

# CPEC 2.0

Shaping an Environmentally and Socially Sustainable  
China-Pakistan Economic Corridor

Oxford University Silk Road Society  
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# FOREWORD

The China Pakistan Economic Corridor project has witnessed significant progress in its implementation stage. However, this has not been without varied challenges from the start. CPEC-2 is a critical part of China’s Belt and Road Initiative and has wide ramifications for inter-regional trade and development. It not only holds great potential for increasing regional trade between South West Asian states and China but also paving the road through this critical diplomatic conduit to bring about political stability to a region fraught with tension over territorial disputes among other challenging issues.

CPEC-2 might not prove the panacea, some optimistic analysts have hailed it to be, but, it does hold credible opportunity to bring about greater economic and political integration between South and West Asia, China, and Central Asia. Pakistan’s relations with China dating back to its formative years have only strengthened with time and their close-knit military and political relations brought about the CPEC, which is being hailed as a gamechanger for Pakistan’s economic wellbeing.

There have been concerns about extractive economic benefits being accrued by China and the reneging on commitments because of policy shifts and/or unwillingness or inability to meet these from Pakistan’s side. All said and done, CPEC is on its way and provided Pakistan is able to ensure the security of strategic energy projects, it could offer other regional states like India and Iran also a great opportunity to get onboard thus utilising the high value potential of this project fully.

This report’s focus on four key projects provides an interesting perspective on aspects of environmental sustainability and social equity. Questions regarding transparency, lack of clarity in policy from Pakistan’s side, issues of mistrust and public debate regarding CPEC projects, especially in terms of its environmental impact and the lack of communication in relaying the impact of the projects to the public remain. It is hoped that more research on these lines in these case studies and other projects under the CPEC ambit could address any gaps and also prove helpful to the stakeholders as they aim to alleviate concerns related to the CPEC.

The project report aims to provide critical guideline on the challenges facing these projects so that this could be replicated in other cases within their relevant context. It is believed that greater clarity and transparency would prove beneficial for policy formulation to set guidelines for the implementation of other projects and would also alleviate any mistrust or concerns among stakeholders.

Environmental protection is critical in Pakistan’s case as it faces critical issues of water shortage, soil erosion and dwindling energy reserves. Development has its own implications on the environment and Pakistan cannot afford to negate these nor ignore. It needs to be cognisant of any detrimental impact of CPEC project. Moreover, it is equally important that the ‘greening’ of such projects is undertaken in a sustainable manner. It is hoped that this report provides vital insight into the special dynamic of Pakistan-China relations realised in the CPEC vision that could bring greater political and economic integration to the region.

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# Introduction

Being part of the Oxford University Silk Road Society's 'CPEC 2.0' has been an immensely rewarding experience, and it has been amazing to see this Pakistan-focused project grow into a fully fledged report.

The China-Pakistan Economic Corridor (CPEC) has been one of the BRI's flagship initiatives since 2013, with the aim of upgrading infrastructure, improving connectivity, spurring economic growth, and to create a new trade route for Chinese and Central Asian exports through the famous Gwadar port. Given the two country's seventieth anniversary of relations just one month ago, and recent renewed interest in both countries in the environmental and transparency of the BRI and CPEC, it is also then natural that OUSRS expands upon its existing work in focusing on the BRI's impact here.

From CPEC's impact on rural women and deforestation, to sustainable SEZs and tracing the roots of a 'Green CPEC', this report maps out the intersection of BRI with Pakistan's sustainable development path, and argues that an opportunity is open to explore innovative responses to the challenges of sustainable governance.

This report uses four case studies to highlight the issue of a lack of clear communication and transparency amongst the various stakeholders, but also brings in relevant successful

examples from other BRI and non-BRI projects that can help in implementing future policies for a more environmentally sustainable and socially equitable CPEC. It is our hope that the research here can help contribute to existing literature, and impact stakeholder's and policymaker's perspectives for the better, as they consider the impact of the BRI on their own communities and environments.

