

Editorial: Belt and Road Initiative in the African context: questions on regional connectivity and inclusive development

1. Introduction

The Belt and Road Initiative (BRI) has developed new economic and transport corridors (Lee *et al.*, 2022). Many BRI-led projects have activated economic activities and stimulated people flow within and outside Africa. The BRI comprises of road networks, railways, bridges, fuel lines, air routes and airports. In addition, the BRI re-created a “Maritime Silk Road” through South China and the ports on the Indian Ocean, the African Coast, the Red Sea and the Mediterranean. Many developing countries, including Sub-Saharan countries, have been facing mobility and connectivity challenges related to limited transportation networks and being land-locked or geographically isolated resulting in increased logistics costs and frequent supply chain disruptions. These transportation problems and insufficient connectivity have limited many enterprises in African countries from effectively participating in international trade to earn foreign exchange. Since 2013, only a few studies have documented the BRI’s past and current effects on the African Continent. This special issue (SI) focuses on recent studies that interrogate the potential of the BRI in connecting the African continent to major world trading corridors and commodity markets, thus facilitating the seamless movement of goods and services at a reasonable cost.

The BRI is an ambitious initiative of the Chinese government to support the socio-economic development by connecting China with Asia, Africa and Europe via land, maritime and air networks. The BRI was launched in 2013 by the Chinese President Xi Jinping as a global strategic framework to develop logistics infrastructure and expedite targeted investment in Europe, Asia and African countries (Lee and Shen, 2020). Over time, the BRI has expanded across three continents and 147 countries who have signed or joined the initiative by March 2022.

The BRI was specifically commissioned to build international logistics hubs, maritime ports and intermodal infrastructure such as railway terminals and airports to facilitate regional and international trade and people flows. The connectivity would be achieved through five core priorities: policy coordination, enhanced connectivity, unimpeded trade, financial integration and bonds among people (Lee and Shen, 2020). The Initiative aims to interconnect countries in Asia, Europe and Africa through an ambitious vision for infrastructure, economic and political cooperations. Arguably, BRI may improve connectivity between the participating countries by building infrastructure that will facilitate trade and investment (Githaiga *et al.*, 2019).



2. The context: BRI development in Africa

The BRI has continued to improve connectivity along the African continent by transforming the dilapidated railways and road infrastructure into a modern and integrated system. There are several projects that have been accomplished through the BRI in Africa: the Mombasa-Nairobi Standard Gauge Railway connects the Kenyan port city of Mombasa to the capital (Nairobi), which is one of the largest infrastructure projects built in Kenya's history (Lin and Mwaura, 2022) and valued at over US\$3bn (Yusuf, 2020). The BRI also initiated the Addis Ababa-Djibouti Railway line, which valued at US\$3.4bn and connects Ethiopia's capital (Addis Ababa) to the Djibouti port (African Review, 2017). In addition, the BRI initiated the Port of Bagamoyo in Tanzania, which is a deep-water port and was being built by Chinese companies. Once completed, this port will be valued at US\$10bn and become one of the largest ports in Africa to significantly enhance Tanzania's trade capacity (Global Construction Review, 2021). Under the BRI, Chinese companies have also built several industrial parks in Ethiopia, including the Eastern Industrial Zone, which is one of the largest industrial parks in Africa. These parks have created thousands of jobs and helped to boost Ethiopia's manufacturing sector (Xinhua, 2021). Although these infrastructure investments were highly strategic and geo-targeted to facilitate business development and global linkages, infrastructure development facilitated by the BRI has promoted cooperation, mutual benefits and cultural ties as well as provided complimentary benefits between countries (Chan, 2018).

The BRI in Africa has a number of potential benefits for both the countries involved in the projects via enhancing supply chain efficiency in the wider region. These include the following benefits: first to increase trade between the countries involved in the projects (Sheriff *et al.*, 2021) that led to economic growth and development (Dumor *et al.*, 2022); second, to improve the infrastructure of the participating countries along the routes, including transportation, energy and communication infrastructure (Kayembe *et al.*, 2021); third is to reduce transportation costs, increase trade and improve access to basic services (Githaiga *et al.*, 2019) and fourth is facilitate job creation in the host country supported by construction projects. These benefits are evidenced through the infrastructure improvements, and the establishment of new industries in the areas around the BRI projects has created additional job opportunities (Adeniran *et al.*, 2021). Through improved transportation infrastructure, companies have benefited through easier accessibility and more cost-effective pricing to transport goods and products to and from the ports (le Pere, 2017). The BRI projects also helped to promote regional integration by creating linkages between neighbouring countries within the region (Ehizuelen and Abdi, 2018). This has facilitated cross-border trade, investment and cooperation, thereby strengthening ties between countries (Johnston, 2019). Lastly, the BRI projects have brought new technologies and know-how to the host countries, which help to stimulate innovation and economic growth (Mihr and Weiffen, 2023). For example, the establishment of industrial parks in Ethiopia has provided opportunities for technology transfer and skills development (Staff, 2021).

3. Key policy questions

The SI focuses on the following policy questions: can the BRI be a poverty reduction strategy to address the root causes of poverty and add to policy development and regional planning to improve the wellbeing of individuals and communities who are living in poverty? Africa is the world's poorest continent, with more than 400 million people living below the poverty line (Ray, 2021). How successful will these BRI projects in effort to poverty reduction in Africa that requires addressing major societal issues, including low economic growth, high unemployment rates, inadequate access to basic services the gender gap, and social inequality. Few case studies have examined the potential impact of the BRI upon poverty reduction in Africa. For instance, a report published by the World Bank in 2019 found that the

BRI has the potential to reduce poverty by creating jobs, boosting economic growth and improving access to basic services such as healthcare and education (Lange *et al.*, 2018). The report also highlighted the opportunities for BRI participating countries to achieve the United Nations' Sustainable Development Goals, including the goal of eradicating poverty. Similarly, a study conducted by the Asian Development Bank in 2018 mentioned that the BRI could reduce poverty and inequality by improving infrastructure, promoting trade and investment and creating jobs (Asian Development Bank, 2019).

