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SERVICES FOR SCIENCE AND EDUCATION

Another Lunatic Express or a Mega Project of Dynamic Ramifications: Kenya's New Standard Gauge Railway

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ABSTRACT

When the British were allocated the British East Africa protectorate, later Kenya Colony, in the Berlin Conference in 1888, they did not want to invest as much in the new dark territory. Subsequently, the Imperial British East Africa Company (IBEACo.) was formed to manage the territory. The Company was soon building the Mombasa Uganda railway line from Mombasa to Kampala dubbed the lunatic express by many who felt it was going to nowhere and had nothing to achieve. Many years later in 2012, when the Kenyan government in liaison with the Chinese government embarked on building the Standard Gauge Railway, many people echoed the very words and almost rechristened it the lunatic express. This paper examines the Standard Gauge Railway project in Kenya as an exemplification of the evaluation of multi-international projects particularly in developing countries and specifically in Kenya. Findings indicate that the SGR project does positively impact on the transport system although there are several underlying issues that require to be resolved in order for the project to derive maximum benefits. The study recommends enhanced stakeholder engagement, transparent management of project finances, and continuous evaluation to ensure visibility, sustainability and accountability in large infrastructural projects like the SGR.

Keywords: Standard Gauge Railway, Mega Project, Project Planning and Management, Kenya.

A FIZZY FIX: BACKGROUND OF THE STUDY

Railway transport has been a longstanding and effective means of connecting countries and regions. It has been favoured for its associated energy and cost efficiency, making it an efficient mode of transportation. The railway system's reliability and high capacity for transporting passengers and bulky goods contribute to decongesting road networks and offer long-term benefits. Rail transport has proven to be a reliable and sustainable solution for transporting large volumes of goods and people, contributing to economic growth and development in various regions (Mboya-Kwanya, 2022). The Kenya-Uganda Railway was originally constructed by the British to link with the Kenyan interior as well as provide Uganda with a connection to the sea. The construction began in Mombasa in 1896 and reached Nairobi in 1899 and Kisumu in 1901. The project faced numerous challenges, earning it the nickname "Lunatic Line" due to criticism from British Parliament member, Henry Labouchère, who mocked the cost, purpose and route (Taylor, 2020). The railway's building process encountered difficulties, including hostile natives as well as the man-eating lions at the Tsavo National Park that tragically claimed the lives of many railway workers before they were eventually hunted down.

In 1929, the Uganda Railway merged with Kenya and Uganda Railways and Harbours, which later became part of the East African Railways and Harbours Corporation (EAR&H) in 1948. EAR&H operated transportation links for Kenya, Uganda, and Tanzania until the dissolution of the East African Community in 1977. Subsequently, Kenya's portion of the railway became the Kenya Railways Corporation. Unfortunately, over the subsequent three decades, Kenya's railway network suffered from a lack of maintenance, leading to a significant deterioration. By 2017, most of the cargo and passenger railways were not operational, and the passenger trains had almost come to a halt (Irandu & Owilla, 2020; Taylor, 2020). There was a need for a new perspective to transport both cargo and passengers, especially between Mombasa and Nairobi, leading to new initiatives to revive the social and economic development in Kenya as well as improved infrastructural development, particularly transport and railway transport.

In November 2006, the Rift Valley Railways (RVR) Consortium assumed control of railways in Kenya and Uganda under a 25-year concession. However, RVR faced challenges in revitalising railway operations, attributed to corrupt management and ageing infrastructure. In 2011, Kenya got into a memorandum of understanding (MoU) with the China Road and Bridge Corporation to construct the Mombasa–Nairobi Standard Gauge Railway. The project, costing US $3.6 billion, secured financing in May 2014, with the Exim Bank of China providing 90% of the funding through a loan and the remaining 10% contributed by the Kenyan Government. Passenger service on the SGR officially commenced on 31st May 2017, and work to extend the SGR to Suswa was later completed (Githaiga, 2021; Mboya-Kwanya, 2022).

The Kenya Railways (KR) provides railway services that connect various cities and regions. Notably, the "Jumbo Kenya Deluxe" offers an essential fourteen-hour overnight trip three times a week for passengers, while the "Port Florence Express" enhances connectivity by linking Nairobi with Kisumu. Apart from passenger services, Kenya Railways operates the Kenyan ferry system on Lake Victoria, facilitating water transportation. Efforts have been made to improve the railway network, including plans in 2010 to construct a new station on Mombasa Road in Nairobi as part of a commuter network, with an airport link to enhance efficiency and accessibility. There are several milestones in the history and development of the railway, as illustrated in Table 1.

Table 1: Milestones in Kenya's Railway Development and History

Date	Event
30th May 1896	Commencement of the construction of Mombasa - Uganda Railway.
1899	Railhead reached Nyrobi, later changed to Nairobi.
1900	Railway line reached Nakuru.
19th Dec 1901	The rail line was completed and reached Port Florence, now Kisumu.
1915	Completion of Konza to Magadi line.
1920	Voi to Taveta line completed.
1920	The East Africa Protectorate (Kenya) became a British Colony under the British sphere of influence.
1924	The line reached "64" (Now Eldoret).
26th Feb 1926	The name Uganda Railway changed to Kenya and Uganda Railways.
27th Dec 1927	Became Kenya and Uganda railways and harbours.
12th Aug 1929	Present railways headquarters building was opened.
1930	Nairobi to Nanyuki line is completed.
14th Jan 1931	Jinja Kampala line opened connecting through to Mombasa.