Much of the current work on the BRI has been dominated by regional specialists - something that, as a student of Persian and Turkish, has inspired much of my own work. But the BRI is nothing if not diverse, and it deserves diversity in how we approach it too. In this spirit, we took advantage of all Oxford has to offer and recruited our analysts from across as broad a range of disciplines and subjects as possible.

Many thanks to all of our analysts for their hard work, creativity, and most of all for the exceptional quality that they have produced. Their abilities and efforts are demonstrated in the calibre of this paper, and we hope to have done their work justice.

We hope that you enjoy reading this report as much as we've enjoyed putting it together, and that it can be part of the vital ongoing conversation about how the BRI can be positively harnessed for communities around the world.

Matthew MacGeoch  
President  
Oxford University Silk Road Society

## China Pakistan Economic Corridor 2.0

Maryam Altaf

*2020 has seen a rejuvenation of the second phase of the CPEC. However, there are still aspects that are lacking. Thus, transparency and communication with, and amongst stakeholders on the ground in Pakistan ought to be implemented.*

### Introduction:

The China Pakistan Economic Corridor (CPEC) is the flagship project under China's Belt and Road Initiative. Within the scope of this report, the case studies explore themes of environmental sustainability and social equity by considering the opportunities and implications of four of the 88 projects planned under the CPEC. Overall, the report concludes that the availability of any reliable or updated information on the CPEC is not only sparse but also difficult to synthesize in a cohesive manner. This report makes some suggestions as to how it may be possible to address some of the issues around the common theme of a lack of transparency and communication<sup>1</sup> specifically within the context of each of the four case studies explored here. The case studies also bring in examples of other successful projects under the Belt and Road Initiative (BRI) that could help in creating a roadmap for the implementation of relevant policies in Pakistan, especially in line with the country's push for meeting various sustainability agendas.

### Context:

According to a Global Climate Risk Index report<sup>2</sup>, Pakistan ranks number 5 amongst countries

