

Research summary

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Tracing the links between infrastructure-led development, urban transformation, and inequality in China's Belt and Road Initiative:

Exploring pathways towards social-environmental sustainability and justice ¹

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Further information:

1. Apostolopoulou, E. (2020). Tracing the links between infrastructure-led development, urban transformation, and inequality in China's Belt and Road Initiative. *Antipode*. <https://doi.org/10.1111/anti.12699>
2. <https://www.cisl.cam.ac.uk/research/prince-wales-global-sustainability-fellowship-programme/the-prince-of-wales-global-sustainability-fellowship-in-infrastructure-and-sustainable-communities-supported-by-the-equal-opportunities-foundation>

Project background

China's Belt and Road Initiative (BRI), also called the 21st century Silk Road, is the largest infrastructure project since the Marshall Plan. Conservative estimates suggest that its cost will reach US\$1 trillion. To date, over 125 countries have signed memoranda of understanding with China expressing their willingness to be involved in the initiative. BRI projects involve from railways, airports, ports, pipelines, real estate and commercial projects, industrial parks, and special economic zones, to free trade agreements and treaties to boost foreign investment and market liberalisation.

The BRI is organised around six main economic corridors. Despite their characterisation as continuous 'belts', evidence from the on-the-ground implementation of the BRI suggests that the anticipated flow patterns of capital, goods and people will be concentrated across a network of infrastructure hubs with several projects strategically placed in selected cities across the globe. This indicates the initiative's potential to drive urban transformation and influence patterns of urban marginality and social inequality is immense.

In seeking to understand the links between the BRI, socio-spatial transformation and inequality, fieldwork has been conducted in four cities where BRI infrastructure and real estate mega-projects are being currently materialised. These are London (UK), Athens (Greece), Colombo (Sri Lanka) and Kathmandu (Nepal). These cities have been selected not only because they allow the exploration of BRI's unfolding in both Asia and Europe, but also because in all of them the BRI is expected to

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remake urban and rural spaces via new transport infrastructure (e.g. port expansions, trainlines), real estate projects and the establishment of special economic zones.

London: Royal Albert Dock

This project involves the transformation of a 35-acre area from a derelict, post-industrial site to a new financial district and tech hub supported by a major investment from Chinese developer ABP (Advanced Business Park). The project relates to a new train route from Yiwu to London and a number of transport upgrades, including a £500 million investment in London City Airport and Crossrail's new terminals. It forms part of a wider transformation of the historical Docklands to a new "boom town". It totals 436,644m² of office, residential, retail and leisure space. The ABP project reveals a bigger story about Chinese investment into UK's public and private sectors over the past decade, including UK energy, manufacturing, telecommunications, education and transport, and particularly about Chinese interest in London's Royal Docks. The first phase of the £1.7 billion development was completed in 2019 and entailed the creation of 42,735m² of office space across 21 new buildings. The second phase will include more offices, flats and a membership club. ABP's vision includes creating an "Asian business port" transforming the area into London's third financial district.

Athens: Piraeus Port

Piraeus is the largest port in Greece and is located 6 miles from the centre of the city. Characterised as the Head of the Dragon by the Chinese President Xi Jinping, Piraeus has been a key investment for China due to its strategic geographical position that renders it a gateway for Chinese products to enter Europe. COSCO, a Chinese state-owned shipping and logistics supplier company, obtained in 2008 a 35-years concession from the Greek government to operate part of Piraeus' container terminal. COSCO's plans as described in a £550 million masterplan include an additional cruise-ship terminal, four luxury hotels, a logistics centre, and a shopping mall in a new artificial 'island' that, if built, will profoundly transform the area. Chinese investment is not limited to Piraeus. Similarly to the UK, Chinese investment has been fast growing in Greece in the infrastructure, energy, telecommunications, tourism and real estate sectors. The latter relates both to the strategic interest of the Chinese government in creating a cross-border transport and trade corridor from the Mediterranean to Central Europe and Greece's willingness to receive Chinese investment, and international financial aid more broadly, due to its prolonged debt crisis.

Colombo: Colombo International Financial City

The Colombo Port City, recently renamed the Colombo International Financial City, is based on a sea reclamation project that is already transforming Colombo's urban landscape. This project was launched in 2014 followed the signing of a concession agreement between Sri Lanka's administration and the China Harbour Engineering Company that undertook the construction. The overall investment reaches £11.5 billion consisting the largest single foreign direct investment in Sri Lanka's history. It is estimated to include 5.65 million m² of build up space, including luxury hotels, shopping malls, high-end flats, beachfront villas, office towers, casinos, embassies, and skyscrapers with recent artistic impressions showing a cityscape comparable to Dubai or London's Canary Wharf. As in London and Athens, Chinese investment expands far beyond Colombo with massive public investments in infrastructure, including roads, motorways, ports and airports, funded by

foreign loans coming mostly from China since 2005. Colombo Port City still is one of the most controversial infrastructure projects in Sri Lanka that was met from the beginning with local opposition.