Date	Event
1932	Kisumu to Butere line completed.
1st May 1948	Became East Africa Railways and Harbours.
1950	Nairobi is made a city.
1963	Kenya attained self-rule and became independent after being a British Colony since 1920.
1964	The Republic of Kenya came into existence.
1st Jun 1969	East Africa Railways Corporation established.
1977	End of East Africa Railway Corporation Administration.
20th Jan 1978	Kenya Railway Corporation formed.
1st Nov 2006	Kenya Railways goods and passenger services conceded to Rift Valley Railways.
1st Jan 2015	Actual construction of the Nairobi – Mombasa SGR line commenced.
30th May 2017	Commissioning of the Madaraka Express Freight Services at Port Reitz Freight Station.
31st May 2017	Commissioning of the Madaraka Express Passenger Services between Mombasa and Nairobi.
19th Oct 2019	Launch of the Madaraka Express Passenger Services between Nairobi and Suswa station.
17th Dec 2019	Launch of the Madaraka Express Freight Services to the Naivasha Inland Container Depot.
10th Nov 2020	Commissioning of the Kenya Railways Transit Shed, Diesel Multiple Unit trains and Refurbished Nairobi Central Railway station.

Challenges, such as inefficient management and a bloated workforce, affected Kenya Railways' operations and financial performance. To address these issues, privatisation and revitalisation plans were considered. In 2006, the Rift Valley Railways Consortium (RVRC) of South Africa took over running of both Kenya Railways and Uganda Railways Corporations. However, management changes occurred later, with Toll Holdings of Australia taking over the Kenya-Uganda railway in 2008. The introduction of the SGR project brought significant developments to the Kenyan railway system. The SGR aims to provide efficient, reliable and faster transportation services, connecting major cities and promoting economic growth. The first phase, completed in 2017 involved the passenger service train renamed 'Madaraka Express' between Nairobi and Mombasa. Future phases are planned to extend the SGR to other regions, enhancing regional connectivity and thus railway network, including SGR, remains an essential component of Kenya's transportation infrastructure, and ongoing efforts to improve and expand it holds great potential for the country's economic growth and regional integration. A standard-gauge railway has a track gauge of 1,435 mm. There are several terms for it, such as Stephenson Gauge, International Gauge, UIC gauge, Uniform Gauge, Normal Gauge and European Gauge in Europe and SGR in East Africa. It is faster, carries more cargo and is more stable than the older metre gauge rail network, whose track gauge is 1,000 mm (1 metre). The Mombasa-Nairobi-Naivasha SGR connects Mombasa, the largest port in East Africa, and Nairobi, the capital city of Kenya. The 480-kilometre line supports passenger and cargo transportation and is one of the biggest infrastructure projects to be implemented in Kenya since independence. It shortens passenger travel time from Mombasa to Nairobi for more than ten hours to a little more than four hours and freight trains in less than eight hours.

The main construction works on the Mombasa-Nairobi Railway line commenced in December 2014 with the China Road and Bridge Corporation (CRBC) being the primary contractor. The Government of China through the China Exim Bank contributed 90%, while the Kenyan Government financed the remaining 10% though the full loan is upon the Government of Kenya.

The cost of the first Mombasa-Nairobi phase was $3.8 billion, In the second phase, an extension from Nairobi to Naivasha was built at an additional cost of $ 1.5 billion and opened in October 2019. Participating countries of Uganda, Rwanda and South Sudan were to continue onward to Kampala, Uganda's capital city, Kigali in Rwanda and to Juba in South Sudan as illustrated in Table 2.

Table 2: Standard Gauge Railway Phased Development

	Phase I	Phase II	Phase III
Track	Mombasa to Nairobi	Nairobi to Naivasha	Naivasha to Kisumu Kisumu to Malaba Kisumu to Kampala Kampala to Kigali Kampala to Juba
Amount	USD $ 3.8 billion	USD $ 1.5 billion	Suspended. Expected to resume to 'old' railway line
Time	2014 2017	2017-2018	

The SGR project was proposed to connect Mombasa to Nairobi to Kisumu and Malaba on the border with Uganda and further East African cities as illustrated in Figure 1.

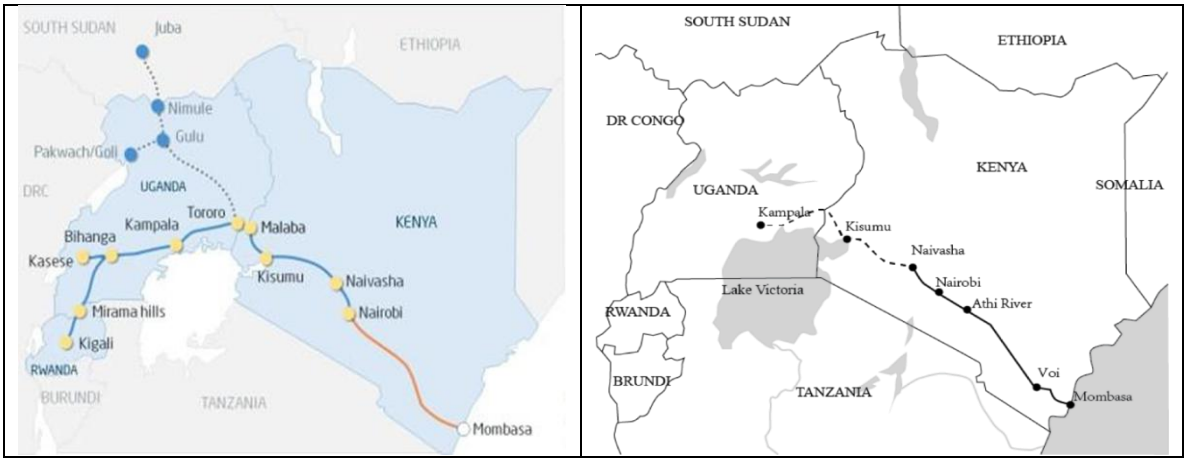

Figure 1: The Standard Gauge Railway: The Connectivity Between Kenya and East African Countries

SGR was conceived as a flagship project under the Kenya Vision 2030 development agenda to simplify transport operations across borders and reduce travel costs, in addition to benefiting the economies of Kenya and the neighbouring countries (Republic of Kenya, 2008). There were other considerations. For instance, the SGR line runs parallel to the existing meter gauge railway and the Mombasa-Nairobi Road for the most part, though it deviates at certain points to attain the desired gradient and curvature. Thus, the construction of the line involved long viaducts, deep cuttings and high embankments to ensure safe operations across the steep incline and ragged terrain, hence the additional costs. This implied that additional land had to be obtained and people compensated in all sections.

