Railway project, and what consequences it has had, and possibly will have for the country. Drawing on the theories in Foreign Direct Investments and infrastructure as a tool to boost economic growth, this paper will address concerns on why the theoretically feasible and profitable project has failed to meet its premise in the face of real-world conditions. It will then discuss to which extent the project can accomplish the goal of increasing the socio-economic growth and development – which is the overall goal of Kenya’s Vision 2030 (Vision 2030, n.d.).

To discuss and provide insight into which extent is the SGR facilitating socio-economic development in Kenya, it is important to obtain a clear and objective definition of what socio-economic development is. We will split the concept into its three parts: Social is referring to the quality of life of the citizens or population of a certain area. This often refers to measurable, objective metrics such as education, income, life expectancy and access to health services and human rights. The latter might such as security, access to a fair justice system, the absence of discriminatory barriers based on gender, ethnicity, and disability.

Economic development is centered on monetary values – is the railway able to provide macroeconomic growth, as well as increased income for the citizens of Kenya. Kenya is a country with substantial challenges regarding the distribution of wealth. According to Oxfam does 8300 people (0.1% of the Kenyan population) own more wealth than the 99.9% remaining (Oxfam, 2021). According to Henley & Partners' Africa Wealth Report 2022, there is 8500-dollar millionaires in the country, only short of South Africa, Egypt and Nigeria (2022). Ranking only eighth on the list of GDP per capita, it is clear that while Kenya has a sizable economy compared to its East African counterparts, most of the wealth fails to trickle down to most people, reducing poverty and marginalization. One way of addressing the issue of inequality is by having distributary policies in place, governing the private wealth and income, which leads us to the final part of the concept: Development.

Defining development is difficult, and there is an array of different metrics and opinions on the topic, ranging from purely focusing on economic growth, to the number of people living below the internationally agreed-upon extreme poverty line of 1.5 USD per day. Anyone below this line is considered living in extreme poverty. In this thesis, we're going to define development as a positive trend in social or economic metrics. As state-governed mega-projects such as the SGR leads to a monopolization of certain industries, as we will get into, it puts more pressure on a governance system plagued by corruption and inefficiency, thus despite possibly being able to increase the volume of cargo and people, it also needs to ensure the distribution of income and wealth to its citizens.

Summing up the three parts of the concept socio-economic development, we will define it as "A positive development of social and economic conditions for the citizens of Kenya".

2. Background – Literature and Theory

Currently, Kenya is a country of a little more than 50 million people (World Bank, n.d.a). It is, like many of its neighboring countries experiencing an astonishing population growth, doubling its population since the mid 1990s, according to the United Nations Department of Economic Social affairs' world population prospect. The population is expected to double again, reaching 100 million people by 2060 (UN, 2019). In contrast to many of its neighbors, Kenya has a relatively diverse economy, with the service sector contributing 53.5%, agriculture 23% and industry 17.4% (O'Neill, 2022). According to the Kenya National Bureau of statistics, the gross domestic product (GDP) is currently at 92,8 billion US dollars (USD) (KNBS, 2021), making it the biggest economy in the East African Community (EAC). EAC is a regional intergovernmental organization consisting of Kenya, Uganda, Rwanda, Burundi, South Sudan and Tanzania. On March 29th 2022, the Democratic Republic of the Congo was officially admitted, making the EAC home to an estimated 300 million people, covering 4,8 million square kilometers, and with a combined GDP of 240 billion USD (EAC, n.d.).

To put these numbers into perspective, the geographical size of EAC exceeds that of the European Union, its population is just shy of that of the United States of America, and its economy is similar to that of Finland and Egypt (Worldometers, 2017; 2022; World Bank, n.d.b). The EAC collective GDP per capita does however only translate to a mere \$800, placing it among the bottom 20 countries in the world.

Kenya's economy reflects more than 1/3 of the GDP of the EAC, and its GDP per capita of \$1800 makes it the most dominant economy in the region. The country is situated along the eastern coast of Africa, bordering Somalia, South Sudan and Ethiopia to the North, Uganda and Lake Victoria to the west, and Tanzania to the south. In the last few centuries, it has, like most of its African counterparts been colonized by different empires. The Ottoman Empire and the Portuguese both established colonies along the coast because of its strategic geographical location, before the British founded the East African Protectorate in 1895 (Embassy of Kenya in Japan, n.d.). During this time, from From 1896-1901, the Uganda Railway was constructed for the British to "unify all their colonies Northern, Eastern and Southern Africa" (Jedwab, Kerby & Moradi, 2015). The rationale of the railway was to open Uganda to trade, and to ease transportation of troops and resources to Uganda through Kenya. This would strengthen the economic viability its colonies, and ease access to the vast

resources of the Hinterlands.. The Hinterlands in the Kenyan context is Uganda, Rwanda, Burundi, South Sudan and the Democratic Republic of the Congo.

To build the Uganda Railway, more famously known as the “ludicrous express”, the British relied on some 30.000 Indians, building the railway in treacherous terrain where mountains, wildlife, insects and disease would cost more than 2000 lives by the time the railway reached banks of Lake Victoria. (Gunston, 2004). For many years, this railway transported tons of goods back and forth from Mombasa to Nairobi, and further inland to the hinterland countries. As the years went by however, the productivity, efficiency and reliability of the aging railway eventually deteriorated. The 1960s and 70s, the railway saw a decline in productivity due to mismanagement and lack of maintenance. By the early 2000s, the old metre-gauge Uganda rail only ran one passenger train a few times a week, at an average speed of only 20-30km/h, making a trip from Mombasa to Nairobi a long and inconvenient journey (Taylor, 2020). Road networks were also being constructed, competing against the railway line (Jedwab, Kerby & Moradi, 2015).

2.1. Kenya’s infrastructure

Up until approximately 10 years ago, Kenya’s infrastructure gap had become more and more prominent (Briceno-Garmendia & Shkaratan, 2011). To mitigate this, the Kenyan administration decided to start the process of reinvigorate its road and rail network, making it a key point in the country’s Vision 2030. The development plan was launched in 2008 by Mwai Kibaki, then president of the Republic of Kenya (Vision 2030, n.d.). Vision 2030 was continued by current president Uhuru Kenyatta, and serves as Kenya’s “long-term development blueprint” (Vision 2030, n.d.a). It aims to make Kenya a globally competitive country with a good quality of life with three fundamental pillars: Economic, Social, Political. It wants to move the country “...up the economic value chain” (Vision 2030, n.d.b), by obtaining infrastructure and services in world class, “investing in the people of Kenya” (Vision 2030, n.d.b.), through “a democratic political system that is issue based, people-centered, results oriented and accountable to the public” (Vision 2030, n.d.b) and that “reflects the aspirations and expectations of its people” (Vision 2030, n.d.b).

The SGR was the biggest, most expensive project Kenya had ever done, but alongside it, numerous other projects has also been launched, including the LAPSSET (Lamu Port South

Sudan Ethiopia Transport) corridor, aiming to link the newly constructed port in Lamu, on the border with Somalia, to Ethiopia and the oil riches of South Sudan. There is also anticipation as to whether the northern region of Turkana might have oil reserves as well – providing an export potential in Kenya’s otherwise scarcity of natural resources. The first berth of Lamu port has already been constructed, while plans are in development, with the aim to construct both pipelines, roads and railways. This would supplement the Mombasa-Malaba corridor (current SGR) with an additional link to the inlands of Africa. Mombasa port also has the disadvantage of being surrounded by reefs, it is quite shallow, and ships has to navigate a rather narrow straight in order to get access to the port – making the port inaccessible for the largest ships. Currently, these ships would go to the deep water port of Dar es Salam, but Lamu aims to be a competitor for transit cargo and a deep-water port for both Kenya, the Great Lakes Countries (Burundi, Rwanda, Uganda), South Sudan, DRC and Ethiopia, and to compete with Sudan and Djibouti ports (AfDB, 2020; Miriri, 2021). In order to finance the ambitious infrastructure projects that Kenya has attracted large amounts of foreign capital through Foreign Direct Investment (FDI).

2.2. Foreign Direct Investment (FDI)

A large portion of large infrastructure projects in developing countries are funded by foreign actors. Multilateral institutions such as the World Bank, the International Monetary Fund (IMF) and the African Development Bank (AfDB), provide bilateral development assistance categorized as ODA (Official Development Assistance). To be qualified as ODA, it needs to be provided with a low interest rate, and to contain a grant element (OECD, n.d.a).

Commercial loans in contrast, are loans through foreign companies or banks.

When commercial loans are given to invest in development projects, it is often categorized as FDI. Foreign Direct Investment can be described as “... a category of cross-border investment in which an investor resident in one economy establishes a lasting interest in and a significant degree of influence over an enterprise resident in another economy.” (OECD, n.d.b). It is regarded as a key instrument to promote international integration, cross border cooperation, economic growth and promoting better access to expertise, technology, and international markets. What’s special about foreign direct investment is the long-term commitment from one nation to another, and they are often regarded as a possibility to facilitate real and substantial revenue-generating services, which can create spill-over effects, generating increasing employment, increase competitiveness and over time, increase

productivity (Denisia, 2011). FDI is seen both as a result, and as a perpetuator of globalization. It has increased from about 10% of the Gross Domestic Product (GDP) of developed countries, to 40% in 2013 (Cohn, 2016, p.362).

After the second world war, and as a part of the rebuilding of Europe, Multinational Corporations (MNC)s and the United States invested, provided loans, and donated large quantities of capital in order to facilitate and speed up economic activity and productivity of Europe (Cohn, 2016; Denisia, 2011; Nayak & Choudury, 2014). As the world is becoming increasingly more globalized, mega-projects has seen a sharp increase in prevalence and cost. Electricity generating assets like the Itaipu dam in Brazil with a final price tag of \$19 billion and the \$22.5 bn Chinese Three Gorges dam, or the recent \$5bn Grand Ethiopian Renaissance Dam, airports like the \$35 billion Al Maktoum in Dubai or \$12 billion Istanbul airport, or rail projects like the \$22 billion channel tunnel, or the SGRs of Ethiopia and Kenya at around \$3 billion are all examples of so-called megaprojects (projects surpassing \$1 billion) (Mack, 2019; Cobalt, 2019; Shaban, 2017; Flyvbjerg, 2014). The cost, the geographical spread and their size are also "... constantly growing ever larger in a long historical trend with no end in sight" (Flyvbjerg, 2014, p. 4).

2.3. Mega-projects

Common for infrastructure projects in the mega-category, meaning projects with a total cost above \$1 billion, is that they are so large that they can fundamentally impact a country's economy, flow of goods and services, access to international trade, and impact potentially millions of people.

Unlike conventional infrastructure projects which only fit into the pre-existing structure of society, mega-projects often have the possibility to fundamentally change the structure entirely. Since the early 2000s, these megaprojects have increased exponentially in prevalence, with a great example being Chinese infrastructure in the period from 2004 to 2008. In this period, the Chinese built more infrastructure than it did in the entire century before. In the three years from 2005-2008, China built as many railways as Europe did in the previous 20 years. Although Europe did see a large expansion of high-speed rail in for example Germany, France, and Italy at the time (Flyvbjerg, 2014, pp. 4-6). Because megaprojects are fundamentally different than conventional projects due to their size, cost, and requirements in technology and expertise, it also comes with fundamentally unique needs

of management, both from feasibility studies, contractors, and governments. There are countless examples of megaprojects being mismanaged, especially in the initial planning and budgeting, as well as forecasted incomes and profitability. The Channel tunnel connecting the United Kingdom with continental Europe through a sub-sea rail-tunnel from the British town of Folkstone to the French coastal city of Calais was initially budgeted to cost \$5.5 billion (Veditz, 1993), with Eurotunnel marketing to investors that a 10% increase in cost would be a maximum. Eventually, the projects final cost was 80% above budget in construction costs. Meanwhile, the forecasted profitability was equally optimistic, with an actual revenue about half of what was projected. This has resulted in the Channel Tunnel being un-viable – meaning it is not self-sustaining, requiring subsidies to maintain its continuous operation. According to Ricard Anguera, who did a post-economic evaluation of the project, the British economy would have been better off if the Channel tunnel had never been built (2006).