Kathmandu: Kyirong-Kathmandu Railway

This a cross-border infrastructure project that has held a strong grasp on the political motivations of both China and Nepal. Due to the topographical constraints presented by the Himalayan Mountain Range, the planned route would have to transect through a complex system of subterranean tunnels, with one proposed line cutting through Langtang National Park, a protected area home to the endangered snow leopard. The project could be seen as part of China's wider strategy of 'infrastructural diplomacy', with Chinese aid currently deployed to reconstruct several cultural heritage sites damaged during the earthquake of 2015. The project has been touted as win-win by both governments, but Nepalese civil society is already apprehensive about how the Railway will affect fragile Himalayan ecosystems, as well as the socio-cultural relations in Nepal resulting from Chinese decision-making within its borders.

Research approach

The research approach consists of a combination of an extensive desk study that involves a review of the policy, scientific and grey literature on the BRI from all relevant actors and institutions including social media material as well as on ethnographic research to capture people's experience of the ongoing transformation of places and ecosystems. The selection of cases as different as Colombo Port City and the London Docklands allows exploring how the implementation of BRI projects differs or resembles under different contexts. Ethnographic research is focused on participant observation, interviews and focus groups with different stakeholders, including policy makers, regulators, local governments and planning authorities, businesses and civil society groups. It has to be noted that while the research has explored the actual/perceived impacts associated with these projects through engagement with key stakeholders, a detailed review of environmental and social impact assessments that may have been conducted as part of the local statutory processes has been beyond the scope of the research.

Emerging findings

All projects indicate a type of infrastructure-led development that is socially, spatially and environmental uneven and that is expected to deepen inequality, spatial fragmentation, territorial stigmatization and social segregation by prioritizing private profits above other important social, cultural, spatial and environmental considerations. In cities of the Global North, like Athens and London, Chinese investment perceived an upgraded role within a context of prolonged crisis, public disinvestment and austerity politics and further fractured public infrastructures of social reproduction entrenching urban marginality. This is evidenced in increasing housing precarity and inequality due to rising rents in both Athens and London and the creation of new transport infrastructure designed to facilitate transnational trade and commercial and real estate projects ignoring the needs of urban dwellers. Similar trends have been manifested in Colombo where the Port City aggravated the displacement and dispossession of Colombo's low income residents.

Crucially, all projects are based on exclusionary economic development models that are primarily targeting investors, major industries and financial elites whereas, despite governmental promises, they have so far created only very limited jobs for local people.

Despite important variations in local planning and governance processes key elements of the implementation of BRI projects in different places across the Global South and North include:

1. The dismantling of labour organisation and workers' rights and the privatisation of public infrastructures and urban space,
2. the negotiation of the direction of infrastructure development through processes and forums that exclude social movements and grassroots organisations,
3. the replacement of public consultation and collective bargain with informal participation in community workshops with no decision-making power and a tightly circumstanced participation that favours representatives with similar agendas,
4. the (often violent) suppression of public protests,
5. the establishment of special economic and financial zones. These zones have a long history in Greater Mekong Subregion characterised by limited transparency, people's displacement, limited workers rights and flawed environmental impact assessments, and
6. the transformation of built environments, spatial forms, social relations as well as nature in urban environments. All BRI projects explored here encompass the intensification of land uses, large-scale infrastructure, residential density, and social-environmental metabolism. These transformations have already shown their detrimental effects in Sri Lanka where people's livelihoods have been dependent on marine ecosystems. They are also already posing major public health risks in Piraeus raising a wider concern about the BRI's environmental impacts and the way environmental impact assessments are being compiled and approved.

Preliminary recommendations

Our results point, therefore, to the need for a list of measures in BRI-related projects to support a transition to social-environmental sustainability and justice. We suggest that these should initially include the following nine essential steps:

1. Strengthen the capacities of national policy-makers and officials of all involved countries to formulate more integrated policies for actions under the BRI to promote the achievement of the SDGs³ both within and across countries.
2. Strengthened and deepened engagement for policy analysis and policy dialogues among policy-makers and experts from the participating countries along the BRI, including engagement with international organizations, to achieve equitable sustainable development.

³ See <https://www.brisdgs.org/about-bri-sdgs>

3. Incorporation of social, spatial and environmental considerations in BRI projects based on inclusive national policies.

The above principles should be translated in the following measures on the ground in specific BRI projects from their planning phase:

4. Comprehensive, effective and scientifically sound environmental and social impact assessments. These should be supported by open seminars that would support local communities in understanding the impacts of the projects something that is currently lacking in all the case studies that we have conducted research so far. In particular:
 - a. Meaningful public participation that would, inter alia, consist of the inclusion of all relevant stakeholders, including local communities, in decision-making processes and equal opportunities for participation for all along lines of class, race, ethnicity and gender from the very first stages of the project and before its on the ground implementation.
 - b. Comprehensive analysis of the number and types of jobs that the projects are expected to create for local communities and openness regarding working conditions (salaries, contracts, working hours etc.).
 - c. Analysis of the social, economic and cultural impacts of the regeneration projects that are involved in BRI investments for local residents and the way these are expected to change the social geography of the involved cities.
 - d. A shift towards 'sustainability assessment' where the principles of comprehensive, integrative and strategic approaches would be key aspects of the preparation and implementation of social and environmental impact assessments.
 - e. Clear consideration of alternatives or even cancellation of the project(s) in case of major adverse impacts.

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