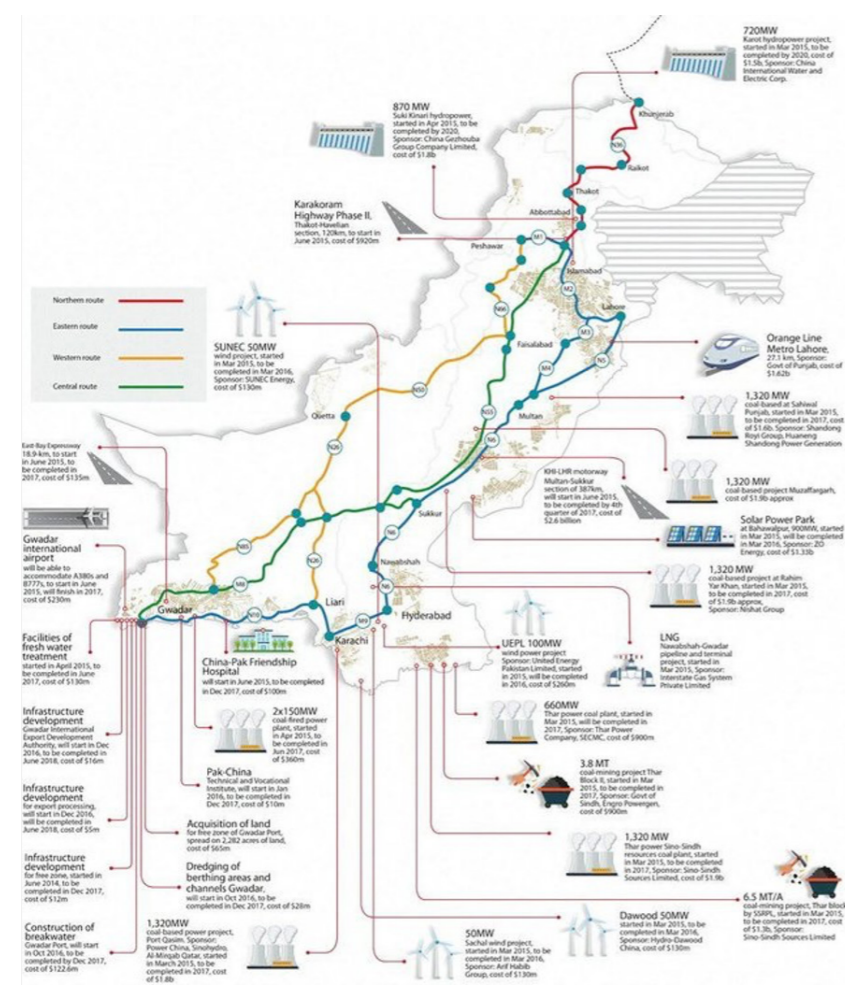


Figure 1: Projects across the China Pakistan Economic Corridor  
Image Courtesy: cited in Javaid and Javaid, 2016

most vulnerable to climate change. The 2030 Sustainable Development Goals (SDGs) set out by the United Nations offer a roadmap for the member states to adopt for a better and sustainable future. Pakistan<sup>3</sup> incorporated the deal into its national development agenda in 2016, and as of 2020, has been hailed for its successful achievement of meeting the UN Climate Action SDG-13 ten years ahead of the 2030 deadline. This has included initiatives for biodiversity conservation, investment in clean energy, large-scale afforestation, and more, to prevent and better equip for fighting off climate-change related threats. This plan finds its backing in the growing interest in sustainability, both, domestically and globally, as well as in meeting more of the country's proposed SDGs. In line with these plans, the current Prime Minister, Imran Khan, has initiated a push for the China Pakistan Economic Corridor to facilitate a transition towards green energy.

The CPEC was initiated in early 2013 with an agreement between the-then Prime Minister of Pakistan, Nawaz Sharif and the Chinese Prime Minister, Li Keqiang. Originally, the focus of the project was to connect China with Gwadar, a port at the southern tip of Pakistan, through rail, highway and pipeline infrastructure. The CPEC has since evolved into a wide-ranging project which now covers 88 different projects across different sectors including energy, transport, infrastructure, and special economic zones. These projects currently amount to a total investment worth 62 billion USD. Spread across the length and breadth of the country, the CPEC involves all four provinces and has numerous political/governmental and non-political/non-governmental stakeholders involved in the planning, organization and implementation of its projects and policies, at the provincial as well as the federal scale.

*"The CPEC has since evolved into a wide-ranging project which now covers 88 different projects across different sectors including energy, transport, infrastructure, and special economic zones."*

Over the years, the CPEC has received a fair amount of media coverage and has been referred to as a 'game changer' for Pakistan's economy. Although, the CPEC has gone through a slowdown in the recent years<sup>4</sup>, 2020 has seen a rejuvenation of the second phase of the CPEC. This boost has included the signing of an agreement for a new 700.7-megawatt-producing hydropower plant<sup>5</sup>, an approval for the second phase of the cross-border optic fibre through the northern border of Pakistan with China<sup>6</sup>, and the greening of energy projects through the banning<sup>7</sup> of any further investment in coal-based power plants.

Our findings conclude that there is a widespread concern about the lack of availability of feasibility studies<sup>8</sup>, lack of overall coordination amongst the two countries, but also amongst stakeholders within Pakistan<sup>9</sup>, lack of clarity regarding law and jurisdiction applicable to the CPEC, lack of access to any CPEC related signed agreements, lack of clear communication or collaboration with the local communities<sup>10</sup>. The dissemination of authentic information and knowledge is extremely crucial, yet there is a dearth of updated information found on reliable data sources, both online and offline, such as the lack of annual government reports, factual figures or updated maps related to the CPEC. All of this in turn makes it fairly difficult to collate the information that is available to assess the potential challenges or even the benefits associated with the CPEC projects. Given these constraints, the four case studies discussed in this section are only able to briefly discuss possible strategies for addressing environmental sustainability and social equity, within the context of each project.