Globally, 90% of all mega-projects experience budget overruns, and an overrun of more than 50% is common. Rail projects does on overage overrun its budgets by 44,7%, and the demand and consequent revenue are equally overestimated by 55% compared to real world conditions. This is a trend that does not seem to improve over time, nor is it constrained to geographical locations. A project might be technologically and physically successful, but cost-analysis's and profitability predictions overwhelmingly overestimate income, and underestimates costs (Flybjerg, 2014; Ansar et. al 2014). If a successful megaproject is defined as a project which is on budget, on time, within forecasted revenues, then Bent Flybjerg, professor at Said Business School at the university of Oxford, argues that because only one in ten mega-projects are on time, one in ten are in budget, and one in ten are as profitable as forecasted, then only one in a thousand mega-projects can be referred to as successful, naming this phenomena “the iron law of megaprojects” (Flybjerg, 2014, p. 11.). Siemiatycki names the underestimation of costs of megaprojects as optimism biases, and suggests that a combination of socio-psychological and political economic forces can help describe the phenomena (2008).

2.2.1. The four sublimes and the megaproject paradox

As an explanatory theory, Flybjerg draws out the four sublimes of megaprojects attempt to explain the desire to increasingly fund and construct megaprojects: The technological, political, economic, and aesthetical sublimes. Firstly, engineers have an inherent motivation

to push technological boundaries, such as constructing the fastest, most effective, tallest, longest or biggest project – wishing to accomplish the technological sublime. Equally, politicians and authorities have inherent interests in having flagship projects to showcase their political strength, power and capabilities as leaders. Cutting the ribbon of a megaproject can be seen as a personal accomplishment of any president, and the public attention that a technological and engineering masterpiece brings can amount to significant political capital, thereby there is motivation for the political sublime. In many developing countries, railways, ports and highways are visible, awe-inspiring and impacts the everyday life of a lot of people. The economic sublime is slightly different, in that megaprojects attract vast amounts of resources, especially in its construction phase. Demands in concrete, petroproducts, expertise, manpower and logistics boosts supporting industries and a temporary sharp increase in demands for employment, both directly on-site during construction, and in secondary industries both domestically, regionally and internationally. Labor unions and business people desire such projects as they are a huge opportunity for a large group of stakeholders, from land-owners to banks and carpenters, and everyone in between.

Lastly, the aesthetical sublime is a desire for something to appear nice, developed, modern and pleasing. There is a number of different megaprojects around the world that does not make economic sense. The Golden Gate Bridge could at the time have been made in a far cheaper way, the Burj Kalifa, currently the tallest building in the world, did not have to be as tall as it is, the Sydney Opera House, the Malaysian Forest City and the NEON futuristic city of Saudi Arabia are all megaprojects that are aesthetical sublime, and can partially be explain by being good-looking and having a good appearance.

The four sublimes mentioned above serve as one way to explain why megaprojects keep increasing in popularity, despite overwhelmingly exceeding budgetary constraints, rarely end up providing the forecasted revenue and is often delayed well beyond initial timeframes. If done right however, the potential of megaprojects are always significant, and could potentially lead to substantial economic growth, sustained increases in employment, lowering import and production costs and could lower environmental footprints. This in turn could have secondary repercussions throughout the society in question (Flybjerg, 2014). One often overlooked reason why such endeavors so often fail to meet expectations, is the failure to account for “black swan” events – natural events that are hard to predict. An example of this could be a global pandemic, price fluctuations in resources, wars, and extreme climate events.

Because they are in their very nature impossible to predict, they are rarely accounted for and managers “... treating projects as if they exist in a deterministic, Newtonian world of cause, effect and control” (Flybjerg, 2014, p.8). Megaprojects are in principle a billion-dollar gamble. The bigger the project, the greater number of variables, and the bigger the consequences. Flybjerg identified back in 2003 what he refers to as the “megaproject paradox”.

Large and expensive projects have never been in more popular demand. Meanwhile, based on an overwhelming amount of results and data gathered, most megaprojects are underwhelming in their achievements, both in demand and in revenue. This is what is referred to as the megaproject paradox. He argues that megaprojects are constructed with the “breax-fix model” (Flybjerg, 2014, p.12). Projects usually break quite soon after the beginning of construction, both in terms of budgeted cost and time. It therefore needs to be fixed. Unlike the United Kingdom and the Channel-tunnel mentioned earlier, developing countries does not have the economic strength to subsidize failed or broken infrastructure projects. They are to a greater extent reliant on the gamble of megaprojects to pay off due to three reasons: They’re on average using a larger proportion of their GDP to fund such megaprojects, compared to developed countries, they have tighter budgets that would be subject to painful social prioritizations, were a project to dramatically overrun its budgeted costs, and finally they tend to finance megaprojects through borrowing. By financing megaprojects through loans, a model frequently used by the Chinese Belt and Road Initiative, the fiscal policy of receiving countries risks running out of control with interest rates and defaulting on debt repayments – ultimately causing inflation, devaluation of the Kenyan Shilling, and possibly loss of assets. In respect to the Kenyan SGR, many of my informants were quick to express concerns regarding the SGR becoming a white elephant, due to high initial costs, high operational costs, and modest revenues.

2.2.2. White Elephants

White elephants are development assistance efforts and investments, which has either not been finished, not been viable, or did not have the practical or financial sustainability to benefit the people and actors that it was supposed to benefit. It can be defined as: “... something whose cost of upkeep is not in line with usefulness or value” (Liberto, 2021). It is often exemplified with deteriorated and abandoned buildings, projects or an area being worse

off than before the development project. Fishing boats in Kerela, India and a fish freezing facility in Turkana, Kenya, are two examples of white elephants. In Kerela, modern fishing boats were provided in the end of the 1950s to make fishing more efficient, increasing the income of local fishermen, benefiting the wider community. However, this led to the waters in the vicinity of Kerela to suffer from overfishing, making not only those with new fishing boats to see a decrease in income, but more so for those who never received this development assistance. The boats with more advanced equipment also eventually failed, and with a lack of spare parts and mechanical expertise, the boats were abandoned. As for Lake Turkana, Kenya, a fish freezer facility was constructed to help local fishermen store fish for sales to markets – increasing the income and local development. The facility was however quickly discovered to be too expensive to run, and the entire project came to a collapse within a short period of time. These were both examples from Norwegian development assistance efforts in the late 1950s, but they are unfortunately still in the back of people's minds today (NRK, 2010). As we will come back to in the analysis section of this thesis, some are afraid that the Kenyan SGR might just become a white elephant, if project and financial management is not strictly controlled. There are already examples elsewhere in the world that borrowing from China to construct megaprojects can have severe consequences for fiscal stability and local development.

Megaprojects are arguably one of the greatest examples of 21st century capitalist development, with a backdrop in trickle-down economics and spill-over effects. This is rooted in liberalist economic theory, where if the market is given the opportunity to freely look for profitable investments and value production, it will benefit all actors involved. Ricardo's comparative advantage theory, where it is in everyone's best interest that countries produce what they are best at, is an economic school of thought which has dominated much of the western world in the post-industrial era. China has increasingly leaned towards a liberal economic theory of development ever since it liberalized its markets and gradually opened its economy up to the international through a series of reforms during the Deng Xiaoping era of the 1970s. What a large proportion of large infrastructure projects in developing economies the last 15 years have in common, is that it is either financed or constructed, or both, by Chinese banks and corporations.

2.3. China

In 2013, Chinese officials launched what has been known as the new belt and road initiative (BRI). The initiative is based on expanding China's sphere of influence through investing billions of USD in infrastructure countries in strategic geographical areas to create and facilitate a new silk road, over land, and by sea. It has five major objectives: "Policy coordination, Infrastructure connectivity, unimpeded trade, financial integration and connecting people" (EBRD, n.d.). From 2013 and onwards, thousands of projects have been constructed in primarily Asia and Africa, ranging from energy production to transportation networks to ports and whole financial districts (Ibold, n.d.).

Some see this as an opportunity for developing countries to modernize and expand their economy, and in turn elevating poverty and marginalization through industrialization, construction, international trade, and mobility. Others worry that the vastness of some of the projects might do more harm than good, concerning the environment, displacement, long-term viability, and financial sustainability.

As the largest bilateral lender in Africa, Chinese funding largely goes towards hard infrastructure, unlike western actors, which prefer smaller-scale project, or projects regarding civil society or softer infrastructure. Rather than following a more traditional way of providing development assistance, such as Official Development Assistance (ODA), China invests billions of dollars in large projects, or "turnkeys". These loans usually have a grace period but are at market interest rates. (Lynch, Andersen & Zhu, 2020; Malik et. al. 2021, Acker & Brautigam, 2021).

Kenya is one of the countries in Africa that has received the most Chinese funding in the last twenty years, only surpassed by Angola, Africa has received in total 154 billion USD from Chinese loan commitment, of which \$9.3 billion has gone to Kenya. Both the China Africa Research institute in collaboration with Boston University, and Aid Data at William & Mary institute has compiled huge data sets of more than 13 thousand Chinese projects in 165 countries, linking the rising superpower with markets across the globe (Malik et. al. 2021; BU-GDPC, 2022). The overall ambition of the Chinese BRI is to ease market access, develop

new markets and ensure that China is supplied with sufficient resources into its rapidly growing economy.

The increasing presence of China in developing countries has been evident for decades, but the more recent, large scale infrastructure projects are not only very visible and affects a lot of people. What stands out with infrastructure such as roads and railways, is that it puts a larger responsibility on national governments to use their legislative frameworks to ensure that the projects can lead to a socio-economic development for the country, and not become a white elephant. The following example, is one that is often being referred to when voicing concerns surrounding significant investments in the BRI from China to developing countries, with relatively weak financial and government institutions

2.3.1. The Sri Lanka affair

As mentioned, in the past decade, China has ramped up its investments to hundreds of billions of dollars in ports, roads, rail, airports and other infrastructure projects all over the world, to a variety of different purposes, and results. Many developing countries sees this as an opportunity, as China is more centered around economic growth, rather than social reforms, education, public services and human rights. Many developing countries, apart from relatively small economies, in many instances suffer from weak institutions, poor financial management and fiscal policy and corruption. This mix of poor management and megaprojects even developed countries struggle to properly manage can in some instances have detrimental results, as seen in Sri Lanka.

Sri Lanka is one of the countries in which China has been significantly investing in. New highways, ports, a new financial center in Colombo, as well as an airport, has all been constructed, is under construction, or is planned – most of which financed with loans from Chinese banks. Being a large receiver of Chinese loans even before the BRI was officially launched, Sri Lanka serves as an example to what could happen to other countries in the future. According to Wijaysiri & Seneratne, Sri Lanka had received more than \$8 billion in FDI from China, mostly related to infrastructure development by 2018 (2018). Wignaraja, Panditaratne, Kannangara & Hundlani argues that Sri Lanka accumulated \$12.1 billion in infrastructure investments from China in the period between 2006 and 2019 (2020). Coal plants, the Colombo Financial City, an expansion of the existing Colombo Port, a new port in

Hambantota, as well as a new airport in the region of Hambantota were in large financed by Chinese banks such as the China Export Import Bank (Wijaysiri & Senaratne, 2018).

