



Conservation Geopolitics: Envisioning the future of the ‘Belt & Road Initiative’ in the Mountains of Central Asia

Advancing development in environmentally sound ways in mountain areas of Central Asia in the context of emerging investments and opportunities

Conserving biodiversity is increasingly seen as a fundamental prerequisite to build, sustain and strengthen communities, societies and nations. Biodiversity refers to the diversity of all species and ecosystems. It includes agro-biodiversity, that is, the diversity of all parts of the ecosystem that provide food for local populations and for more distant downstream urban centres. Further, in remote mountain areas, diverse **cultural heritages** also are often present. With their traditional knowledge, livelihood practices, and distinct sense of identity, cultural heritage is often integrally connected to local ecosystems and biological diversity.

The *Mountains of Central Asia* are widely recognized as a global **biodiversity hotspot**. Due to the particular suite of geophysical and biotic factors characteristic of mountains, encompassing diverse habitats and climatic conditions over short distances, a huge variety of wildlife species and microhabitats are found here, many of which occur nowhere else. These include migratory and transboundary species such as snow leopard and argali as well as native fruit trees and unique crop varieties and livestock breeds.

Mainstreaming biodiversity conservation across key sectors in national and regional development programming is one of the most important measures taken to ensure **sustainable mountain development**.

KEY MESSAGES

- China’s BRI is potentially the most significant infrastructure development programme this century, spanning over 70 countries with investments estimated at over US\$3 trillion. Since its commencement in 2013, US\$200 billion has already been invested in over 200 BRI projects
- Development in BRI partner countries (including Central Asia) is contingent on local geographic constraints (e.g., resources, historic pathways, etc.) as well as subject to suitable policies
- To date, the BRI focuses mainly on economic development and building transport infrastructure. However, there is increasing recognition that social and environmental elements of development need to be addressed
- Sustainable development goals could be promoted through BRI – most beneficially if the explicit mission of BRI were expanded and made to align with partner countries’ SDG commitments
- Embracing opportunities to strengthen conservation and resilience in water-rich mountain regions would benefit all of the BRI geopolitical partners

Specific mechanisms should include strengthening national and regional networks of protected areas (including indigenous and community conserved areas, ICCAs) and a greater recognition of key biodiversity areas (KBAs). In addition, ‘safeguarding’ measures are vital such as China's approach of ‘red-lining’ functional ecological zones and more widely adopted requirements for social and environmental impact assessments in both infrastructure and non-infrastructure projects. Sustainable financing mechanisms must also be found.

China’s Belt & Road Initiative

Amongst all international development programs, the Belt & Road Initiative (BRI) is spectacular in its scope and ambitions. Announced in 2013 by China’s President Xi Jinping, the BRI will invest over US\$3 trillion in more than 70 countries over the next decade. A fundamental BRI theme is *connectivity*. Therefore, transport infrastructure is a central focus in many investments. Additionally, connectivity entails cooperation between countries (socioeconomic and otherwise), social integration, and building digital information superhighways.

As of 2017, the promotion of the BRI is included in China’s constitution, and therefore is an integral element within China’s expanding foreign policy. BRI-related investments aim to promote ‘shared growth and prosperity’ amongst all the partnering countries, following long-term vision and plans for mutually beneficial cooperation.

BRI and Sustainable Development

The BRI could serve as **accelerator for achieving Sustainable Development Goals (SDGs)** in many countries – but for this, there is a need to extend and upgrade the BRI, so that it can more explicitly seek sustainable transformations. BRI projects and investments should include poverty reduction (better still, be ‘pro-poor’ across sectors) as well as advance environmental

sustainability and inclusive social development. BRI also must move beyond a ‘transport corridors’ perspective, and aim to build **multi-dimensional ‘economic corridors’** with development gains for the partner countries, as well as the end-points of multinational long-distance transport routes. As many target areas (corridors) in Central Asia are remote, rugged, and mountainous, adopting pro-poor and climate-smart approaches is essential.

To achieve equitable regional development, even as BRI investments will focus mostly on selected corridors, **second-tier investment programs** must also be developed for the non-target ‘hinterlands’ in the partner countries, to enable wider and more equitable spread of benefits and opportunities.