### Case Studies:

Considering the vast spread of the CPEC projects and the limitations of a brief report, the four case studies explore the following: (i) actors involved in greening the energy sector; (ii) impact on the creation of opportunities for women and other social implications; (iii) environmental impacts of road construction in the transport sector; and (iv) social, economic, sustainable development for SEZs.

Parson and Lee's case studies illuminate the need for a more comprehensive national strategy in order to achieve an environmentally sound infrastructure development plan. Parson's section of the report investigates the various actors involved in the China-Pakistan-Economic-Corridor's policy towards clean energy by taking into account the case of the Azad Pattan Hydropower Project in the Sudhanoti District, in what is locally referred to as Azad Jammu and Kashmir, in Pakistan. Lee's case study focuses on another project in the province of KPK; the Rashakai Special Economic Zone. The author engages with the most successful example of an SEZ in Southern China, namely the Shenzhen SEZ, and explores how the implementation of similar social, economic and sustainable strategies may be possible in the case of the Rashakai SEZ. In a subsequent section, Politi and Khan's case studies highlight the comparatively underrepresented impact of the CPEC on local communities, and the importance of including the locals in the decision-making process. Politi highlights the implications the Sahiwal Coal Power Plant Initiative in Qadirabad, Punjab, has had on the residents as well as makes recommendations for how the initiative could contribute to creating opportunities for women in the locality. Lastly, Khan's study gives us an insight into the potential environmental implications of the road network in Pakistan's north-western province of Khyber Pakhtunkhwa; a geographical area at high risk of melting glaciers, flooding and other natural hazards due to the spillage of carbon into the atmosphere.

# Azad Pattan: Clean Energy Discourse in CPEC

Zach Parsons

*There has been a significant shift to a more environmentally focused CPEC since early 2020. Seemingly, the primary reason for this green energy transition was Pakistani domestic political actions, rather than Chinese actors involved in the project.*

## Introduction

This article investigates the actors that pivoted the “China-Pakistan Economic Corridor” scope towards clean energy, using a case study of the Azad Pattan hydroelectric dam as an example. It surveys the actors involved, namely populations, private companies (Laraib Group and Gezhouba), the Pakistan and China governments, to assess the ones’ most responsible for the change in focus. In examining the evidence, public statements, political context and energy needs from 2018 to present, it becomes clear that the primary driver of this transition to a green CPEC was Pakistani domestic political action, rather than significant changes made by Chinese actors. Examining the public rhetoric from each side, the Pakistani government, in particular Imran Khan and the Pakistan Tehreek-e-Insaf Party (PTI) outwardly and actively communicated to their domestic citizens that the government wanted a greener CPEC. Additionally, the Pakistani company in the joint venture, Laraib Group, brands itself as an environmentally minded company specialising in renewable hydropower.<sup>1</sup> Alternately, the partnering Chinese company, Gezhouba, keeps a low profile and does not advertise itself as a green company. Both English and Mandarin Chinese governmental news sources portray the change towards greener energy in the favourable light, but there is no indication that China’s government or private sector is

actively incentivising greener alternatives for host countries in the BRI. Since CPEC projects often work in a public-private partnership between a private Chinese company and the local government, at present there are limited incentives for Chinese actors to prioritise any particular kind of investment. This case study has larger implications since similar pivots from Chinese built coal plants occurred in Egypt, Kenya and Bangladesh.<sup>2,3,4</sup> The conclusion makes some suggestions for how Chinese actors could incentivise the prioritisation of greener energy projects in the future.