In 2018, China was handed the port of Hambantota in a 99-year lease agreement with the government of Sri Lanka, in an agreement to relief the increasing foreign debt that Sri Lanka had accumulated in the last decade. In return, Sri Lanka would have a \$1.1 billion in write-off on its debts (Shultz, 2017; Wijaysiri & Seneratne, 2018) China, which sees Hambantota as a geopolitically strategically location due to its vital shipping lane of petroleum products. China imports its majority of petroleum from the middle east, and close to all of this passes close to the coastal waters off the southern part of Sri Lanka. Having the opportunity to regulate this port, and using it as a transit hub for its vital imports can be argued to be in great political interests of China. This, and other examples, are what critics use as examples when accusing China's 2013 BRI as Debt Diplomacy, or Debt-Trap Diplomacy. Using economic and political strength and power, China can force countries into subordination using non-disclosure agreements and threats of sanctions in an increasingly intertwined economic relation that many of the BRI countries around the world see as a direct result of investments in infrastructure. Both Kenya and Sri Lanka saw an exponential growth in its imports from China in the years following infrastructure investments, and from 2016, China surpassed India in becoming Sri Lankas primary market for imports (Wijaysiri & Seneratne. 2018).

Today, Sri Lanka is suffering its worst economic crisis since independence. Access to, and prices of basic needs such as fuel and food as sky-rocketed, and public discontent towards the governments has led to country-wide protests and curfews (Vaidyanathan, 2022).The political and economic crisis in Sri Lanka is a result of both many things, including the Covid-19 pandemic, the global rise of prices on oil and food products, as well as widespread corruption. It is however within reason to argue that pressure on the Sri Lankan economy would not have been as bad, had it not been for its large appetite for megaprojects through the BRI.

Whether China is actively expressing power and subordination through debt diplomacy or not is extensively discussed among scholars. Many developing countries have just emerged from the debt-crisis of the 80s and 90s, as a result of financial crisis and the World Bank and IMF's structural adjustment programs (SAP), but are again increasingly under a new debt burden with loans from Chinese banks. With a lack of economic rationale and feasibility in many BRI projects around the world, some speculate that China is actively forcing developing

countries into a situation where they require debt-relief assistance (Green, 2010). The Trump Administration used the Hambantota port as an example of China's use of debt as a strategic weapon, and Mike Pence coined the term "debt-trap diplomacy" (Mike Pence in Brautigam & Rithmire, 2021). Scholars who disagree on this perspective, highlight that in Sri Lanka's case, several feasibility studies were performed by Danish and Canadian actors, and that Sri Lankan authorities were the ones who took the primary decisions regarding which kind of port Hambantota was to become, and for which purposes, in large disregarding feasibility studies. Secondly, the port is hardly a great deal for China at \$1.1 billion, as its geographic location with a narrow straight to enter the port would hardly be of military value to the Chinese. Thirdly, Brautigam & Rithmire argue that China learned from the Hambantota incident and has adjusted their project management to increasingly account for local political considerations (2021). Another example of fiscal difficulties and controversies after BRI infrastructure deals with China can be found in Kenya's neighboring country; Uganda.

2.3.2. The Uganda controversy

Nicknamed the world's most expensive highway, the 50km dual carriageway connects the two biggest cities of Uganda, at a cost of just shy of \$500 million. 73,5% of the funding comes from Chinese Exim Bank. It was built in five years and finished on time in 2017. Shortly after, a \$200 million deal between Exim Bank and Uganda to refurbish and upgrade Entebbe international airport; the only international airport in the country was signed. Rumors quickly started to spread that China would seize the airport, due to the inability of the government of Uganda to service its debt. The contracts were also, like in many infrastructure projects, shrouded in secrecy. According to the East African, they obtained insight into the contract saying: "the borrower (Uganda) shall keep the documents, terms, conditions of the agreement strictly confidential and must seek permission for disclosure" (Naturinda, 2022). Aiddata, one of the leading experts on global Belt and Road projects, gained access to loan agreement surrounding the airport and the potential collateral agreement. They found no evidence that the airport, which can be seen as physical or illiquid asset, in any shape or form was put up as a collateral in the loans (Parks, Malik & Wooley, 2022). Rather, it did show the opening of an escrow account: An escrow account is a liquid asset, which can be seized by the lender, were Uganda to default on its loan. They also argue that because the Government of Uganda is able to renegotiate terms regarding the loan and payments, the debt-diplomacy paradigm, illustrating Beijing as a predatory lender for its own gains, is

flawed. They do however state that: “We instead find that Beijing is a shrewd negotiator who is willing to impose intrusive conditions upon sovereign borrowers to protect its own balance sheet” (Parks, Malik & Wooley, 2022).

As we will come back to later in this thesis, perhaps the largest controversy surrounding BRI investments in Kenya and the Standard Gauge Railway, is the non-disclosure agreements between China Road and Bridge Corporation (CRBC), Exim Bank, Kenya Railways and the Kenyan authorities, and the fear that Mombasa Port is put up as a collateral in the loans for the SGR. Some of the informants I talked to during my fieldwork in Kenya in February and March of 2022 were worried that Mombasa would see a similar fate to the Sri Lankan Hambantota port, were Kenya to default on its payments now that the grace period has expired. As we will discuss in great details in the analysis section of this thesis, there is some reason to be concerned, but others argue that this will not be an issue.

3. Methods

3.1. Rationale of thesis

This project aims to contribute to the discussion around infrastructure as a tool to boost and facilitate socio-economic development. The Kenyan Standard Gauge railway is a great example, because there is no shortage of controversy. Partially inspired this project by the “assessment report of the socio-economic impact of the operationalization of the Mombasa-Nairobi Standard Gauge Railway on Port City Mombasa” to the county government of Mombasa from Dr. Ogollah, Rucha, Aroni and Ndua at the University of Nairobi (2019), this project seeks to critically analyze the different sides of the story and lift the perspective from a local perspective to a national and international perspective. Two researchers out of Huazhong University of Science and Technology in Wuhan, China, have also produced an interesting article on the topic, assessing the impact that the SGR has had in Kenya (Githaiga & Bing, 2019). They did however not include primary data, and by producing research from a Chinese university, it is argued that my thesis will strengthen some of their arguments, as well as providing new and additional insights to the topic, with a less biased origin. Finally, Oscar Otele of the University of Nairobi published an article on the SGR in October 2021, simultaneous to the planning of this thesis and field work. Although some conclusion in his article and this master thesis will coincide, they also differ in some respects, as he, similarly

to Githaiga & Bing, only utilized secondary sources as the baseline for his arguments. My thesis on the other hand, seeks to address topics such as cost and corruption, relations with China and the wider belt and road initiative, as well as regional geopolitics, with the aims to supplement existing research with a critical analysis of the SGR and its justification in a socio-economic framework. As part of the research for this thesis, the author went on a four-week field work to speak physically interview different stakeholders in Nairobi and Mombasa. By doing so, it is attempted to illuminate new perspectives on the matter, while also highlighting the worry that many Kenyans have around the Standard Gauge Railway and the high Chinese presence in the country.

Standard Gauge Railways, and other controversial megaprojects have been constructed all around the world. The reason for choosing Kenya and the SGR was twofold. The SGR constitutes a large proportion of the country's annual GDP, and it is therefore arguably more important for Kenya that this project serves its intended purposes, compared to other countries, where the projects would constitute a far lower proportion of annual budgets. Secondly, Kenya has a long history of railways. Nairobi was in large built as a direct result of the British Railway, and many of the towns and cities around Kenya are all linked to the more than one hundred-year-old railway connecting the Victoria Lakes region to the Indian ocean, serving as key market and trade hubs in the country (Jedwab, Kerby & Moradi)

Since its very proposal, the Standard Gauge railway has been controversial. The total cost for the SGR all the way from Mombasa to Malaba on the Kenya-Uganda border was estimated to be around 8 billion USD. At the time in 2014, this would amount to 15% of Kenya's GDP, or 73% of government revenue (Ndi, 2018). As the flagship, and one of the largest achievements of President Uhuru Kenyatta's reign, it is a political symbol of wealth, development and achievement in a country that still struggles with large social challenges. It ranks around 0.6 on the Human Development Index,

Non-disclosure agreements hinder journalists and others from getting insight the contracts signed between the Chinese banks and construction firms, and the Kenyan government. The lack of transparency is part of the reason why the costs of the projects vary significantly. The Nairobi-Mombasa section is estimated to cost between 3 and 3.8 billion USD. Whether Mombasa Port is set as collateral in the SGR-loan between the Government of Kenya and Exim Bank is also a contested topic with strong opinions both for and against the reality of it

being a possibility. The Hambantota port in Sri Lanka and Entebbe international airport in Uganda are both well-known cases among Kenyans, and combined with a leaked document from the Kenyan Attorney General has fueled the conspiracy despite the Kenyan authorities denying the fact on numerous occasions.

Finally, corruption is a significant burden on Kenyan development. According to transparency international's corruption perceptions index, Kenya only ranks 128 out of 180 countries. Inefficiency, cost of public projects, land disputes, bribery, nepotism and biased public expenditures were all topics my informants driving causes for poverty and lack of progress in the socio-economic development in Kenya.

3.2. Research Question

These topics will be discussed in depth in the analysis chapter of this project, comparing statements made by primary sources and existing research and articles on both infrastructure as a tool to facilitate development, and the Standard Gauge railway specifically. When planning this project, suitable research question needed to be formulated. A research question is the framework of an entire scientific study. In social sciences, a research question seeks to explain “how certain selected phenomena in society should be perceived or understood” (Grønmo, 2020, ch 2). Inspired by the report from Mombasa, it was an overall ambition to be able to contribute to the knowledge on how this affects the people of Kenya. The research design has been inductive, meaning that as data got collected and analyzed, the research question was tweaked to obtain the most prolific answers and discussions. In qualitative research, this is not uncommon, and it allows for the research to be adjusted based on real world conditions. Additionally, because the BRI is so large, in so many countries, it was found to be interesting to examine some of the foundational reasons as to why Kenya would want a Chinese financed and constructed railway in the first place. This project therefore would be segmented into three main parts. Literature review, field work, critical analysis. These three parts would together answer the following research question:

To which extent has the SGR contributed to socio-economic development for Kenya, and what are the key drivers behind this gamble?

“The gamble” refers to the large costs that a megaproject such as the SGR entails. As described in the theory section of this thesis, megaprojects often overrun its budgets, and equally overestimate their forecasted revenues. It is therefore be argued that constructing a megaproject in a developing country is a gamble.

3.3. Literature review

To answer this question in the most insightful way possible, a comprehensive literature review was undertaken. In this regard, comprehensive refers to a review of available literature on the topic, and the review was guided by the research question (Grønmo, 2020, ch 5). The quality of the literature used always needs to be considered in a careful assessment. Background checks on authors and/or publisher, peer reviews, and whether literature has been published are all signs looked for, to ensure their objectivity and validity. Multiple studies on the Kenyan SGR was found, as well as research on the Belt and Road Initiative, theories on megaprojects and the impact that infrastructure might have on development. A theoretical saturation point for the literature review was reached once no more literature on the SGR specifically could be found. As three and a half case studies on the Kenyan SGR was reviewed (one of them included a master thesis of mixed quality), it was evident that questions remains unanswered. In a rapidly changing landscape, some of the articles were already a few years old. Curiosity was therefore linked to how the situation is now, in 2021/2022? And why does the Kenyan government seem so eager to continue this megaproject, despite it being increasingly evident that its financial sustainability is questionable at best?

A field work was therefore determined to be the most effective way to find additional value in the knowledge on this topic.

3.4. Planning the field work

This project has been approved by the Norwegian center for research data (NSD). The clearance can be found in Appendix 1. After saturating the project with existing literature, it was time to plan the field work. The field work was considered to add value to this project for three main reasons. Seeing the megaproject firsthand would give an impression that wouldn't otherwise be possible through pictures and literature, secondly, by living among Kenyans, interacting with people on a daily basis, would lay the foundation for understanding the

general public opinion on the topic. Finally, meeting informants in person would make the sampling easier, as it was quickly evident that getting in touch with informants per mail from abroad proved inefficient. Additionally, addressing the biases of the author of this paper was deemed necessary. As the author originates from Norway, the media landscape is often portraying China from a rather negative perspective. That this can contribute to unconscious biases, perhaps overly critical to Chinas BRI investments in developing countries was therefore considered to be possible. Ethnography is a scientific method which has the goal of immersing itself with its participants, as an observer (Bryman 2016, p. 423). Additional to selected qualitative interviews, A field work would help addressing this issue by more thoroughly understanding where public resistance and opinions originate. By learning about Kenyans perspective on the topic, information might be accessed, and arguably a more nuanced discussion can be undertaken.