THEORETICAL FRAMEWORK

This study adopted the use of Context, Input, Process and Product (CIPP) model (Finney, 2020; Stufflebeam, 2000; Stufflebeam & Zhang, 2017). The CIPP model provides a systematic

approach to programme evaluation by addressing four aspects: context, input, process and product. The CIPP Model is a versatile framework for evaluating projects, programmes and personnel. It can be applied internally or externally across various fields. The CIPP model can be used to understand various developments and trends in the Kenyan railway sector and assess the impact of the SGR project. Integrating the CIPP (Context, Input, Process and Product) framework offered a methodical and comprehensive approach to evaluating the SGR. This is to systematically examine the project's goals, execution and outcomes of the Kenyan railway sector.

First, the context provides the historical background of Kenya Railways and the introduction of the SGR project, laying the foundation for understanding the railway sector's evolution in Kenya. This context informs on the initial objectives of the SGR within the Kenyan community. This understanding is essential to determine the relevance of the SGR and the actual need for enhancing rail transportation. This contextualisation is essential in framing an assessment of the SGR's impact on the overall transportation infrastructure. Second, the input provides an opportunity to investigate the details of the SGR project's design, including the financing and planning. Thirdly, the process evaluation assesses the SGR project's implementation leading to the fourth and final part, the product and hence the outcomes of the SGR project. The four-part series enables an assessment of the impact of SGR on economic growth, regional connectivity, reduced travel times, cargo movement and provides valuable insights into the effectiveness and broader impact of the SGR on Kenya's infrastructural development and transportation sector in particular, thus evaluating its impact on the nation's development as illustrated in Figure 2.

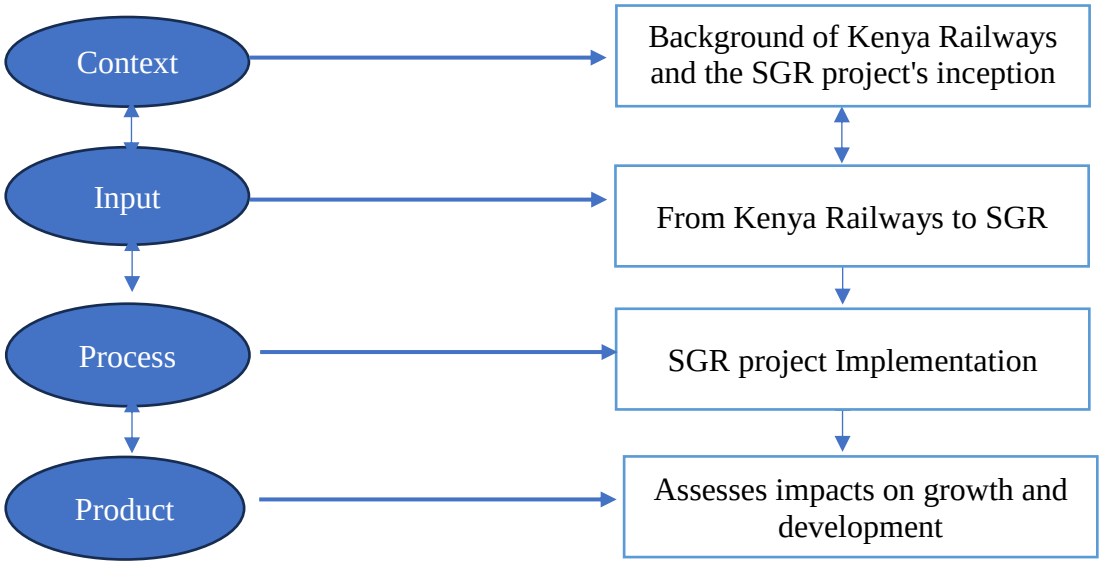

Figure 2: Theoretical Framework

The rationality of evaluation of the programme implies that programmes, and SGR in particular, should have immense value and, in turn, contribute to social and economic rationality (Lycett, Rassau & Danson, 2004; Maylor & Turner, 2022; Project Management Institute, 2023). The Context, Input, Process and Product (CIPP) model ensures both a methodical assessment and a critical analysis of the project.

RESEARCH METHODOLOGY

The study adopted a descriptive survey research design (Bell & Waters, 2014; Creswell & Creswell, 2018; Dawson, 2009; Leedy & Ormrod, 2015; Walliman, 2010). Data was collected using a combination of research methods including a questionnaire, semi-structured interviews (Afolayan & Oniyinde, 2019), policy documents and published media and other secondary data (Kathuri, 2024). To minimise bias and uphold research integrity (British Psychological Society, 2021), the study relied on both primary and secondary data, including interviews with the participants for an in-depth perspective on the subject of inquiry using an interdisciplinary approach (Repko & Szostak, 2017). The research was conducted from August 2023 to October 2023 (Kathuri, 2024). A total of 30 participants took part in the study, which exceeded the initial target of 21 participants as illustrated in Table 3.

Table 3: Research Participants

Category of participants	Male	Female	Total
Representatives from the Ministry of Transport, Kenya Railways Corporation	3	2	5
Railway operators who are directly involved in operating and managing SGR services	3	3	6
Residents and community members living in proximity to SGR routes.	3	3	6
Commuters and travellers who use SGR services for transportation needs.	3	3	6
Representatives from businesses and industries reliant on the SGR for freight transportation, trade and logistics.	4	3	7
	16	14	30

The reason for the additional participants was principally because although representatives from the Ministry of Transport and Kenya Railway were hesitant to make any inappropriate comments about SGR, various stakeholders including commuters and travellers were more outspoken (Kathuri, 2024). Indeed, there was a general contention that they felt left out of the SGR deal although highly enthusiastic about the various issues including the transportation of goods and passengers, the social economic and political implications of the project, national and regional impact of SGR and many other emerging issues many of which were way beyond the scope of this study. Document analysis included Kenya's government policy documents and development plans, SGR project progress and review reports in journals, research reports and the print media, as illustrated in Table 4.