The development and expansion of seaports and the accompanying infrastructure in Africa have been observed to have positive effects on several economic indicators. These include an increase in income and economic growth, a decrease in unemployment rates, improvements in poverty reduction initiatives, and the facilitation of inflation control (Sakyi and Immurana, 2021). Furthermore, Williams (2018) examined the impact of seaport infrastructure on economic development in Sub-Saharan Africa. The study found that the presence of a deep-sea port positively associated with higher levels of economic development, including higher levels of trade, foreign direct investment (FDI) and per capita income. Nevertheless, the evidence on knowledge sharing and international collaboration through the BRI project is limited to attest the transfer of technologies and skills to African nations. This can also benefit industries in the continent, particularly in agriculture and healthcare, and lead to the development of more effective and sustainable practises (Gu and Qiu, 2019).

In contrast, other studies have suggested that the BRI could exacerbate poverty and regional inequality, particularly if the BRI projects are poorly planned or implemented (Himaz, 2021). For instance, if the BRI projects displace local communities without providing adequate compensation or failed to involve local communities in decision-making, they would result in increased poverty and social unrest. The Centre for Global Development is concerned whether the BRI exacerbates debt issues in the participating countries, which could ultimately hinder their development and increase poverty (Hurley *et al.*, 2019). While there is some evidence to suggest that the BRI could help reduce poverty in Africa, but it has also been criticised for its potential negative environmental and social impacts. It is difficult to ensure that any BRI projects in Africa are implemented responsibly and sustainably, taking the needs and perspectives of local communities into account. Some other questions are asked related to the current or future BRI projects of whether they can help enhance economic growth and job creation, promote social safety nets, improve education and skills training, improve healthcare and nutrition, empower women and marginalized groups.

4. Lessons learnt: summary of the papers

This SI contains two papers, each of which highlights a specific facet of the BRI with a particular focus on Africa. These papers were sourced from the 7th Global Research Network – Belt and Road Initiative Conference, 2023, under the theme “Connecting the African Continent through BRI: Status quo, opportunities and way forward”.

The first paper, “*Impact of the China's belt and road initiative on logistics management in Africa: A bibliometric analysis*” undertakes a bibliometric analysis to establish the current state of logistics research related to the BRI in Africa. Critical areas are currently under-researched such as the environmental, social and economic impacts of the BRI's transport investments, governance, logistics performance and international cooperation are identified. The research gap in knowledge regarding the BRI in Africa is an interesting finding to inform policy development to be socially inclusive. The authors concluded that despite the significant investments in infrastructures through the BRI, nonetheless the actual BRI's impacts on the participating countries in Africa are yet to be fully probed to enhance sustainable development of the continent. The key contribution of this paper is its rigour and in-depth analysis of papers published on the BRI in Africa.

The second paper, “*Modelling spatio-temporal patterns of Chinese foreign direct investment under the Belt and Road Initiative*” applies a geographically weighted regression (GWR) to explore the spatio-temporal patterns of Chinese FDI since the inception of the BRI in 2013. Spatial and temporal dynamics of the magnitude and the direction of China’s outward FDI stock and its flows from 2011 to 2015 are quantified and mapped at the country level. The results showed significant differences between participating and non-participating countries in the BRI. The size of gross domestic product (GDP) and container port throughputs of the participating countries positively affected China’s outward FDI stock to Africa, especially after 2013. On the other hand, non-participating countries encountered insignificant effects on the BRI before or after the implementation of the BRI. Authors argued for a well-planned logistics infrastructure development to enhance the fair and equitable distribution of FDI to facilitate international trade and inclusive development. The key contribution of this paper is the innovative application of the GWR approach to incorporate spatial, temporal and relevant attributes to explain the spatially integrated FDI data.

5. Future direction on the BRI research in Africa

China is Africa’s largest trading partner. China’s BRI in Africa has undergone a significant transformation since its launch in 2013. A significant amount of literature empirically analysed a wide range of topics relating to the BRI from a range of different perspectives. For example, an overview of transportation research of the BRI (Wang *et al.*, 2021), the implications of the BRI for Africa’s connectivity (Githaiga *et al.*, 2019), inter-connectivity among African countries with the support of the BRI infrastructure development (Lisinge, 2020), the model of governance for the BRI railroad megaprojects (Carrai, 2021) and the BRI’s impact and Chinese outward FDI on bilateral trade between China and sub-Saharan African countries (Wang *et al.*, 2020). It is evident that there are many different views concerning the BRI, both positive and negative (Lee *et al.*, 2022). Yet, they provide myriad improvement opportunities and strategies to achieve sustainable development goals.

Although the prior literature provided an overview of the BRI and analysed its impacts on African countries’ economies and sustainability, this SI raises some pertinent future research directions and trends through raising concerns over the alignment of BRI projects in tackling key policy questions. For instance, how the environmental sustainability objectives (e.g. carbon emission) in the BRI projects can be achieved in a cross-country setting? What approaches and technologies should be used to achieve environmental sustainability of the BRI projects? What are the best governance models to ensure the attainment of sustainability and development goals of the BRI projects? How are the logistics networks reconfigured to promote healthy competition among African countries with the support of the BRI? How will the BRI become a conduit for a “win–win” partnership between African nations and China?

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