Before departure, I had been introduced to three locally employed staff members of the Norwegian Embassy by a former diplomat, now staff member of NORAD – the Norwegian Agency for Development Cooperation, and was quickly invited to the embassy for a set of interviews on the topics of development in Kenya and the SGR. From there, the snow-ball sampling method would be used to get further informants. A self-selection and snow-ball sampling are method of strategic sampling used in qualitative research. By reaching out to different stakeholders considered to be relevant, providing information about the research (appendix 2), the sample of interviews is determined by who volunteers to contribute to the research. Due to the challenging nature of obtaining informants, as further described below, using the network and assistance of existing informants to access new actors and informants was important. The process of asking informants to provide new informants continues until the sample size is considered to be saturating the research questions, and providing adequate information and perspective. Especial care was taken into ensuring a variety of stakeholders in the interviews. Politicians, national civil society representatives, private entrepreneurs, diplomatic staff and labor unions might have differing views on the topics in question, and were therefore self-selected on the basis of the snowball results.

First, I will present my primary data through an ethnographic description of the SGR, before explaining more in detail some of the interviews. Finally, the findings from the qualitative interviews will be analysed and discussed drawing on existing literature and data on the topic. The four-week long fieldwork was conducted in Nairobi and Mombasa, Kenya, in the period

February 13th to March 14th 2022. As far as field works go, this was a relatively short period of time, but it is argued that it was just enough to interview a satisfactory amount of informants to saturate the analysis.

3.5. The field work

While the Norwegian Prime Minister Jonas Gahr Støre announced that all covid-related restrictions in Norway were to be lifted, I boarded my flight heading to Kenya's capital Nairobi.

Arriving in the neighborhood of Parklands in the early morning of February the 13th, I was greeted with number of security forces. After the terror attacks in recent years, as well as crime being a notable challenge in some parts of Kenya, security is taken seriously at all hotels, transport hubs, shops, and restaurants. According to the CEO of KK security, more than 300.000 people work in the security industry in Kenya (Mulipi, 2014).

The proportion of Nairobians which are direct descendants of Indians as direct cause of British policies to build the Uganda Railway more than a hundred years ago was also striking. As a result of tens of thousands of workers being moved from India to work on the railway line more than one hundred years ago, it has had a real impact on Nairobi's demography.

3.5.1. The experience of the SGR

After a few days, and a few interviews in Nairobi I arrived at the Nairobi Terminus, planning to board the train to Mombasa. The first-class ticket cost about \$30 and had to be booked online. An economy class ticket was \$10. The train station is a massive building, but oddly located in the middle of an industrial area in the outskirts of the city, and the security was incredibly strict. The car had to be searched before entering the parking, then a body search, while two dogs sniffed through the luggage. Then all the luggage had to be scanned through China-Aid x-ray machines before one could walk towards the main building. There, tickets were dispatched from machines, before ID and tickets were checked and a new security check point had to be passed. A metal detector and a body search were passed, and another China-Aid x-ray machine scanned the luggage. I was told by one of the security guards that the primary reason for this, was the unreliability of the x-ray machines.

Finally, we passed some inoperable ticket scanning machines before we were allowed to enter the platform and walk to the train. At every entrance, an employee of the KRC would check the ticket, and we were allowed to enter. As of March 2022, KRC was in charge of security and staffing at the station, while Afristar, the Chinese subsidiary of CRBC operated the trains (Lutta, 2022).

Apparently completely full, the train departed on time, and by a screen in every carriage, it travelled towards Mombasa around 80-120km/h. Through beautiful landscapes of eastern Kenya, the train passed over large concrete viaducts and bridges. It ran for most of the time parallel both to the old MGR and the A109 single carriage way. According to an interview made with a Kenyan politician, it is made this way for two reasons: Environmental civil society organizations demanded that the rail was to traverse the national parks with a minimal impact to the wildlife. Therefore, the railway is constructed with high bridges and viaducts. There are also not a single railway-crossing along the route, so that incidents with trains and other vehicles does not become an issue. The railway is in large only a single rail, however. Quite noticeably, on several occasions on the way to Mombasa, the train had to stop in order to let cargo and passenger trains in the opposite direction through.

As this was the express route, the train did not stop at any stations along the route, and eventually, twenty minutes late, the train arrived at the Mombasa Terminus after the having traversed half the country, and descended 1700 meters from the Kenyan highlands into the humid conditions of the coastline in just over five hours. Two express trains connect the two cities daily in each direction, and one additional intercity train is operated daily, in each direction. The inter-city train stops at the seven stations in between the two terminuses, and according to Kenya Railways, makes the journey in six hours (KRC, n.d.).

The Mombasa Terminus is just as astonishing as the one in Nairobi, brightly illuminated, covering multiple floors, and packed with cafés, shops and modern architecture. Outside however, it was scarcely illuminated, and hundreds of taxi drivers wanting to transport the newly arrived passengers into the city. Mombasa Terminus is situated some 20 minutes' drive west of the city, and like the Nairobi Terminus, seemingly in the middle of nowhere. According to satellite imagery, and what could be seen from the train window, all the stations along the Nairobi-Mombasa line is placed rather remotely, dozens of kilometers from any

city center. As the political informant later could inform me, he argued that it was because of the cost of land-acquisition.

3.5.2. The coast

Mombasa is very different compared to Nairobi in many aspects. The temperature is higher, mosques are everywhere, the architecture has a certain Arabic style and a lot of the buildings along Moi avenue in the city center looked relatively abandoned. The Boda Boda's of Nairobi are replaced by three-wheeled Tuk-Tuks, and the maritime industry, and tourism are, or were the main employers. After speaking to HAKI Africa and Kenya Transport Association, the whole experience of Mombasa was one of melancholy. One taxi driver told me he had previously worked in the pharmaceuticals industry but lost his job due to Covid. He now drives for the taxi-application Bolt, making only a couple of hundred shillings a day (only a few USD). Sellers at the beach in Diani, perhaps Kenya's hotspot when it comes to tourism, were desperate. Most hotels were empty, and their livelihoods were drastically reduced due to three consecutive crises: The terror attacks from the radical Islamist group of Al-Shabab, Covid-19, and then the conflict in Ukraine. One crisis seemed to take off where the previous had started. Profit margins in most of these small- to medium sized enterprises (SMEs) are not equipped to survive sustained drop in sales, and most people that I spoke to seemed to agree on that while prices on basic necessities such as cooking gas, oil and fuel have gone up, reliable incomes has dropped. In Mombasa as a whole, many people cited the SGR as the fourth crisis, due to the trucking industry and its indirect networks of services had drastically been reduced. The total impression of Mombasa and its neighboring towns was depressing. In terms of socio-economic development, as we'll discuss in the final part of this thesis, in a lot of ways, socio-economic development is heading in the wrong direction in this part of the country, and it has been for more than half a decade.

3.6. The interviews

Starting off with three contacts in international development organizations, one contact in a local NGO and three contacts at the Norwegian Embassy, the plan was to use the snowball sampling method to secure interviews and conversations with relevant and interesting people

– both as knowledge on the topic was further explored, and because of the practical reality of being a Norwegian masters-student in Kenya.

The interviews were semi-structured and non-structured. Unstructured interviews are conversations with informants based on topics relevant for the background and expertise of the informant, and allows for a non-structured exchange of perspectives and information (Grønmo, 2020, ch 10). Semi-structured interviews are based on an interview guide (Appendix 3). These are pre-formulated, open-ended questions asked to guide the conversation towards answering key points of interests for the researchers. The attached interview guide is rather superficial, so in the field, additional questions were added, based on the informant in question. Unlike a structured interview however, a semi-structured method allows for a certain degree follow-up questions and anecdotes to saturate the interview based on knowledge and background information appearing in the course of the interview (Bryman, 2016, pp. 465-469).

Rather quickly, it was evident that obtaining respondents on emails would be difficult. Very few people got back after emails, and several government bodies, including the Kenya Railways Corporation (KRC) and the Kenya Maritime Authority (KMA) was difficult to get properly in contact with. Despite conversations back and forth, an interview with KRC never materialized, and no documentation was provided. An informant from the KMA did agree for a short interview per the video on WhatsApp. He promised to send me documentations of what he argued was a profitable operation of the SGR, but after numerous check-ups from me, he never got back to me. Being a master student, only producing a master thesis for the Norwegian University of Life Sciences, did not seem to levy enough importance for people to prioritize it to any noteworthy extent. It is for this reason that snow-ball sampling became the method of choice, and with a little bit of luck, the informants quickly accumulated into a broad portfolio of perspectives.

In total, 16 qualitative interviews were undertaken, and an equal number of randomly selected individuals were asked about their opinions on Chinese infrastructure in the country. It is argued that these informants saturate the topic to a satisfactory extent. The number was not higher due to practical limitations such as access, time and relevance.

The informants included:

- Diplomats
- Locally employed personnel at the Norwegian Embassy
- A representative from Save the Children
- A representative from Sight Savers
- Two private entrepreneurs
- A commercial officer at the KMA
- A high ranking individual from the presidential office of Kenya
- The Chairman of Kenya Transport Association (KTA)
- Two representatives from HAKI Africa in Mombasa
- One Journalist from Business Daily, the largest business news agency in Kenya
- One journalist from the newspaper East African, publishing news stories to the countries in the African Great Lakes Region
- A representative from Mzalendo Watch, an active and respected Kenyan government watchdog
- A private contractor in shipping and maritime technology

The first informants that I had the opportunity to interview, were the already scheduled three locally employed Shamsa Birik, Morris Maina and Margaret Komen at the Royal Norwegian Embassy in Nairobi. Unlike some of the mail-correspondence to Kenyan government offices, these informants were open, not afraid to speak their mind, and eager to share their views and opinions on the topic of development and infrastructure.

As my first interviews of the field work, they provided a valuable insight, as well as loaded opinions on the topic. They were also very helpful in providing additional contacts, both diplomatic, as well as an NGO in Mombasa and shared some interesting secondary literature.

They had all been working with the embassy for a while and they all had international experience with different work, mostly in the civil society. They were all rather negative to the SGR. Shamsa Birik expressed that the loan from China has possibility to fundamentally change the country, due to the sheer amount of financing, arguing that accepting financing from an actor like China is not necessarily a bad idea, but that the way it is being handled by the Kenyan government is what has driven up the cost, making the SGR project so unprofitable.

Most of the interviewees were happy to be identified by full name and position, and it was experienced that they spoke openly and free from restrictions. Press and freedom of speech is relatively free in Kenya, and people rarely get punished for speaking against the government.

In this project, there were three notable exceptions. Three informants did not speak freely, or they wanted to be cited anonymously: An anonymous politician close to the president, a commercial officer in the Kenya Maritime Authority (KMA), and a diplomat from a foreign country to Kenya. The latter wanted to be cited anonymously due to diplomatic reasons, to uphold article 41 of the Vienna Convention on Diplomatic Relations: "... have a duty not to interfere in the internal affairs of that State" (United Nations, 1961).

The political source did not want to be recognized. He gave some perspectives from a personal standpoint, not in line with the government, and we both agreed that it would be far more beneficial for this thesis if he could provide some information that were not a part of the government's official narrative, despite that meaning that I could only cite him anonymously.