Table 4: The Standard Gauge Railway in Kenya Information Sources

Author	Title	Source	Date of Publication
Ahmed, M.	Uproar in Coast over SGR leaves Governor Joho at a Crossroads	Sunday Nation	28th September, 2019
Bräutigam, D., Bhalaki, V., Deron, L. and Wang, Y.	How Africa borrows from China: And why Mombasa Port is not collateral for Kenya's Standard Gauge Railway	China Africa Research Initiative Working Paper	2022
Githaiga, N. M.	The Successes and Challenges of Kenya's Mombasa - Nairobi Standard Gauge Railway Transport Operations: A Special Reference to the Users	Research in World Economy	2021
Githaiga, N. M. and Bing, W.	Belt and Road Initiative in Africa: The impact of Standard Gauge Railway in Kenya	China Report	2019

Author	Title	Source	Date of Publication
Gorecki, I.	Kenya's Standard Gauge Railway: The Promise and Risks of Rail Megaprojects	Wilson Centre Blog	24th September, 2020
Huang, Z. and Lesutis, G.	Improvised Hybridity in the "Fixing" of Chinese Infrastructure Capital: The Case of Kenya's Standard Gauge Railway	Antipode	2023
Irandu, E. M. and Owilla, H. H.	The Economic Implications of Belt and Road Initiative in the Development of Railway Transport Infrastructure in Africa: The Case of the Standard Gauge Railway in Kenya	The African Review	2020
Kimari, W. and Lesutis, G.	Infrastructure as Symbolic Geopolitical Architecture: Kenya's Megaprojects and Contested Meanings of Development.	Bristol University Press	2022
Kisero, J.	SGR 'Take or Pay' Debt Trap	Sunday Nation, The Weekly Review	2022
Kitimo, A.	Uganda backs out of compulsory use of container port in Naivasha	The East African	2020
Lesutis, G.	Infrastructural Territorialisation's: Mega-infrastructures and the (re) making of Kenya	Political Geography	2021
Lesutis, G.	Infrastructural Territorialisation's: Mega-infrastructures and the (re) making of Kenya	Political Geography	2021
Mboya-Kwanya, L.	Impact of the Standard Gauge Railway on the Kenyan Economy	International Journal of Latest Technology in Engineering, Management & Applied Science	2022
Nation Africa	SGR pact with China a risk to Kenyan sovereignty, assets.	The East African	13 January, 2019
Olingo, A.	Kenya fails to secure $3.6b from China for third phase of SGR line to Kisumu'	The East African	27th April, 2019
Olotch, C.	Kenya's New Railway and the Emergence of the 'Government-to-Government Procurement' Method	World Bank Blogs	17th July, 2017
Oluochi, J. N.	Analysis of the Economic Value of The Standard Gauge Railway (SGR) and its Contributions for Kenya	International Journal of Social Science and Humanities Research	2018
Ombara, I.	Transport infrastructural development in Kenya towards enhanced regional integration: A case of Eastern Africa Region	University of Nairobi	2013
Omondi, O.	Kenya debt to China hits Sh650 billion as SGR takes up more funds	The Standard Newspaper	1st August, 2019
Otele, O.	China's Approach to Development in Africa: A case Study of Kenya's Standard Gauge Railway	Council on Foreign Relations	2021
Peralta, E.	A New Chinese-Funded Railway in Kenya Sparks Debt-Trap Fears	Special Series: China Unbound	2018
Republic of Kenya	Kenya Vision 2030: A Globally Competitive and Prosperous Kenya. Nairobi	National Economic and Social Council of Kenya	2008

Author	Title	Source	Date of Publication
Taylor, I.	Kenya's New Lunatic Express: The Standard Gauge Railway	African Studies Quarterly	2020
Wissenbach, U. and Wang, Y.	African politics meets Chinese engineers: The Chinese-built Standard Gauge Railway project in Kenya and East Africa	China Africa Research Initiative Working Paper	2017
Zhang, H.	The aid-contracting nexus: The role of the international contracting industry in China's overseas development engagements	China Perspectives	April. 2020
Zhu, K., Dossani, R. and Bouey. J.	Addressing Impact Evaluation Gaps in Belt and Road Initiative Projects in Africa: The Standard Gauge Railway Project in Kenya as a Proof of Concept.	The African Review	2020

The study adhered to ethical research standards including the American Psychological Association (2024) and the British Psychological Society (2021) among others.

RESULTS: THE TEMPRESS LUNATIC EXPRESS CRITICAL SUCCESSFUL FACTORS

The study participants can be considered in two main groups. That is, (1) representatives from the Ministry of Transport and Kenya Railways Corporation; and, (2) members of the public that consist of a variety of people, including business operators, commuters, and residents as illustrated in Table 5.

Table 5: Participants Working Organization: Within or Outside Government and SGR

Group	Working Organisation	Number	Percentage
1	Govt. (Ministry/KRC)	5	16.7%
	Railway Operators	6	20%
2	Residents / Commuters	12	40%
	Business/Industry	7	23.3%
	Total	30	100%

The research participants from the Ministry of Transport and Kenya Railways Corporation gave short responses and were highly hesitant to participate in the study despite all the assurance and reassurance of confidentiality, research permit and all, while the stakeholders from the business and public sectors were more outspoken and enthusiastic as they felt they had been left out of the SGR deal, their views and involvement largely ignored. Nonetheless, none of the research participants wanted to be positively identified. The research participants were of diverse groups as illustrated in Table 6.