## Azad Pattan

The shift towards a more environmentally focused CPEC has drastically changed since early 2020. While the Agreement on the Long-Term Plan for CPEC published in November 2017 certainly mentions hydropower, solar and wind energies, the agreement focuses more on fossil fuels, especially coal.<sup>5</sup> During this time, then Prime Minister Muhammad Nawaz Sharif touted the “extensive coal” and “substantial shale gas” reserves in calls for investment.<sup>6</sup> As recently as November 2019, there were significant signals from both parties that sustainability was not a central tenet of CPEC’s immediate future.<sup>7</sup> A jointly published framework from this meeting claims that the second phase of the project (from 2021-2025) is focused on goals like improving market access and regional connectivity, and only by CPEC’s third and final phase would sustainability become a focal point.<sup>8</sup> By 2020 however, CPEC was reinvigorated and rebranded as a green project, with those in power stressing

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the shift towards cleaner energies and away from coal. The rise in new projects is often attributed to the creation of a new military-led authority, cutting through federal-provincial tensions and increasing efficiency, although the military is not credited for the green focus.<sup>9</sup> This prompts the question, which actors, Pakistani or Chinese, Public or Private, caused this pivot towards green? Examining one new Green Project from this pivot, the Azad Pattan Hydropower Plant can help identify who is driving the environmental concerns.

Located on the Jhelum River in Azad Jammu and Kashmir, the Azad Pattan plant is directly next to the Kashmir-Punjab border and about 90 km from Islamabad.<sup>10</sup> The plant is expected to produce around 700 MW and take 69 months to build, with an expected completion date of 2026.<sup>11</sup> Although the project was formally signed in July 2020, the Azad Pattan hydropower plant has a history dating back to the early 1980s. Initially the subject of feasibility studies, these preliminary analyses continued on and off for 35 years, until the 2010s.<sup>12</sup> The approval in April 2020 was only one in a string of three hydro projects announced that week worth more than \$5 billion, operating as part of the larger Green CPEC trend.<sup>13</sup> The project was reportedly delayed almost a year, until the green pivot in 2020.<sup>14</sup> During the signing of the deal, the military-led CPEC authority hailed it as a success, arguing that the construction would be both sustainable and economically beneficial - providing greener energy and 3,000 jobs, while preventing outflow of foreign reserves.<sup>15</sup> Cabinet member and “Minister of Planning and Development” Asad Umar specifically linked that deal to the government’s commitment to become greener.<sup>16</sup>

Alternately, the Chinese actors involved in the project gave no indication that they were interested in this particular project because it was greener than others. Instead, the Chinese state media highlighted the positive effects of Azad Pattan’s cleaner energy after the deal was done, and did not portray the Chinese government as

*"Examining one new Green Project from this pivot, the Azad Pattan Hydropower Plant can help identify who is driving the environmental concerns."*

an active player in encouraging environmentally beneficial projects.<sup>17,18</sup> The Chinese government seemed to be a willing partner in supporting the Pakistani government’s decision to prioritise cleaner energy, but not one to take the lead. Meanwhile Gezhouba’s public comments in Chinese media highlight the economic benefits it hopes to bring but minimal public discussion of environmental benefits.<sup>19</sup> Dividing up the stakeholders into two national groups, China and Pakistan, it seems increasingly likely that the CPEC’s green pivot was Pakistan led rather than China. The green rhetoric meshes well with the political promises and platform of Imran Khan and the PTI. On the other hand, China’s players made limited public statements regarding the project’s green credentials, prioritising their limited communication on economic and energy security benefits. While not explicitly said with regard to the Azad Pattan context, it seems that China’s principle of non-interference, in which China maintains “non-interference in [neighbor’s] foreign affairs”, is relevant here.<sup>20</sup> The Chinese state and companies will not dictate what BRI projects the host country should choose. While happy to engage in Green infrastructure, they did not play a leading role in changing to a greener CPEC. This understanding is important because it suggests to other BRI participants that the ball is in their court, namely that China is not going to drive the conversation towards prioritising Green projects.

China distinctly does not want to be in the business of determining which host country infrastructure projects get prioritised. Further complications ensue from the fact that many CPEC projects, like Azad Pattan, and BRI projects in general are not state to state, but



rather host state to Chinese SOEs. So, any potential solution would need to incorporate that although Chinese companies operate in closer conjunction with the government than Western ones, they still have a different set of priorities.

### Policy Recommendations

So how can China re-incentivize Green energy projects, while maintaining their non-interference principle?