The informant from Kenya Maritime Authority was happy to be cited with full name and title for most of the interview, but when questions about the Mombasa port as collateral in the SGR loans to China, he quickly changed his tone, was visibly uncomfortable and said "I would get in trouble if I told you". When asked again whether it was okay to cite him by full name after he cut the interview short, he replied that he now wanted to be anonymous

The chairman of Kenya Transport Association Newton Wang'oo and representative from HAKI Africa Harriet Muganda were especially intrigued to contribute to this project. As they had both witnessed first-hand the consequences of the SGR in their local communities in Mombasa county, they were more than happy to share their experiences.

The private entrepreneurs, as well as representatives from the international NGOs were mostly in accordance, and mirrored the majority public opinion: "Kenya has a lot of social issues. Spending billions of dollars on a new railway is not what the country needs right now". As an example, the around \$5 billion dollars that the phase 1 and 2 of the SGR cost, would amount to \$100 dollars to every Kenyan citizen. In a country where 18.8 million people lived below the extreme poverty line of \$1.9 per day in 2021 (Guguyu, 2022) the

public discontent is arguably justified. Especially when the proclaimed profits from the SGR are absent.

Ensuring the anonymity of informants who did not want to be recognized is perhaps the most important ethical consideration in this project. In order to get approval from the Norwegian Center on Research Data, significant measures were taken in order to satisfy requirements on personal data and anonymity. A document describing the project was handed out to respondents, and they were carefully informed about their rights to choose to participate, and what data that could be used about their personal information.

3.7. Qualitative research, reliability, and validity

Qualitative research was the chosen methodology of this project. Unlike quantitative methods, this allows for more detailed interviews with personal opinions, perspectives and exchange of knowledge and experiences. As the goal of this project was to answer as to what extent the railway has contributed to socio-economic development, and explaining some of the drivers behind it, it was quickly concluded that quantitative research using statistical analysis and survey-forms would not adequately tap into informants' perspectives. Secondly, the validity of the information used in the analysis and ultimately the answer to the research question of this thesis needed to be carefully considered. Reliability can be explained as the trustworthiness of data which the research is based upon. If the reliability of the data and information used is reliable, the research is reproducible - meaning others can check the data and reach the same conclusion. Related to reliability is validity. Validity of a conclusion, or an answer, is based on whether the analysis and discussions surrounding a topic is based on a certain amount of integrity (Bryman, 2016, p.41).

Two key points on the topic of reliability and validity needs to be addressed, before we move on to the analysis section of this thesis. A lot of numbers and statistics are derived from Kenyan government institutions. As extensively proven by Jerven (2013), these datasets are often based on guesswork and broad assumptions. Close to 7 million micro-enterprises constitute the informal economy in Kenya. It constitutes a substantial amount to the country's GDP, and according to a report by the Federation of Kenya Employers (FKE), in collaboration with the international labor organization (ILO), 73.3% of the informal enterprises has yet to start their formalization. The consequence is that millions of Kenyans

run small businesses in an unregistered economy, making estimations around macroeconomic robustness of the Kenyan economy is therefore down to a set of assumptions (FKE, 2021).

Second are the non-disclosure agreements with China. No one outside of Exim bank, Kenya railways and the Kenyan government has officially seen the loan-contracts between Kenya and China. This subsequently again leads to a certain amount of guesswork. The Kenyan treasury, as well as Kenyan National Statistical Bureau publishes data on public debt, and it from these sources that total costs from the SGR is derived from. According to research from the Kiel institute, half of the global loans through the Belt and Road Initiative to developing countries are not publicly recorded. It argues that as of 2017, the world owes more than five trillion dollars to China, an estimated 6% of the global GDP – but that a large proportion of these numbers are not publicly available (Horn, Reinhard & Trebish, 2017).

It is therefore important to underline that the presumptions put up in financial sustainability section of the analysis in this thesis, as well as the viability of the SGR are based on data which might not be accurate. All informants in Mombasa seemed to agree that the socio-economic situation is worse than what the macro-economic numbers seem to indicate, which is a small indication that the megaprojects in Kenya might be worse than what is publicly known. Due to non-disclosure and the lack of transparency, this is however only speculation.

After 16 qualitative interviews with people with different positions, perspectives, biases and opinions, they were categorized into central topics surrounding the SGR and the socio-economic development of Kenya. They were categorized using codes. Codes are important because they help structure the findings in a qualitative interview. Codes are keywords expressed, which can be put into a wider category of discussion (Grønmo, 2020, ch 16). The coding and categorizations were done to sort the informants opinions and information into the context of the wider literature and theory of this thesis. Finally, the different categories of findings were critically analyzed and compared to existing literature on the topic, and the result is the following chapter.

4. Analysis

The analysis section of this thesis will sum up existing literature on the SGR project specifically, before it will go through the main topics of contestation and controversy, and they will be discussed using theories and former experiences from BRI projects elsewhere, provide insight into the to which the Standard Gauge Railway has contributed to the socio-economic development of Kenya. Then, an attempt will be made to address the explain some of the drivers behind Kenya's gamble to invest in the SGR.

The informants for this project, interviewed primarily physically, but also by video calls via the messaging service WhatsApp, were all quite eager to talk about the topic of the SGR, and its consequences for the Kenyan economy and its people – i.e. its Socio-economic development. Due to the sheer size of the project both psychically and monetarily, it has been on top of the public discourse in debates and media outlets for years.

Most people, both my qualitatively interviewed informants, and my informal chatter with dozens of locals during my fieldwork, seemed to agree that the government is on an unsustainable spending spree that “our grandchildren will be paying for”. Displaying the contrast between the authorities and the every-day Kenyan, my source in the presidential administration argued quite the opposite; that SGR and Kenyan megaprojects will benefit “our grandchildren” and that “someone had to bite the bullet, and make the decision”. According to him, these megaprojects take time, and they require investments and facilitation now, while their true benefits will only be achieved far into the future.

4.1. The financial sustainability of the SGR

The Cabinet Secretary of Transport and infrastructure James Macharia is quoted in the government run Kenya Broadcasting Channel (KBC) that the SGR is making a profit. He argues that monthly, the “... SGR is making between Kshs. 300 million and Kshs. 500 million in profit”. (Eric Beigon, n.d.). 300-500 million kshs equals 2,5 – 4,3 million USD. Different economists, and numbers from the treasury, argue that this number is inflated. (Ndi, 2018). According to the annual economic survey by the Kenyan National Bureau of Statics of 2022, the SGR has a revenue of 15.2 billion shillings, equivalent to \$130.8 million in 2021 (Wamagu, 2022). With a passenger revenue of close to \$19 million, and a freight revenue of close to \$112 million, the project is not covering the annual costs of operation of

\$155 million, making the project see a net loss of around \$24 million in 2021 (Wanjala, 2022).

In 2011, the African Development Bank had agreed to fund \$39 million to help Kenya reinvigorate its old Metre Gauge Railway (MGR). It was at the time according to feasibility reports a large price gap between refurbishing the old MGRs and constructing new SGRs. Kariuki Kimiti, estimated that \$980 billion would have been sufficient to refurbish the old MGR to modern standards. An additional \$10 million would have been sufficient to invest in enough wagons and locomotives to meet demand. An even lower estimate was made by consultants for the EAC, estimating that \$1.2 billion would have been enough to revitalize the railway systems in Kenya, Uganda and Tanzania. In contrast, they argued that renewing all the railways to SGRs would cost between \$4 and \$29 billion, depending on whether the MGRs were to be upgraded, or completely new railways was to be constructed. A Canadian feasibility study from 2009 similarly concluded that the costs of upgrading the EAC rail network to SGR would require an radical growth in demand, and that the high operational costs would make the projects non-viable (Taylor, 2021, pp.32-34).

When my government official source was asked about what he would have done differently, given that he could build a new railway again, he told me that he would have refurbished the old metre gauge railway (MGR). Estimates suggest this would have cost 30% of the cost to construct a brand-new SGR, and it should have been able carry freight with the same efficiency. He did however uphold his argument that the large revenues of the SGR are yet to be realized. When the SGR is finished, and a seamless rail-network is constructed from the hinterlands to Mombasa, that's when the profits will arise, according to him.

Realizing this ambitious project seems increasingly unlikely, however. As mentioned, an SGR from Mombasa to Uganda would cost in the vicinity of \$8 billion, according to early estimates. In addition, EximBank was in 2018 reluctant to fund the final phase of the SGR, due to financial sustainability. The Naivasha to Uganda phase would cost an additional \$3.6 billion, something which is currently not on offer from the Chinese lender, due to the fear that Kenya would struggle to handle the mounting debt to foreign lenders (Anyanzwa, 2019). Nairobi has therefore decided to refurbish its old MGR between Naivasha and Uganda at a budget of \$350 million. Uganda, which accounts for more than 80% of transit-goods.through

Kenya, argues reloading in at the Naivasha Dry Port would only add cost and be less efficient (Koech, 2022).

Due to Covid-19, and Kenya's increasing debt compared to GDP of 65.7%, the IMF decided to increase its risk assessment of the country from "moderate" to high" in 2020, the IMF increased its perception of risk connected to Kenya's economic stability from "moderate" to "high".

As the grace period of the loans of the SGR are over, the Kenyan government needs to start making payments on its debt to Exim Bank. Despite having received some debt relief from several of its bilateral lenders connected to the Covid-19 pandemic including China, the Kenyan Treasury estimates that the country needed to pay \$832 million on its loans to China in 2021 alone (Munda, 2021). According to Oscar Otele, a lecturer at University of Nairobi, the financing from Exim bank for the Phase 1 Mombasa to Nairobi SGR were two separate loans. One 1.6 billion USD with a timeframe of 20 years, seven years grace period and an interest rate of 2%. The other, a 1.63 billion USD loan with a five-year grace period, and a 10-year timeframe at commercial interest rates (2021, p.5).

The SGR is now in its fifth year of operations, and it has yet to break even on its operational costs. Even though Covid-19 has reduced passenger traffic, and arguably impacted freight transportation, it is still mathematically impossible for the SGR to turn a profit, according to David Ndi, who did calculations on the amount of trains the single railway line could theoretically transport each day (Ndi, 2019). Adding scheduled repayments on the loans for the construction of the railway into the calculations, it is increasingly clear that currently, this is a non-viable project, as described in Flybjerg (2017). The only ones disagreeing with this increasingly solid fact is the politicians surrounding the Kenyatta administration. As my political informant stated, despite the numbers not adding up currently, the project is only in its beginning. With increasing cargo to and from the Hinterlands, the informant was confident that the project would become profitable in only a few years. He also stated that to increase the capacity, plans were being made to make another parallel rail, so that an increased number of trains could make the journey per day. This would, according to him, be far cheaper, as the bulk of extra costs of the rail was land-compensation. An additional parallel rail he argued, would be running on the land already occupied by the SGR, preventing additional compensation measures.

4.2. Land Rights and Compensation

It became evident quite early in the research for this thesis, that the government blamed the land compensation for the high costs of the SGR. A new constitution put in place in 2010 has put a lot of emphasis on land ownership and rights, thus the government had to compensate generously to affected people owning the land on which the SGR were to pass through.

Taylor argues that 30% of the cost of the SGR went to such land compensation (2020, p. 32). Nearly all the informants interviewed during the field work in Kenya in February and March mentioned a rumor that wealthy individuals, and politicians with access to inside information, had bought up land in the years leading up to the SGR, and sold the land to Kenya Railways for a massive profit. My anonymous source in the presidential administration did not deny the allegations I put forward to him, but when confronted with the rumors, he denied that this has been an active policy. He did however suggest that there had been “leaks”, allowing some people to buy land. He followed up by saying that there were multiple possible routes that the SGR could take, and that most people did not know which exact route it was going to take. Therefore, despite there being “leaks”, people would take a huge gamble. When looking at the actual route that the SGR is following, it wouldn't be difficult to guess where the SGR were to go, as it for most of the route from Mombasa to Nairobi runs close, and parallel to the MGR and the highway, done in part due to logistical reasons during the construction. Harriet Mugenda at the human rights organization HAKI Africa said that a lot of the work they do, revolve around solving land disputes. Because of inconsistent and poor national registries, land ownership is a frequent point of contestation.