Table 6: Characteristics of Research Participants

Characteristic	Number	Percentage
Gender		
Male	16	53%
Female	14	47%
Total	30	100%
Age		
35 – 44 years	4	13.3%
45 – 54 years	7	23.3%
55 years and above	19	63.3%

Total	30	100%
Religion		
Christian	14	46.7%
Muslim	10	33.3%
Hindu	2	6.7%
Other	4	13.3%
Total	30	100%
Level of Education		
Primary Level	10	33.3%
Secondary Level	14	46.7%
Tertiary Level	6	20%
Total	30	100%

Majority (53%) of the participants were male, while the remaining participants were female (47%). Notably, there was nearly equal representation of male and female participants from various stakeholder groups. Most of the participants (63.3%) were over 55 years, reflecting the inclusion of community members and experienced business people. This age group was able to provide a lot of insight based on their long-term experience with transportation issues in Kenya, both before and after the SGR. Indeed, the stakeholders, especially from the business and industrial sectors, were highly enthusiastic about discussing various issues on the transportation of goods and passengers, especially the movement of containers, though this was beyond the scope of this study. A majority of participants (46.7%) identified as Christians, while other religious affiliations were also well represented, including Muslims (33.3%). This religious diversity was deemed significant in capturing varied perspectives in the socio-cultural landscape of people living in Kenya and making use of SGR, particularly along the coastal region where the project begins. The participants were requested to indicate their highest educational level. A significant portion of participants (46.7%) had achieved a secondary education level, while others (33.3%) had minimum primary education. A substantial segment (20%) possessed tertiary-level education qualifications, such as diplomas and degrees. This educational diversity among the participants ensured that a wide array of perspectives and insights were considered useful throughout the investigation, from grassroots community views to more formally educated business and logistical opinion.

A detailed critical analysis of SGR highlights several areas of concern that were grouped into themes. These were (a) project delivery; (b) cost-effectiveness; (c) quality and standards as control focus; (d) project context, including stakeholder involvement and (e) project sustainability. This is because mega projects such as the SGR have both anticipated and overall benefits, including the impact of the project. Therefore, the success or failure of a project may be traced back to the underlying and flawed assumptions such as (1) infrastructural project such as the SGR will achieve the desired; and, (2) arising from (1) failure to take in various aspects of project management such as the social economic and political context including stakeholder involvement as summarised in Table 7.

Table 7: SGR Perspectives and Analysis

	Statement	Agree (YES)	Not sure	Disagree (NO)	Total
1.	The primary motives and goals of the SGR in Kenya are worthwhile.	23	3	4	30
2.	The planning and execution of the SGR project was well done.	15	10	5	30

3.	The SGR was completed in good time.		22	5	3	30
4.	The SGR is an important milestone in Kenya's social-economic and political development?		20	7	3	30
5.	The SGR was worked out and delivered with systematic timelines.		10	14	6	30
6.	Various factors such as cost, procurement and land compensation were well conducted in the SGR project.		10	12	8	30
7.	Various stakeholders were involved in the SGR planning and delivery.		10	15	5	30
8.	The SGR has led to more jobs and employment opportunities in Kenya.		10	7	13	30
9.	The SGR has influenced and contributed to Kenya's transportation sector as follows:	Socio-economic development	21	4	5	30
		Positive economic development	19	5	6	30
		Economic investments	17	7	6	30
		Increased investments	15	8	7	30
		Increased Job opportunities	19	5	6	30
10.	The SGR project is a success and will impact on:	Kenya's transportation network and economic growth	21	3	6	30
		East Africa's transportation network and economic growth	19	5	6	30
11.	The SGR has measures to ensure seamless and reliable services of:	Goods	18	5	7	30
		Passengers	20	7	3	30
		Operations	19	5	10	30
		Supply chain	17	7	6	30
12.	The SGR performance:	Efficiency	18	3	9	30
		Effectiveness	22	4	4	30
		Safety and Security	21	5	4	30
13.	The SGR is a sustainable project.		11	10	9	30
14.	The SGR project was conducted in a transparent way.		11	07	12	30
15..	The SGR project as anticipated should be completed as planned.		10	11	9	30

The table findings can be summarised as follows:

1. It was acceptable among the participants that the goals of the SGR were clear (numbers) and that the project was completed on time (numbers 1, 2, 3 and 4).
2. It was evident that although most of the research participants agreed that the SGR is an essential project, they did not appear satisfied or as contented, as evident in numbers 5, 6, 7 and 8. This could have been attributed to the overall efficiency, effectiveness, safety and security of both goods and passenger trains, as evident in numbers 9, 10, 11 and 12.
3. Despite the notable achievements of the SGR project, the viability, continuity and sustainability of the project were clearly in doubt, as evident in numbers 5, 6, 7, 8 and 9. However, the government and railway officers kept away from this sensitive topic and vastly preferred not to answer whether or not the SGR was as viable though members of the greater public were not as convinced, as evident in numbers 8, 13, 14 and 15.

These findings are congruent with the fact that despite the financial constraints in Kenya's internal and external debts, infrastructural development was acceptable in that it would lead to greater socio-economic development of landlocked and marginalised regions of Kenya and the broader East African region. For Kenya, the SGR is a priority area identified under the Kenya Vision 2030 and the National Spatial Plan of 2015 to 2045, and also the foundation for the realisation of a double-digit annual economic growth rate (Republic of Kenya, 2008). However, the continuation and sustainability of the project is a much more contested issue.

DISCUSSIONS: RAILWAY TRANSPORT, STIMULATED SOCIAL ECONOMIC GROWTH AND THE SGR

Railways transport has an essential role in facilitating transportation and trade within the country and beyond, contributing significantly to social economic growth and development (Githaiga & Bing, 2019). However, various studies have indicated that these railway operations have faced challenges, including issues related to efficiency and management (Githaiga & Bing, 2019). There was a lot of pessimism in the construction of the initial railway line, just as there is scepticism in the new project. This can be expressed as follows in Figure 4.