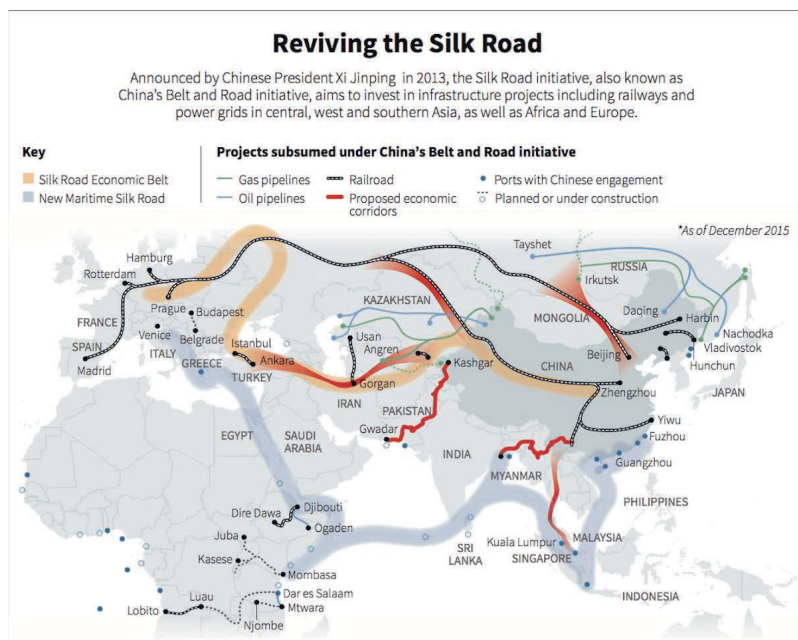
In the longer-term, success can only be built with development of partner countries’ **human capital** – not just their natural and financial resources. That is, the knowledge and professional capacities of partnering countries, as well as their hopes and aspirations for the future, are essential elements.

BRI and Biodiversity

To date, little mention is made of biodiversity in BRI dialogues, despite the fact that the proposed corridors traverse 13 global biodiversity hotspots, and may even bisect existing protected areas.

In the countries of Central Asia – the first that will be affected on the route from China to Europe – the widely recognized *Mountains of Central Asia* biodiversity hotspot provides **many essential services** for 64 million people within its 860,000 km², together with millions more downstream. Key ecological services include provision of water, stable and fertile soils, biodiversity and the genetic basis of crops and livestock, carbon sequestration, and social and ecological resilience derived from well adapted integrated systems.

Infrastructure development, however, often carries with it a **range of threats** for the maintenance of biodiversity. Linear infrastructure in particular – such as new or enlarged roads, railways, pipelines – has the potential to cause significant damage, as it may destroy or fragment critical habitats and disrupt migratory routes, as well as increase access to and the potential over-use of resources, often in unregulated ways. A need for power and construction materials may also lead to significant harm, along with risks posed by construction of dams. Historical experience suggests that such risks to the environment are common when developments occur at a rapid pace in novel, uncharted contexts. Increased access to previously isolated regions also raises the likelihood of potentially invasive species. Furthermore, increasing connectivity across the region increases potential for poaching and trafficking of wildlife and



Map of Belt & Road Initiative Projects, as of December 2015. Source: MERICS.

other products, negatively impacting on endangered species populations and increasing their vulnerability of formerly inaccessible areas.



BRI infrastructure will traverse more than 70 countries around the world

Whilst BRI brings prospects of economic growth and development, the proper stewardship of land and biodiversity should be prioritized, especially within the emerging narratives of inclusive development. Otherwise traditional knowledge systems and management practices surrounding use of biodiversity – such as maintenance of agrobiodiversity in Central Asia’s mountain regions – will be particularly vulnerable to such rapid changes.

Key Challenges for Biodiversity

Several key challenges are broadly noted for BRI wherever infrastructure is developed. They are associated with direct impacts on the receiving environment such as clearance of vegetation and secondary impacts commonly from waste and pollution. In addition, a major concern is cumulative impacts from successive, incremental and combined impacts from single or multiple activities in the past, present or future. Of particular concern are direct impacts on ecosystems and risks associated with polluting industries such as greenhouse gas emissions, other air pollutants, water pollutants, and solid waste. BRI projects are likely to have significant impact on the natural capital, climate and biodiversity of the region – if not suitably considered beforehand.