4.2.1 The 2007 election and the constitution

Kenya is a country in which land disputes has been of particular importance, and infamy. The ethnic conflict rooted in the presidential election of 2007 displayed the worst consequences of a governance system not managing its land rights and distribution in an open and transparent manner. Rooted in historical ethnic boundaries, which were redistributed during the colonial era, the 2007 election between then president Mwai Kibaki and Raila Odinga ended up costing an estimated 1300 people their lives, and a displacement of more than 600.000. Allegations of the general elections from the loosing Raila Odinga led to country-wide violence, and several of the top candidates and their running mates ended up in the international court of human rights (Veit, 2011). Before the elections, there had been lot of conflict between ethnic groups on land ownership, which were shifted along ethnic

boundaries during the colonial era. As a result of the 2007 violence, a new constitution was signed in 2010, which went further in securing ownership and land-rights, rules regulating procurement and tenders, transparency and freedom of press and speech. The goal was to formally solve land-disputes which had been a core contestation in every election since the colonial land-use rights were drawn before the country's independence in 1963. It is these very land rights which the government authorities now lay the blame on when budget overruns and modest revenues are put into question.

4.3. Civil push-back

According to reporters without borders, press freedom is limited, but relative to its neighbors, it isn't too bad in Kenya, placed at number 69 out of 180 countries in the global press freedom index. Tanzania, Uganda and Ethiopia, its closest neighbors, are placed at 123rd, 132nd and 114th respectively. Critique both from the press, and from the civil society related to the SGR, the increasingly close ties to China, and on public spending has been visible. Kenya Transport Association based in Mombasa, has been especially critical to the implementation of the SGR, and a levy which forces importers to ship their cargo by the SGR, instead of using the competing trucks. In an interview with the Chairman of KTA, he said that the SGR has had a massive impact on the livelihood of the 15.000 truckers that are organized in KTA. He continued that they are not fundamentally against the SGR, it can only take so much cargo. What he is against, is the policy enforced by the Kenyan Port Authority to "Monopolize freight transport", and not allowing for importers and exporters to freely choice their mode of transport. The court cases made headlines at the time, and KTA won in both instances (Muyanga, 2019). Still, two years after the court order, there has been no change in the practice at the Mombasa port, according to KTA chairman Newton Wang'oo and HAKI Africa Mombasa representative Harriet Muganda. They also both referred to the impact survey done by the This leads us into the Kenyan governance system, and its role in the management of public services.

4.4. The Kenyan Governance System

Gitungu Wamere, representative of the Government Watchdog Mzalendo watch, has lived in Germany for several years and was eager to share information about the work that they do, and the shortcomings of the Kenyan government. As their primary focus is to keep

government officials accountable, he summed his perspective on the matter of public management up in a few key points

- Unlike in Europe, you rarely see the result of your tax money. People don't have the same relationship to government officials, as they do in developed democracies. Community and ethnicity is far more important
- Even though the democratic system in Kenya provides relatively fair elections, there is little political will to address social issues, once officials get elected into the parliament
- People vote along ethnicity lines, and they vote for faces. Politics doesn't really matter because the public mistrust is so large.
- The SGR is a perfect example of the lack of transparency and neglect of public opinions and contributions.

He also argued that even though freedom of speech is protected by the new constitution, they get threats from government officials at a regular basis.

Mirroring this perspective on public opinions on the government officials, is the anonymous diplomat, a few young private entrepreneurs, as well the journalists Charles Mwaniki and Otiatu Guguyu from The East African and the Business Daily national newspapers. They refer to the Kenyan Harambee system, a system which in Swahili translate to "all pull together", and is a traditional community-based cooperation model, which in basic terms can figuratively be referred to as "You scratch my back I scratch yours". On the community level, the Harambee system is a vital function for many Kenyans, especially where public services are inadequate. The problem occurs however, when the Harambee system, which is even written in Kenya's coat of arms, enters the political sphere. My informants told me stories where political candidates return to their hometowns in rural villages, supporting individuals in need, and in return, gets their political support. They then return to Nairobi, serve their political office in Nairobi, and they don't make themselves known to the communities they just visited, until the next elections. The Harambee system has many names, depending on context and geography. It does however share features and elements of neo-patrimonialism, clientelism, camaraderie and personalism, all elements of what is often used to describe the African state. Wang & Wissenbach argue that the clientelism, i.e. the in-transparent, personal gains of public officials during the planning and construction of the SGR played a vital role in its final cost, as well as the implementation of the whole SGR project (2019). They argue that local elites in client-patron relationships were highly compensated for services and land-

acquisition during the planning and implementation stage, and that the in-transparent nature of procurement and tenders played a vital role in the SGRs mounting costs and optimistic revenue forecasts (2019). Mirroring the statements by the anonymous government official interviewed earlier, as well as Ian Taylor (2021), land acquisition and consequent compensation were a key reason for the SGRs expensive outcome. Perhaps the choice to build the SGR in the first place. Wang & Wissenbach, and the locally employed informants at the Norwegian embassy similarly argued that the importance of ethnicity in the Kenyan society, which in the worst cases result in violence as in the 2007 general elections mentioned above, all helps describe and explain the underlying reasons and foundations for why the political system in Kenya is inefficiencies, corruption and clientelism. Perhaps where the secrecy and in-transparency of the SGR has been most visible, is in the procurement and tender phase of the project.

4.5. The in-transparent elephant in the room

As the financier of the SGR in Kenya, China has a significant presence in the country. It first made its impression into the debt-figures of Kenya in 2012, greatly contributing to Kenya's external debt rising from 3.1 bn USD in 2003, to 35.5 bn USD in 2021 (Kenyan Central Bank, n.d.). Loans from Beijing increased from 554 million USD to 4.2. billion USD during President Kenyatta's first presidential term 2012-2017 (Guguyu, 2022). China is also by far the largest bilateral lender to the country, only recently surpassed by the multilateral International Monetary Fund.

In the years following the introduction of Chinese megaprojects in Kenya, trade between the two countries has increased substantially. In 2014, China became Kenya's main source of imports, and by 2017, Kenya imported goods with a combined value of \$3.37 billion from China, while exporting a mere \$100 million (Githaiga & Bing, 2019). In 2018, Kenya imported goods \$5.197 billion, while exporting \$174 million. Adding to Kenya's overall increasing trade deficit, it is also evident when considering the load factor of the SGR freight figures. On average, for every 7.8 tons of cargo moving inland from Mombasa, only 1.01 tons come back and are exported from Kenya. Ian Taylor argues that the increased market access China has got to export its goods to Kenya and beyond perfectly illustrates the rising rapidly expanding Asian superpower's rationale for investing so significantly in the country's infrastructure (2021, p. 41)

The bilateral agreements between China and Kenya were shrouded in non-disclosure and questionable procurement from the very beginning. The initiation of the project, which officially started with the Kenyan ministry of Transport signing a memorandum of understanding (MoU) with CRBC in 2008, gave CRBC the role of conducting a free feasibility study for the Kenyan SGR. Following the feasibility report, CRBC was awarded the tender for the entire project. Neither the feasibility study, nor the tender award for the project was subject to competitive bidding and transparency, as laid out in the Kenyan constitution of 2010: “when a state organ or any other public entity contracts for goods and services, it shall do so following a system that is fair, equitable, transparent, competitive and cost-effective” (Constitution of Kenya, n.d.). Following the award, Kenya Railways (KRC) requested financing from Exim Bank in January of 2021 (Otele, 2021). The following loan contracts has to date been covered in secrecy despite journalists, such as Otiato Guguyu and Charles Mwaniki has requested insight. A lawsuit by the Law Society of Kenya on the procurement of the feasibility report to CRBC was in a Kenyan court ruled in favor of the government, and despite the recommendation from two parliamentary committees to cancel the tenders, these were all ignored (Otele, 2021).

The most controversial topic of the SGR is not the railway itself however. Speculations that the country’s most important and valuable physical asset has been put up as collateral in the loans to Exim Bank are frequently in national media and was mentioned in nearly all of my interviews.

4.5.1. The Mombasa Port

Following a leaked document from the Auditor general in Kenya to the Kenyan Port Authority in 2013, the fear that Kenya’s most valuable geopolitical asset was put up as a collateral in the loans to Exim Bank spread on social media and was quickly in the public discourse. Considering the 99-year lease of the Sri Lankan Hambantota port, and the accusations of a Chinese take-over of the Entebbe international airport in Uganda, concerns that Mombasa port would be next in the line of China’s debt-trap diplomacy were present to everyone I talked to. In an interview with a representative from the Kenya Maritime Authority, I asked what he could tell me about the port potentially being a collateral, and he responded, “I would get in trouble if I told you”. The interview per WhatsApp had been open and interesting up to that point. Now however, the informant became visibly uncomfortable,

and eventually terminated the conversation. He also terminated his approval to be cited with name and position, he now wanted to be anonymous.

According to the leaked document from the Kenyan auditory general in 2018, the sovereign immunity of Mombasa port was lifted in 2013, as part of an agreement to secure the Exim bank loans in case of default. It also contained clauses where disputes on loan agreements would be resolved by the China International Economic Trade Arbitration Commission – giving Kenya little to now say in potential disputes that may arise, The Auditory General himself refused to comment on the authenticity of the leaked document, sparking further public suspicion and outcry (Taylor, 2021). The authenticity of the agreement has been questioned, and as described in the examples of the Entebbe and Hambantota in chapter 3 of this thesis, this is not a unique issue to Kenya. The controversy led the researcher Deborah Brautigam and a team at the China in African research insitutie to look into the issue. They conclude that the port is indeed not in danger of a “take-over” by China. Rather, the rumor is based on a misinterpretation of the Kenyan Auditory General and media outlets. According to their extensive report, the agreement was rather a set of clauses put in place to secure the agreement were loans to be defaulted, through establishing escrow accounts where income from the Mombasa Port would go directly into managing the outstanding debt (Brautigam, Bhalaki, Deron & Wang, 2022). Before this report was published, rumors were spreading in social media, and both Kenyans and international media outlets suspected that Kenya was in risk of losing its most valuable asset. Eventually, the Kenyan National Treasury released a press statement in 2021, ensuring that the port is indeed safe (Kenyan NTP, 2021).

The specifics of the contents of the leaked document is not up to this thesis to discuss in detail, but it illustrates the wider problem with the China-Kenya contracts. Perhaps the main problem surrounding the controversy is the lack of transparency. Many are therefore encouraged by the May 2022 ruling of a high-court in Mombasa, demanding the full disclosure of the loan agreements between Exim Bank and Kenya Railways (Muyanga, 2022). Whether the stakeholders will follow through, is rather uncertain. Media outlets and researchers have continuously pushed for the disclosure, but confirming what many have suspected, my government official informant close to the president, admitted in our video-interview that the ones pushing for the non-disclosure and lack of transparency is China, not Kenya.

In contrast to those who argue that China is aggressively pushing expensive loans at high interest rates onto weak African states, Wang & Wissenbach rather argue that the SGR was first envisioned by the East African Community as early as 2004, and that the whole region planned to reinvigorate its rail transport network, because of its deteriorating state. This has also materialized, and is why both Uganda, Kenya and Ethiopia all have their own agreements with Chinese investors to build their own Standard Gauge Railways. It is argued that the countries would have been reinvigorated its railways with or without China, and now that all the countries in the region are in the process of constructing SGRs, we can see a regional race to provide the best and quickest service for the hinterland countries, in order to obtain market shares and to strengthen international relations.