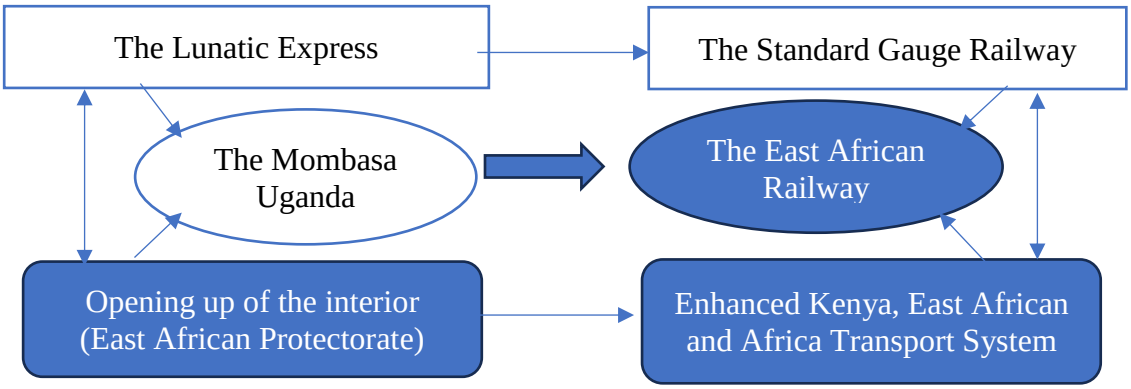

Figure 4: The 'Lunatic' Expressions

The cynicism in the SGR could have arisen out of the mystery surrounding the China Kenya deal as evident in other African and Asia projects even if the project meant well (Haque, 2022; Lesutis, 2022; Myddelton, 2007). Nonetheless, the SGR has had both positive and negative impacts on Kenya's economy and the East African region. On the positive side, the SGR has benefited Kenya's economy and the entire East African region. It has positively impacted the tourism and manufacturing sectors, leading to significant economic growth. The project has contributed to a 1.5% increase in the country's GDP, creating 46,000 jobs for local residents and providing income to support their families. The Madaraka Express has become popular, achieving 95% occupancy and reducing travel time between Mombasa and Nairobi. This has made the SGR more affordable, convenient and reliable for both business and leisure travellers (Mboya-Kwanya, 2022) and the impact is illustrated in Figure 5.

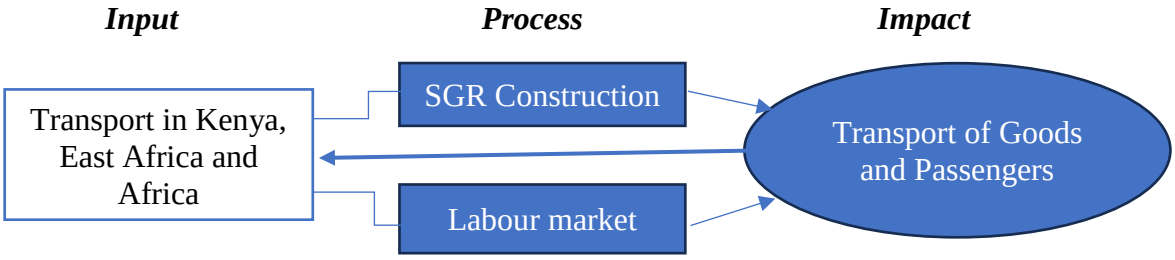

Figure 5: SGR Input and Impact on Transport

The SGR's cost-effectiveness and operational efficiency offer faster transportion of goods, particularly perishable agricultural products, which enhances access to markets. Passengers also benefit from faster travel between destinations, allowing more time for business and other

activities. The SGR's fuel efficiency and reduced maintenance costs contribute to significant savings for transporters and the larger economy (Mboya-Kwanya, 2022). The SGR has positively affected cargo throughput at the Mombasa Port, handling significantly larger amounts of imports and exports. With an efficient transportation system, the SGR has become an essential component of Kenya's trade infrastructure (Mboya-Kwanya, 2022). The SGR has been a revolutionary response to the need for supplementary transportation channels to handle the massive amount of cargo at the ports. Its efficiency has reduced the time spent on transportation, making it a more preferred mode of transport for passengers and cargo alike. The development of reliable and efficient transport infrastructure is essential for the East African region, requiring regional cooperation and international financial support (Mboya-Kwanya, 2022). The risk with opting for the SGR arose majorly out of over-optimism in cost analysis as summarised by Taylor (2020:32):

> *Debate as to whether Kenya needed a new railway—or simply the refurbishment of the existing line … at an estimated cost of about KShs. 100 billion ($980 million). An additional KShs. 100 billion would have been required to lease five thousand wagons and two hundred locomotives.*

The SGR was carried out at a cost of USD $ 5.3 billion and a great risk given the cost and cost-effectiveness (Lesutis, 2022). Now, the SGR supplements road transport and has also greatly contributed to reducing the cost of road maintenance by reducing the number of trucks on the roads. In addition, it has attracted foreign investments, improved trade and transformed the East African region positively (Mboya-Kwanya, 2022). Similarly, the transformation to SGR, as a matter of course, has brought about a transformation leading to increased and improved services, as illustrated in Figure 6.