One opportunity would be for the Chinese state to subsidise or help cover some of the costs for greener infrastructure projects. For a global leader in green infrastructure that just committed significantly to goals for 2030 back at home and is hosting the Convention of Biological Diversity later this year, the Chinese state might find that this is an efficient use of funds to combat the global problem.<sup>21 22</sup> The Chinese state also frees itself from restrictions dictated by the principle of non-interference, and is less intrusive than a potential debt-for-nature swap where China would

dictate domestic environmental policy.<sup>23</sup> China is not coercively forcing partners to take their advice and will continue to complete whatever projects the partner country is interested in. All China is doing is defraying the costs, spending some money to recenter the incentives to achieve mutually beneficial climate goals. Making this structural change to CPEC would provide a perfect first step, given the magnitude of the joint governmental commitments, geographic and environmental proximity of to China, and the Pakistani vulnerability to climate change.

Recentring allows Partner Countries to take these economic incentives into consideration while choosing projects allows them to maintain agency and decision-making power, while increasing the affordability of new clean infrastructure. The Chinese state continues its policy of non-interference in the domestic affairs of other countries and maximises the efficiency of its climate change spending. The Chinese companies continue to operate as the key actor, merely changing potential payment structures

with Chinese state banks to incorporate more government subsidies.

Reforms to ensure CPEC continues in its environment direction are also available to Pakistani stakeholders. The primary issue to overcome is that there are no legal guarantees that this environmental pivot stays at the core of CPEC in the future. The Green pivot took place due to changes in the electoral political realm, and the environmental prioritization remains at risk of other political priorities or changes in the ruling party. The natural next step for the PTI and Pakistan is to entrench the environmental focus beyond that of partisan politics, and make it more difficult for the government to potentially regress. An impactful, but reasonable step could be fortifying environmental sustainability as a central tenet of CPEC. More specifically, rather than adding a subordinate structural group to vie with other priorities, adding an environmental tenant in the mandate of the CPEC Joint Cooperation Committee would be more impactful, since due to CPEC's institutional framework all joint working groups answer to the JCC.<sup>24</sup> This would assure that regardless of political pressures and changes, the future of CPEC would be more environmentally structured.

## Developing a Vision for the Second Phase of the China-Pakistan Economic Corridor

Sean Lee

*Special Economic Zones (SEZs) has played a vital role in the development of cities. Understanding the formulas for a successful SEZ is essential to the success of the Rashakai Special Economic Zone in Pakistan's Northwestern Khyber Pakhtunkhwa (KPK) province.*

Special Economic Zones (SEZs) are areas of a country subject to different economic regulations than other regions. They are specifically set up to improve employment, foreign direct investment, and international trade competitiveness. SEZs played a key part in the rapid industrialization and economic development of China, with the most successful example being the Shenzhen SEZ in Southern China. Opened in 1979 as part of then-Chinese leader Deng Xiaoping's strategy to open up China's economy, it transformed from a small fishing village to a leading global metropolis and technology hub. Both developed and developing nations have since embraced the idea of using SEZs to spearhead their economic development strategies. However, the formula of success is not easy, requiring meticulous long-term strategic and economic planning. At the same time, the status of SEZs as 'model cities' means they should be champions of sustainable development both economically and socially. This article explores the social, economic, sustainable development and implementation strategies for planned SEZs in Pakistan, referencing the planned Rashakai Special Economic Zone in Pakistan's North-western Khyber Pakhtunkhwa (KPK) province.



Figure 1: The Pakistani government is optimistic that SEZs will accelerate the country's rate of industrialisation, leading to prosperity  
Image Courtesy: cited in Rashakai Economic Zone, February 6, 2021

### The Formula for a Successful SEZ

SEZs do not automatically create economic prosperity and there is no one policy formula for success. These zones must be nurtured over time, using a trial-and-error approach tailored to the local business environment and to attract foreign direct investment (FDI). In the case of China, common factors leading to SEZ success have been<sup>1</sup>:

- Strong commitment to reform and pragmatism starting from top leadership.
- Cooperation/consultation with the private sector and general public in policy making, institutional autonomy.
- Embrace of technology, innovative and competitive culture.
- Location, support infrastructure – strong transport links facilitate movement of labor and trade.
- An educated and motivated workforce.
- Finding a unique identity – a focus on generating investment that would not have happened in the absence of an SEZ.
- Political, social, and economic stability – policies should stay consistent through a change in government.