4.6. The Scramble for the Hinterlands

About 90% of Ethiopia's imports originate at the port of Djibouti, constituting the primary rationale for their inauguration of their SGR in 2016. At a cost of \$3.4 billion, it stretches from the outskirts of Djibouti city and 756km inland, and up to the Addis Ababa terminus, located at close to 2300 meters above sea level. 70% of its financing is from China's Eximbank, while the rest is a consortium between Ethiopia and Djibouti. Often compared to the Kenyan SGR, some argue that Ethiopia got a better deal, because its railway is electric, Kenya's runs on diesel, Kenya's SGR is 200km shorter. Officials has commented on the comparison between the two SGRs with three counter arguments: The terrain in Kenya is more challenging, environmental concerns required more viaducts and bridges to satisfy civil society demands, and it is argued to have greater capacity per train, compared to the Ethiopian – Djiboutian Railway (Kacungira, 2017; Shaban, 2017). My government official source explained the differences between the two projects, and argued why they cannot be compared, in the same way. He had quite obviously been given this question multiple times before and seemed lightly annoyed by the comparison.

Tanzania has commenced a similar project, with its first phase in testing, and its second phase soon to be completed. In a total of 5 phases, the mega-rail project will cross the entire country from the large deep-water port in Dar es Salam to Lake Victoria and Kigali. Unlike Ethiopia and Kenya, Tanzania has not looked to China for financing, but rather has a portfolio of investors, ranging from Turkey, Portugal, Denmark, Sweden, British Standard Chartered, and attempts are being made to obtain funding from the World Bank (Olingo, 2021). It is argued

that the 1200km long railway will reach speeds of 160km/h, and will be electrically driven once finished (Tanzaniainvest, n.d.).

All three of the megaprojects in East Africa are billion-dollar ventures, and all claim to contribute to revolutionary changes in market access, productivity, and economic growth, and they all coincide with EACs railway master plan to interconnect the region with fast, efficient railway networks (EAC, n.d).

Because Kenya Railways has met delays and having issues financing a SGR connection all the way from Mombasa to Uganda, Rwandan Prime minister has according to Charles Mwaniki hinted that a SGR south of the Victoria lake through Tanzania would be a better option for his country, compared the complicated route through Uganda and Kenya on both MGRs and SGRs. Uganda is equally cautious with its SGR ambitions, as the Ugandan former minister of works and transport argues that they will have to wait for Kenya's SGR to reach the border, before they will construct their own SGR (Taylor, 2021, p.41). Mwaniki, one of my journalist informants, continued with arguing that this might be one of the leading causes as to why Kenyan authorities seem so eager to get going as quickly as possible with its SGR network. Seen from a regional geopolitical perspective, this is in theory a multi-billion-dollar race towards the Hinterlands to secure market share, he argued. According to the Kenyan investigative newspaper Financial Standard, it is paramount for the Kenyan SGR to transit Uganda's goods on its SGR. Using import and export data from the Kenya Bureau of Statistics, the SGR would still be unprofitable if all its imports and exports was transported on the SGR to and from Mombasa port, amounting to 15 million tons a year, to the estimated capacity of 20 million (Taylor, 2021). As the initial budgeting for the whole project was with international imports and exports from the Hinterlands in mind, it can be argued to have become a personal quest for Uhuru Kenyatta to see this project to the finish, to avoid the SGR leaving Kenya only with an aesthetically and technologically sublime railway without any real financial rationale behind it. Can this ultimately benefit the Kenyan people, or is this gamble not paying off?

5. To which extent is the Kenyan SGR contributing to socio-economic development of Kenya?

As this thesis has explored in detail, there is no shortage of points of discussion regarding the Standard Gauge Railway in Kenya. Financial viability is questionable at best, the procurement and tender process was in-transparent and un-democratic, and many are worried that the SGR will never fulfill its goal of freight tonnage and revenues.

5.1. Socioeconomics in Mombasa

The coastal region is especially concerned with the policy that all cargo is to be moved by the SGR, and not through the important truck industry of the Mombasa region. The transport sector constitutes 26% of the county's GDP, and according to calculations, the sector would see a drop of 16.1% if all cargo was to be transported by SGR.

The region has already seen negative impacts in regards to the revenues of truckers and secondary industries such as warehouses, roadside businesses, container storage stations, job losses in the supporting industries such as hotels, shops, mechanics and loaders. Mombasa county also sees an increase in crime prevalence and social impacts, as well as a drop in the county's overall revenue. In 2019, the predictions were already visible, with about half of the estimated drop of 16.1% in the transport sector having materialized (Ogollah, Rucha, Aroni & Ndua, 2019). Both to Oliver Meiner, a private contractor in the Mombasa maritime industry, chairman of Kenya Transport Association KTA Newton Wang'oo and Harriet Muganda at the human rights organization HAKI Africa had read the socio-economic impact report in question. They all argued that the reality of 2022 has been far worse than the forecasts. As no data after 2019 is available at this time, this was difficult to verify, but the dozens of local citizens that I spoke to during my one week stay in Mombasa in March 2022 all described a deteriorating socio-economic situation. Basic foodstuffs such as cooking gas and oil had increased by close to double, while unemployment levels were rising. Attributing all this to the SGR would be unprecise, as Covid-19 has had global impacts on socioeconomics for more than two years, and the war in Ukraine started driving up prices of foodstuffs a couple of weeks before my arrival into Mombasa. On the other hand, it would be reasonable to argue that the SGR has had some negative effect on the regions socioeconomics, due to the private transport-sector being a key industry. The policy to force most freight onto the SGR is also contributing to the worsening for local industries.

5.2. The construction sectors

Other sectors have seen an increase in revenues, directly attributed to the SGR “That includes transferring people and goods faster between Mombasa and Nairobi, cutting environmental pollution and risk, reducing damage to transport infrastructure; and improving safety” (Taylor, 2021, p. 36).

In the beginning of the construction of the railway, CRBC initially intended to import a lot of manufacturing products and resources for the construction from China. After significant advocacy and pressure from the civil society, the Regional Mega Projects Coordination Council (RMPCC), representing local industries in Kenya, did according to Wang & Wissenbach obtain some procurement agreements to supply the construction of the megaproject with cement, pebbles, sand and railway sleepers (2019). According to 2016 statistics from KNBS, the number of formally employed Kenyans in the construction sector grew from 132,900 in 2014 to 148,000 in 2015. In 2016, the number reached 163.000 – an increase of 18,5% in two years. Meanwhile, wages also doubled – largely attributed to the construction of the SGR, and other infrastructure projects (Githaiga & Bing, 2019). By 2015, CRBC had employed more than 10.000 local workers to work on the SGR, primarily in low-skilled positions such as mechanics, carpenters and machine operators. 1000 kenyan had been employed at foreman and middle manager positions. According to Oscar Otele at the university of Nairobi, 38.000 temporary jobs were created in the construction of phase 1 (2021).

5.3. Kenya’s macroeconomics

Despite most of the world seeing a sharp decrease in its GDP due to the Covid-19 pandemic, Kenya was able to maintain positive numbers, albeit by only half a percent from 2019 to 2022 (World Bank, n.d.c). Prior to the pandemic, the country saw a rapid annual rise in GDP by 5%, and a decrease of the proportion of its population living in extreme poverty (below \$1.9 per day) from 45.2 to 34.4% from 2009 to 2019. Largely because of the pandemic, 1.2 million Kenyans fell back below the poverty line in 2020. The recent macro poverty outlook estimate report from the World Bank now argues that close to half a million Kenyans are back above the poverty line, as the pandemic restrictions have lifted (Guguyu, 2022).

It is difficult to give a precise evaluation of the economic contribution, or cost, that the SGR has had for the Kenyan Economy, due to multiple variables such as the Covid-19 pandemic and the war in Ukraine. Financial markets and currencies are fluctuating in relation to global events, and it is next to impossible to accurately conclude that a certain amount is attributed to the SGR. That it has contributed to more uncertainty for the Kenyan economy is however rather likely, due to the mounting debts that the country needs to handle in the coming years.

National budgets and socio-economic development are closely related. If the national budget is to increasingly allocate funds to manage its increasing debt to its foreign lenders, less funding will go towards social services such as fuel subsidies, hospitals, education and agricultural subsidies. The SGR is a very expensive endeavor that does risk becoming a white elephant. As of early 2020, reports estimated that the railway needed to generate \$15 million every month, but it only made \$8.4 (Taylor, 2021, p. 43). Therefore, currently, the SGR is undoubtedly contributing negatively to the national budget. Exacerbating the issue, is that the SGR does not only need to make a profit, it needs to make enough profit to service the billions of dollars in loans to Exim Bank. Additionally, secrecy and non-disclosure agreements make estimates on Kenya's debt difficult for foreign observers.

More tangibly, it is possible to describe the SGRs impact on the socio-economic development in and around Mombasa, with the impact report referred to above forecasting a noticeable drop in the region's most important sector.

According to my sources both in Nairobi and Mombasa, necessities have become more expensive, even before the Ukraine crisis. The expensive imported goods in Nairobi, argued to become cheaper because of the SGR, has yet to materialize. All my informants agreed that prices enrollment fees on universities, cost for treatment at hospitals and other public services has seen a sharp increases in the last few years, and they all lay some blame on the national budget having to relocate more to debt-management. The IMF has now ranked the Kenyan economy as high-risk, making foreign investors more careful when investing in Kenyan enterprises. To sum up, it might seem that the SGR has had limited to no positive contribution to the socio-economic development of Kenya. Rather, it has contributed to more uncertainty, as increasing debt puts pressure on fiscal stability of the Kenyan shilling. The coastal region has seen a negative impact as a direct result of the SGR.

6. The drivers for Kenya's SGR

As extensively described in the analysis section above, the reasons for Kenya to gamble on an expensive new railway are complex and multiple. The Kenyan governance system of corruption and clientelism, the need for modernizing its infrastructure, China's interests, and a geopolitical scramble for the hinterlands can however be attributed much of the blame. Kenya has arguably ended up in an expensive competition with Ethiopia and Tanzania to access the transit-cargo from the hinterlands. By deciding to construct the phase 1 SGR before funding for the entire distance to Uganda was secured, it has put itself in a difficult dilemma. It is unlikely that Kenya's SGR will break even without the transit cargo, but it is not financially viable to construct an SGR all the way to Uganda firmly placing the Kenyan ministry of transport in a catch-22. Transporting cargo by its refurbished MGR from Uganda to Naivasha, and then on from Naivasha to Mombasa by SGR might make Uganda prefer to use road transport, as the competitive advantage of speed and cost of the SGR is lost with time-consuming re-loading.

The locally employed informants at the Norwegian Embassy were overall negative to the project. They did believe that a new, modernized railway system could have had the potential to play an important role in increasing economic activity in the country, but they unanimously agreed that it currently is not, and it does not seem to be able to do so in the future either. Along with most of my other informants, the main reason for the socio-economical short-comings of Kenya comes down to its ineffective governance system. Since independence, political parties have been instruments and tools for personal marketing in a presidential campaign, and nepotism, corruption and inefficiency make every state-run project and institution expensive and slow. According to the chairman of the Ethics and Anti-Corruption commission Chairman in Philip Kinisu, one third of Kenya's state budget is lost to corruption. This amounted to \$6 billion in 2016 (Miriri, 2016). Uhuru Kenyatta himself announced that the country lost \$17 million every day due to corruption (Nganga, 2021). Corruption is a major hurdle for any emerging economy, and big, complex infrastructure projects are prone to budgetary leaks through different steps of mismanagement (Locatelli, Mariani, Sainati & Greco, 2017). Unlike Bent Flybjerg, who introduced several concepts on megaprojects earlier in this thesis, Locatelli et al. argues that even though corruption is hard to measure, and to get quantifiable data, it is one of the leading causes of project overruns. To which extent this has been the case in Kenya is hard to accurately predict, nor conclude. But

that it has been a contributing factor seems to be a unanimous opinion both in the literature, and among the informants contributing to this thesis.

Corruption is not only driving the costs of infrastructure up, but megaprojects also attract more corruption. As one informant said: “Megaprojects are the avenue of corruption”. It Locatelli et al. argues that the bigger projects facilitate corruption in a few key areas: When a project is big and expensive, it is easier to hide bribes and inflation of costs. When a project is unique – such as the standard gauge railway, there is no precedence, as to how much a certain product of job should cost, allowing for inflation of costs. Additionally, non-disclosure of certain agreements are easier in big projects, therefore covering any illegitimate transactions or bribes (Locatelli, Mariani, Sainati & Greco, 2017).