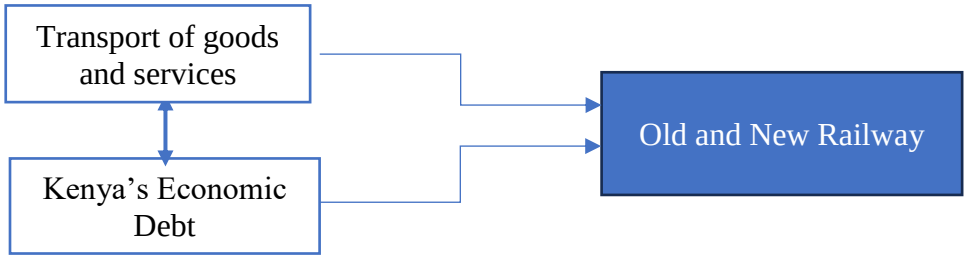

Figure 6: Benefits of SGR as Encompassing Transport and Economics

As illustrated, the transportation (both good and passengers) vis-à-vis the economic burden represents a marked shift. The SGR has significantly impacted cargo movement to and from countries outside Kenya. Cargo movement to these countries increased by 7.7 million tons, representing a 1.1% growth in 2015. Otele (2021:6) concludes:

> *Because there was no competitive bidding for the entire project, it was difficult to tell whether the government obtained value for money …. SGR also increased the country's debt to China by almost 750 percent between 2014 and 2019.*

Among the countries benefiting directly from the Mombasa port, Uganda remains the largest market, followed by South Sudan, Burundi, Democratic Republic of Congo, Tanzania and

Somalia. The Mombasa port recorded a total container population of 14,411 Twenty Feet Equivalent Units (TEUs) by the end of 2017 (Mboya-Kwanya, 2022).

Even though SGR aimed to transform Kenya into an industrial and middle-income country, there were, and still exist issues on debt sustainability, including warnings from the World Bank as to whether Kenya was undertaking excessive loans from China (Bräutigam et al., 2022; Kimari, & Lesutis, 2022). The SGR project has also contributed to the country's external debt, reaching 60% of the GDP. As a result, the IMF has placed Kenya on a debt-distress watch list. Furthermore, the SGR's efficiency and cost-effectiveness have improved the business market, leading to reduced travel time and costs and making it the preferred mode of transport, affecting other transportation businesses (Irandu & Owilla, 2020; Mboya-Kwanya, 2022; Ombara, 2013). The sustainability of the SGR therefore still raises concerns that again reflect on project planning and team building due to the complicated nature of the East African Community's regional commitments to complete the intended networks (Huang, 2022; Zhu et al., 2020). The regional controversies, local responses and the loan crises raise critical highlights of planning that have implications for sustainability and the future development of mega projects such as the SGR.

CONCLUSION

The investigation into the various dimensions of the SGR provides insights into the composition of participants, highlighting the diverse viewpoints on critical areas of the project. The investigation highlights critical areas of concern and intricacies during the project's implementation, accentuating the necessity for meticulous planning and fiscal prudence. It also emphasises various critical factors influencing project success, such as procurement, integrity and accountability, including financial acumen and government purpose and people phenomenon (Lycett, Rassau & Danson, 2004; Maylor & Turner, 2022; Project Management Institute, 2021). But while infrastructure is critical, it is imperative to carry out project risk management, especially for megaprojects, including in low-and middle-income countries such as Kenya. Besides, the study recommendations for effective project evaluation and management include improved procurement procedures and integrity as well as greater consultation among all stakeholders.

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References

Afolayan, M. S. & Oniyinde, O. A. (2019). Interviews and Questionnaires as Legal Research Instruments. *Journal of Law Policy and Globalization*, *83 (8)*, 51 – 59.

Ahmed, M. (Sunday Nation, 28 September, 2019). Uproar in Coast over SGR leaves Governor Joho at a Crossroads. https://nation.africa/kenya/news/uproar-in-coast-over-sgr-leaves-joho-at-a-crossroads-208314. Accessed 12th October, 2023.

American Psychological Association (2024). *APA Research Ethics Code: A Guide to Ethical Standards in Research*. American Psychological Association.

Bell, J. & Waters, S. (2014). *Doing your Research Project: A guide for first-time researchers.* McGraw Hill Education.

Bräutigam, D., Bhalaki, V., Deron, L. & Wang, Y. (2022). *How Africa borrows from China: And why Mombasa Port is not collateral for Kenya's Standard Gauge Railway*. China Africa Research Initiative Working Paper No. 52. Washington: School of Advanced International Studies, Johns Hopkins University.

British Psychological Society (2021). *BPS Code of Human Research Ethics*. Leicester: The British Psychological Society.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage Publications.

Dawson, C. (2009). *Introduction to research methods: A practical guide for anyone undertaking a research project.* How To Books.

Finney, T. L. (2020). Confirmative evaluation: new CIPP evaluation model. *Journal of Modern Applied Statistical Methods*, *18* (2 – 30), 1 - 24.

Githaiga, N. M. & Bing, W. (2019). Belt and road initiative in Africa: The impact of standard gauge railway in Kenya. *China Report*, *55* (3), 219-240.

Githaiga, N. M. (2021). The Successes and Challenges of Kenya's Mombasa-Nairobi Standard Gauge Railway Transport Operations: A Special Reference to the Users. *Research in World Economy, 12 (2), 258*. – 272.

Gorecki, I. (September 24, 2020). Kenya's Standard Gauge Railway: The Promise and Risks of Rail Megaprojects. https://www.wilsoncenter.org/blog-post/kenyas-standard-gauge-railway-the-promise-and-risks-of-rail-megaprojects.

Haque, M. S. (2022). Paradoxes of universal knowledge in public administration: exploring the contexts of Africa and Asia. *Asian Journal of Political Science*, 30:1, 19-34.

Huang, Z. (2022). Kenya Standard Gauge Railway. https://thepeoplesmap.net/project/kenya-standard-gauge-railway-sgr/ Accessed on 22nd September, 2023.

Huang, Z. & Lesutis, G. (2023). Improvised Hybridity in the "Fixing" of Chinese Infrastructure Capital: The Case of Kenya's Standard Gauge Railway. *Antipode,* 55 (5), 1587-1607.

Irandu, E. M. & Owilla, H. H. (2020). The Economic Implications of Belt and Road Initiative in the Development of Railway Transport Infrastructure in Africa: The Case of the Standard Gauge Railway in Kenya. *The African Review*, 47 457 – 480.