*"The status of SEZs as 'model cities' means they should be champions of sustainable development both economically and socially."*

In Pakistan, politics heavily influences economic policy – much to the detriment of long term economic planning.<sup>2</sup> The federal government must promote informed debate on economic policies at the national and regional level by involving independent economists, urban planners, environmentalists, and private sector stakeholders. This would require the setup of an economic development institution with a degree of political autonomy to ensure policy stability through a transition of government. At present, the All Parties Conference (APC) set up to discuss national policy is a start, and must be taken further. Such a body would act as a check to enhance project feasibility studies and ensure they provide substantial socio-economic benefit to regional communities while remaining environmentally sustainable. Increasing the number of appropriately-sized SEZ's would encourage their specialisation, and improving their links with each other would help promote domestic economic trade, and technology and knowledge sharing. This would also help to reduce the reliance on foreign markets and investment in the medium to long term.

Investments must also be made in improving the quality of the workforce - this goes for all CPEC projects. Fair job allocation between Chinese and Pakistan workers would cause local communities to feel included in these large-scale projects, and would increase local support for such projects. In the late 90s, Shenzhen removed restrictions of nationality, identity and organisational affiliation to attract high-end talent, and educational and research institutions. This allowed Shenzhen to obtain high-end factors of production locally without extra expenses, empowering the local population with rising incomes and opportunities. Thus, in the CPEC SEZs, training institutions should be established to train the local workforce to use Chinese technology in the short term, in parallel with the transfer of technology to help equip the local population with the knowledge for independent local innovation in the long term. The government should also implement business and labor friendly policies that encourage competition while preventing unfair business practices such as intellectual property theft, and worker exploitation. This would require a sound independent regulatory system, efficient administration, and low corruption. An example of this in practice is Bangladesh - despite ranking 119 of 183 in the World Bank's Doing Business Index 2010<sup>3</sup> yet the country's SEZs have fared better with an independent, more efficient and business friendly administration that reports directly to the prime minister. The SEZs are run by an independent body called the Bangladesh Export Processing Zones Authority (BEPZA), given priority for national resources and responsible for regulatory approval, the provision of land, and the maintenance of supporting business, administrative and quality of life infrastructure services. This policy of implementing an exclusive one stop solution in service of investors and enterprises has been greatly appreciated by foreign investors and

when implemented in CPEC would greatly improve the ease of doing business, and attract greater multinational investment.

### Sustainable SEZ Implementation

Khyber Pakhtunkhwa (KPK) is blessed with abundant natural resources and favorable terrain and climate conditions for agriculture and rearing livestock. Yet many challenges face its development, highlighted by this report by the International Growth Center (IGC).<sup>4</sup> The economy is primarily agricultural and manufacturing based. The Rashakai SEZ will focus on garments and textiles manufacturing, electronic appliance manufacturing, mechanical equipment, mineral processing, and food processing. Officials remain confident in the SEZ's prospects. However, the KP Planning and Development department (P&D) has criticized the planning of the entire project, and has called for a review of the project's financial and commercial viability. To ensure environmental and social sustainability, "Green" policies must be woven within the SEZ's legal, regulatory, and institutional framework.