The railway is aesthetically sublime with modern architecture at both the Nairobi and Mombasa terminuses, as well as all the smaller stations along the route. Its enormous bridges and viaducts have also circulated the international news networks, serving as a politically sublime project for Uhuru Kenyatta. It is hardly a coincidence that the railway was inaugurated a mere months before the general elections of 2017, and it likely contributed to Uhuru’s second term in office. It is used as a flagship by the president’s delivery unit, and is an example of Kenyatta’s political ambition of rapidly modernizing the country (President’s delivery unit, n.d.). Unlike the theory on megaprojects by Flyvbjerg however, there is little evidence to support the theory of an economic sublime in Kenya. Due to the lack of public involvement in the procurement phase of the project, local businesses and industries did not have the agency to advocate for such a project. Rather, there has been a public pushback against the SGR, as the railway is monopolizing the transport industry, eroding the economic foundations of the most important sector of the Mombasa County economy.

A key driver is also undoubtedly also China. As its economy is growing, it is continuously expanding to access resources, and to create employment for its citizens, banks such as the have shown the will to engage in risky megaprojects in order to obtain critical accesses to markets. However, there has been a slow-down in global BRI initiatives, and there is reason to believe that the foreign investment banks of China are aligning to a more sober approach for its outwards expansion. According to Malik et. al. at the Aiddata project, 35% of BRI infrastructure projects has seen implementation problems, including corruption, public protests, environmental concerns and labor violations (Malik et. al. 2021).

In 2022, IMF again retook the position as Kenya's top lender, and this is a repeating pattern in many of the countries that the Belt and Road Initiative has been heavily invested in since 2013.

7. Concluding remarks

Bent Flybjerg rather tragically refers to megaprojects as the “Vietnams of Policy and Management: Easy to begin and difficult and expensive to stop” (Flybjerg, 2014, p.12). Kenya's case is hardly unique. Megaprojects are as shown a risky gamble, and very often results in overestimations both in cost, and in forecasted revenues.

The difference between megaprojects in weaker developing economies, compared to bigger countries with GDPs many times higher than that of Kenya, is that developing countries inevitably take more risks. The crossrail project, or more commonly known as the Elisabeth line in London, is often referred to as Europe most expensive infrastructure project at (Jones, 2022; Ndi, 2018). The Crossrails cost of \$23 billion is five times higher than that of the SGR from Mombasa to Naivasha. However, the British project only constitutes less than one percent of the UK GDP, and 3,5% of the government revenue. It also borrows domestically at interest rates of between 1 and 2%, and therefore the Elisabeth line puts no pressure on the UK taxpayer. Only phase 1 of the Kenyan SGR, from Mombasa to Nairobi at \$3 billion, constituted more than 5% of the country's GDP at the time, and 11% of the government's revenue. Were the whole SGR project from Mombasa to Malaba to materialize, the project would have amounted to 15% of GDP and 73% of government revenue. Because the line additionally is finance by foreign loans at higher interests' rates than domestic loans in the UK, the pressure on the Kenyan taxpayer is far higher. This drive home the main point of this thesis.

Mismanagement, corruption, and in-transparency has taken Kenya onto a dangerous economical path. With project revenues not aspiring to expectations, the nation of Kenya is at risk of becoming the host of some of the world's most expensive white elephants in a matter of a few years. There are however hopes that things might not be as detrimental as some fear. The IMF and the World Bank has increased its borrowing to Kenya, allowing for lower interest rates, grant elements and increasing possibilities of debt-restructuring. The Kenyan

economy does also seem to bounce back from its pandemic-related slow down, and is expected to continue its economic growth, which will gradually dampen the debt-burden. “Kenya is on track to meet its fiscal objectives put debt as a share of GDP firmly on a downward path” (IMF, 2022)

What the future holds for Kenya’s socio-economic development would largely be speculation, but this thesis argues that the SGR did not significantly contribute to socio-economic growth. It was a risky investment with potentially high rewards in a country that did need refurbishment of its infrastructure to accommodate future economic growth. Mismanagement made the project far more expensive and uncertain than it could have been, in the face of a China which is a “... shrewd negotiator who is willing to impose intrusive conditions upon sovereign borrowers to protect its own balance sheet” (Parks, Malik & Wooley, 2022). The uncertainty was even expressed by the government official source contributing to this paper, who stated “you could only speculate the outcome, now we need to work with what we’ve got”. Hinting to the fact that Kenyatta’s administration was in fact gambling on behalf of the Kenyan economy in the hunt for rapid socio-economic development.

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Appendix 1

Approval from NSD – Norwegian Centre for Research Data

Appendix 2

Information sheet for informants

Appendix 3

Interview Guide

[Meldeskjema](#) / [Master-oppgave om kinesisk jernbane i Kenya](#) / Vurdering

Vurdering

Referansenummer

557947

Prosjekttittel

Master-oppgave om kinesisk jernbane i Kenya

Behandlingsansvarlig institusjon

Norges miljø- og biovitenskapelige universitet – NMBU / Fakultet for landskap og samfunn / Institutt for internasjonale miljø- og utviklingsstudier

Prosjektperiode

03.01.2022 - 16.05.2022

[Meldeskjema](#) 

Dato

03.05.2022

Type

Standard

Kommentar

OM VURDERINGEN

Personverntjenester har en avtale med institusjonen du forsker eller studerer ved. Denne avtalen innebærer at vi skal gi deg råd slik at behandlingen av personopplysninger i prosjektet ditt er lovlig etter personvernregelverket.

Personverntjenester har nå vurdert den planlagte behandlingen av personopplysninger. Vår vurdering er at behandlingen er lovlig, hvis den gjennomføres slik den er beskrevet i meldeskjemaet med dialog og vedlegg.

VIKTIG INFORMASJON TIL DEG

Du må lagre, sende og sikre dataene i tråd med retningslinjene til din institusjon. Dette betyr at du må bruke leverandører for spørreskjema, skylagring, videosamtale o.l. som institusjonen din har avtale med. Vi gir generelle råd rundt dette, men det er institusjonens egne retningslinjer for informasjonssikkerhet som gjelder.

DEL PROSJEKTET MED PROSJEKTANSVARLIG

Det er obligatorisk for studenter å dele meldeskjemaet med prosjektansvarlig (veileder). Det gjøres ved å trykke på "Del prosjekt" i meldeskjemaet. Om prosjektansvarlig ikke svarer på invitasjonen innen en uke må han/hun inviteres på nytt.

TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 16.05.2022.

LOVLIG GRUNNLAG

Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER

Personverntjenester vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen

formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke viderebehandles til nye uforenlige formål

dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet

lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER

Personverntjenester vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18) og dataportabilitet (art. 20).

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER

Personverntjenester legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1 f) og sikkerhet (art. 32).

Ved bruk av databehandler (spørreskjemaleverandør, skylagring, videosamtale o.l.) må behandlingen oppfylle kravene til bruk av databehandler, jf. art 28 og 29. Bruk leverandører som din institusjon har avtale med.

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og eventuelt rådføre dere med behandlingsansvarlig institusjon.

MELD VESENTLIGE ENDRINGER

Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til oss ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde: <https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-for-personopplysninger/melde-endringer-i-meldeskjema> Du må vente på svar fra oss før endringen gjennomføres.

OPPFØLGING AV PROSJEKTET

Personverntjenester vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet/pågår i tråd med den behandlingen som er dokumentert.

Kontaktperson hos oss: Anne Marie Try Laundal

Lykke til med prosjektet!

Do you want to contribute to my Master Thesis?

Socio-Economic Impact of Chinese investments in Kenya. Case: The Standard Gauge Railway

Do you want to participate in a research project where the goal is to investigate how the Chinese investments and infrastructure projects are impacting the socio-economic development of Kenya? In this document, I will provide information about the goal of this project, and what it means for you to participate.

Rationale of thesis

The goal of this master thesis is to gain insight into different people's, companies' and organizations perspectives, opinions, and knowledge about what the large investments from Chinese banks and companies means to the Kenyan economy and the impact that it has on the lives for ordinary Kenyans. I wish to examine whether it is an overall positive development, or whether the loans and construction might end up having a negative impact on Kenyan's lives and on the sustainability of the Kenyan economy. The Standard Gauge Railway project, currently running from Mombasa to Naivasha, but is planned to run to Kisumu, is of particular interest. Issues such as debt, land use, maintenance, impact on the labor market and transparency are some of the topics that I wish to examine and discuss.

Research Questions:

1. How are the Chinese investments impacting the socio-economic development of Kenya?
 - a. How is it impacting the economy?
 - b. How is it impacting ordinary Kenyans?
2. To what extent is the Standard Gauge Railway fulfilling its promise of boosting the Kenyan economy?

Who is responsible for the project?

Norwegian University of Life Sciences (NMBU)

Why are you asked to participate?

This project wishes to examine different organizations, investors', companies', and authorities' perspectives on the Standard Gauge railway and how infrastructure can contribute to economic growth and overall development of the country. Since you meet these criteria, I hope that you can contribute to an interview.

What does it mean for you to contribute?

If you choose to participate in the project, you will take part in an individual in-depth interview. It will be about 30 minutes long. It can be done digitally, or physically. There will be no personal questions such as personal background, civil status etc. and it is up to you how much you wish to share in terms of name, age and employment. The interview contains questions surrounding your perspectives on what development is, and your perspectives on the Chinese presence in Kenya, as well as infrastructure. I wish to make an audio recording of the interview, that will be stored until May 2022, as well as notes. This can however be changed upon request.

Participation is voluntary.

Contribution and participation to this project is voluntary. If you choose to participate, your contribution can at any time be pulled and your consent can be withdrawn. All notes and audio-recordings/transcripts from our interview will then be deleted. It will not have any negative consequences for you if you do not want to participate, or if you choose to withdraw your consent at a later point in time.

Your privacy – how your data will be used and stored.

I will only use transcripts and audio recordings for the purpose described above. Your information will be stored locally and confidentially. Only me, Lars Nettet Romundstad and my advisor Morten Jerven at the Norwegian University of Life Sciences will have access to your information. Your information will be anonymized upon any publication, if no other agreement is made.

What happens to your information when the research project is finished?

Transcripts and audio recordings will be deleted once the project is finished and the thesis has been approved. Scheduled date is May 15th 2022.

Your rights

If you can be identified in the project, you have the right to:

- Have access to see what personal information is registered about you, and have a copy of this information sent to you electronically
- Have personal information corrected
- Have personal information deleted

Where can I find out more?

If you have questions about the study, or wish to use your rights, please contact:

- Norwegian University of Life Sciences by the student Lars Nettet Romundstad (+254 745 443 656 / Lars.Nettet.Romundstad@nmbu.no) and advisor Morten Jerven (Morten.Jerven@nmbu.no)

Kind regards

Morten Jerven
Advisor

Lars Nettet Romundstad
Student

Interview Guide

Research Questions:

To what extent has the Kenyan Standard Gauge Railway Impacted socio-economic development?

What are the key drivers?

Can you tell me about what development means to you?

Can you tell me about the Kenyan Governance system?

What is your opinion on Chinese investments in Kenya?

- Positives, negatives

Can you tell me what the difference is between Chinese investments and projects are, compared to other international or nationally financed projects and investments?

In what way has infrastructure development impacted your (organization/agency/people you know)'s lives? (to KRC: How do you think that the SGR might impact socio-economic development in the country?)

What could be done, have been done differently by investors or infrastructure developers?

What could have been done differently by the government?

In your opinion, what would be the best project or investment in order to improve socio-economic development in Kenya, (or in your community)

Covid-19 related questions: How has Covid-19 impacted the socio-economic development of Kenya?