Kathuri, R. W. (2024). *Project Management and Evaluation: An Investigation into the Impact of the Standard Gauge Railway in Kenya*. Girne American University.

Kimari, W. & Lesutis, G. (2022). 'Infrastructure as Symbolic Geopolitical Architecture: Kenya's Megaprojects and Contested Meanings of Development.' In *The Rise of the Infrastructure State: How US–China Rivalry Shapes Politics and Place Worldwide*. Schindler, S. & DiCarlo, J. (Eds.) Bristol: Bristol University Press.

Kisero, J. (23rd October 2022). SGR 'Take or Pay' Debt Trap. *Sunday Nation, The Weekly Review, S*, 8- 9.

Kitimo, A. (30 May 2020) Uganda backs out of compulsory use of container port in Naivasha. The East African https://www.theeastafrican.co.ke/tea/business/uganda-backs-out-of-compulsory-use-of-conta iner-port-in-naivasha-1442320. Accessed 29 July 2020.

Leedy, P. D., & Ormrod, J. E. (2015). *Practical research: Planning and design.* Pearson.

Lesutis, G. (2021). Infrastructural Territorialisations: Mega-infrastructures and the (re) making of Kenya. *Political Geography*, (*90), 1 - 11*. 102459.

Lesutis, G. (2022). Infrastructure as Techno-Politics of Differentiation: Socio-Political Effects of Mega-Infrastructures in Kenya. *Transactions of the Institute of British Geographers* 47 (2), 302–314.

Lycett, M., Rassau, A. & Danson, J. (2004). Programme management: a critical review. *International Journal of Project Management*, 22 (4), 289–299.

Maylor, H. & Turner, N. (2022). *Project Management*. Pearson.

Mboya-Kwanya, L. (2022). Impact of the Standard Gauge Railway on the Kenyan Economy. *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, 11 (1), 1 – 7.

Myddelton, D. R. (2007). They Meant Well: Government Project Disasters. *Institute of Economic Affairs Monographs,* Hobart Paper No. 160.

Nation Africa (January 13 2019). SGR pact with China a risk to Kenyan sovereignty, assets. https://www.theeastafrican.co.ke/tea/business/sgr-pact-with-china-a-risk-to-kenyan-sovereignty-assets-1410364. The East African. Assessed 12th October, 2023.

Olingo, Allan (2019) 'Kenya fails to secure $3.6b from China for third phase of SGR line to Kisumu' The EastAfrican, 27 April. https://www.theeastafrican.co.ke/tea/business/kenya-fails-to-secure-3-6bfrom-china-for-third-phase-of-sgr-line-to-kisumu-1416820 Accessed 29 July, 2020.

Olotch, C. (July 17th, 2017). "Kenya's New Railway and the Emergence of the 'Government-to-Government Procurement' Method," *World Bank Blogs,* July 27, 2017. https://blogs.worldbank.org/ppps/kenya-s-new-railway-and-emergence-government-government-procurement-method. Assessed 29th September, 2023.

Oluochi, J. N. (2018). Analysis of the Economic Value of The Standard Gauge Railway (SGR) and its Contributions for Kenya. *International Journal of Social Science and Humanities Research,* 6 (2), 740-748.

Ombara, I., (2013). *Transport infrastructural development in Kenya towards enhanced regional integration: A Case of Eastern Africa Region.* Nairobi: Doctoral dissertation, University of Nairobi.

Omondi, O. (1st August, 2019). Kenya debt to China hits Sh650 billion as SGR takes up more funds. https://www.standardmedia.co.ke/business/article/2001340176/kenya-debt-to-china-hitssh650b-as-sgr-takes-up-more-funds. Accessed 12th October 2023.

Otele, O. (2021). *China's Approach to Development in Africa: A case Study of Kenya's Standard Gauge Railway*. Council on Foreign Relations.

Peralta, E. (2018). A New Chinese-Funded Railway in Kenya Sparks Debt-Trap Fears. https://www.npr.org/2018/10/08/641625157/a-new-chinese-funded-railway-in-kenya-sparks-debt-trap-fears. Accessed 12th October, 2023.

Project Management Institute (2021). *The Standard for Project Management and A Guide to the Project Management Body of Knowledge* (PMBOK Guide). (7th Edition). Project Management Institute.

Repko, A. & Szostak, R. (2017). *Interdisciplinary Research: Process and Theory*. London: Sage.

Republic of Kenya (2008). *Kenya Vision 2030: A Globally Competitive and Prosperous Kenya*. Nairobi: National Economic and Social Council of Kenya.

Southall, F. (2008). *Strategic Public Sector Programme Management*. Stamford: Chartered Institute of Purchasing & Supply.

Stufflebeam, D. L. & Zhang, G. (2017). *The CIPP Evaluation model: How to evaluate for improvement and accountability*. Guilford Publications.

Stufflebeam, D. L. (2000). The CIPP model for evaluation. In *Evaluation models: Viewpoints on educational and human services evaluation*. Dordrecht: Springer Netherlands.

Taylor, I. (2020). Kenya's New Lunatic Express: The Standard Gauge Railway*. African Studies Quarterly, 19 (3-4), 29 -52*.

Walliman, N. (2010). *Research methods: The basics.* Routledge.

Wissenbach, U. & Wang, Y. (2017). *African politics meets Chinese engineers: The Chinese-built Standard Gauge Railway project in Kenya and East Africa*. China Africa Research Initiative Working Paper No. 13. Washington: School of Advanced International Studies, Johns Hopkins University.

Zhang, H. (2020). The aid-contracting nexus: The role of the international contracting industry in China's overseas development engagements. *China Perspectives*, *2020* (4), 17-27.

Zhu, K., Dossani, R. & Bouey, J. (2020). Addressing Impact Evaluation Gaps in Belt and Road Initiative Projects in Africa: The Standard Gauge Railway Project in Kenya as a Proof of Concept. *The African Review,* 47 (2), 1–38.