Five main challenge areas are noted here, as they have particularly complex, multi-faceted natures:

Mitigating impacts – Mitigating potentially adverse environmental impacts including biodiversity loss due to infrastructure development requires that timely, comprehensive and transparent impact assessments be undertaken, and that appropriate risk monitoring continues for the lifespan of all relevant projects. With respect to biodiversity it is important that whatever mitigation methods are used (especially offsetting) there is no net loss to biodiversity. Ideally, BRI could positively contribute to conservation purposes above and beyond only mitigating impacts.

Governance systems – Promoting more inclusive development (versus introducing or reinforcing uneven power structures), and recognizing both formal and informal (customary) practices, also pose both challenges and opportunities for BRI. Sometimes, opaque decision-making processes have plagued construction and other high-value projects, with corruption noted widely – though not exclusively the domain of BRI. In instances where local communities or indigenous peoples are concerned, their *free, prior and informed consent* should be obtained.

Uncertain futures – With uncertainty increasing, from changing climate to the reorganization of spheres of influence in politics and socioeconomic development, maintaining (and ideally strengthening) resilience and adaptability in integrated social-ecological systems is of paramount importance to us all. Appropriate risk assessments and mitigation measures that account for uncertain futures are critical elements in project cycles.

Financing mechanisms – There is critical need to develop new mechanisms to finance a sustainable future in mountain regions. Non-economic costs of projects must be internalized. Investments in new ‘green’ technologies and economies should be promoted. Furthermore, lasting dependencies must be minimized. Cross-cutting challenges for developing the over-arching approaches to invest in sustainable mountain development also include a lack of information on opportunities for green investments, limited agreed standards, and few demonstration or pilot sites for ‘green projects.’

Transboundary approaches – Adoption of regional and transboundary approaches that move beyond artificial borders is essential, due to the scale of BRI impacts. This is especially important where neighboring countries share water resources and species habitat.

Major Opportunities for Development

Drawing on a wide range of BRI-related studies and recommendations, several key opportunities are noted here, particularly in the context of the *Mountains of Central Asia* biodiversity hotspot:

- Under the framework of *connectivity* regularly highlighted by President Xi Jinping, BRI projects should build human capital with academic exchanges and other *people-to-people* interactions in order to promote knowledge sharing and co-creation of context-specific solutions for mutual benefit.
- Best practices in infrastructure projects and related development should be identified, including the mitigation of climate-related risks of natural hazard in mountain areas, with a highlighting and raising awareness of good models and standards in different sectors and targeting key messages for a range of audiences.
- New possibilities exist for development of agricultural and other value chains – maximizing emerging market opportunities as well

as enhanced transport and access, incorporating climate-smart and pro-poor perspectives.

- Building a new *Green Silk Road* with support from the BRI can help promote sustainable investments in mountain regions, oft neglected, and can advance improvements in people's quality of life while maintaining mountain biodiversity and functional ecological services – if BRI were to extend its remit from being mainly economics- and transportation-oriented, toward more SDG-friendly approaches, including inclusive social development and long-term perspectives in environmental conservation.

Looking forward...

The enormous scope and scale of China's BRI brings both some challenges and great opportunities for conservation and sustainable use of biodiversity. If addressed appropriately, it has the potential to contribute towards China's commitments to the Aichi targets as well as the Sustainable Development Goals of partner countries. Synergies between conservation actions and the development of green economies must be prioritized.

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RECOMMENDATIONS FOR THE 'BELT & ROAD INITIATIVE'

- Better align projects with national SDGs in partner countries/regions, e.g. the Mountains of Central Asia
- Make biodiversity a core BRI value
- Make inclusiveness a core BRI value, paying special attention to 'mountain voices' and also employment of youth and support for new entrepreneurship
- Strengthen EIA processes and mitigation standards and apply Strategic Environmental Assessments and cumulative impacts assessments as requirements for international financing and loans
- Develop centralized transparent reporting structures to document and assess impacts at the site, regional and country scale, and minimize impacts of on-going and new BRI projects and related initiatives
- Develop projects with landscape-level perspectives (i.e. addressing fragmentation), including both corridors and so-called 'hinterlands'
- Complement regional/transboundary transport and trade related dialogues with parallel dialogues and initiatives focused on biodiversity conservation across borders
- Enhance communication across all key development sectors, and develop relevant 'stakeholder networks' – promoting connectivity – e.g. regional network of mountain protected areas along the Silk Route

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