Green infrastructure is key to a project's environmental sustainability, and planners should work to integrate renewable energy generation, waste reuse and recycling systems, and resource efficient methods in base SEZ core and support infrastructure, and work with clients to apply this during individual zone construction. As Pakistan is a water-scarce country, resource efficiency and waste recycling will be crucial to alleviate stresses and ensure the long-term supply of Pakistan's natural resources. While Rashakai is situated in a central location within the province, in close proximity between the major cities of Peshawar and the ML-I highway, there are many other rural areas of the province that would benefit greatly from investment in road networks. Improved transportation links in Kohistan, Battagram, Shangla, Hangu, Karak and Tank would better connect these regions to the rest of the province and the country. This will open up the relatively remote and economically depressed areas and facilitate inter and intra-provincial flow of goods, local investment and labour.

Rashakai is expected to have provision of up to 210 MW of electricity for its manufacturing



Figure 2: Khyber Pakhtunkhwa's geography makes it ideal for agriculture, rearing livestock and tourism  
Image Courtesy: [https://commons.wikimedia.org/wiki/File:Saif\\_ul\\_malook\\_lake-01.jpg](https://commons.wikimedia.org/wiki/File:Saif_ul_malook_lake-01.jpg)

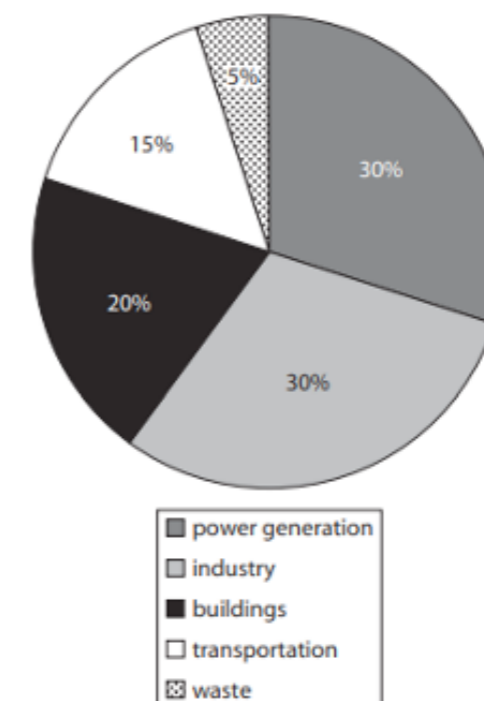


Figure 3: Example - Some SEZ GHG Emission Structures by Sector  
Image Courtesy: cited in Thomas Farole and Gokhan Akinci, 2011

industries. According to the KP Secretary for Energy and Power, the 'low cost' and 'uninterrupted' power would be provided by the provincial government through a mixture of coal and hydropower projects. SEZ's should commit to a target for renewable energy supply that should be higher than the national average. Buildings should be designed to be more energy efficient, using efficient heating/cooling, lighting, natural ventilation, and waste/resource recycling. There are huge benefits, with a 2009 study by Shalizi and Lecocq showing that making buildings more energy efficient in China would add 10 percent to construction costs, but save more than 50 percent on energy cost, creating long term savings in return for slightly higher initial capital cost. Moreover, manufacturing uses a large amount of water, and in the case of the garment industry, water pollution from toxic chemicals used in production processes raise concerns about the ability for local water supplies to cope. Environmentally friendlier raw materials and manufacturing processes should be used, and this should be encouraged through policies and knowledge sharing. Returning to

Rashakai's garment industry, organic farming can reduce water usage by up to 60% without using cancer-inducing insecticides. Using natural and low impact dyes and chemicals would also lessen the environmental effects of production.<sup>5</sup> SEZs often have industrial clusters - interconnected business entities that enhance competitiveness by increasing productivity, stimulating partnerships and innovation, and attracting skilled labor.<sup>6</sup> Successful cluster development requires identifying the potential spillovers of skills, technology, and information that could improve economic synergy. They also present another opportunity for sustainability. In manufacturing, clusters could allow waste from manufacturing processes to be recycled and used as raw materials for complimentary processes, conserving resources. This is called industrial symbiosis. An example of which can be found in South Korea<sup>7</sup>, where the government acts as advisors to corporate-led projects, using feasibility studies and strong firm-government and firm-firm transparency to select projects with the highest potential outcomes. Businesses operating in the park must be involved in the

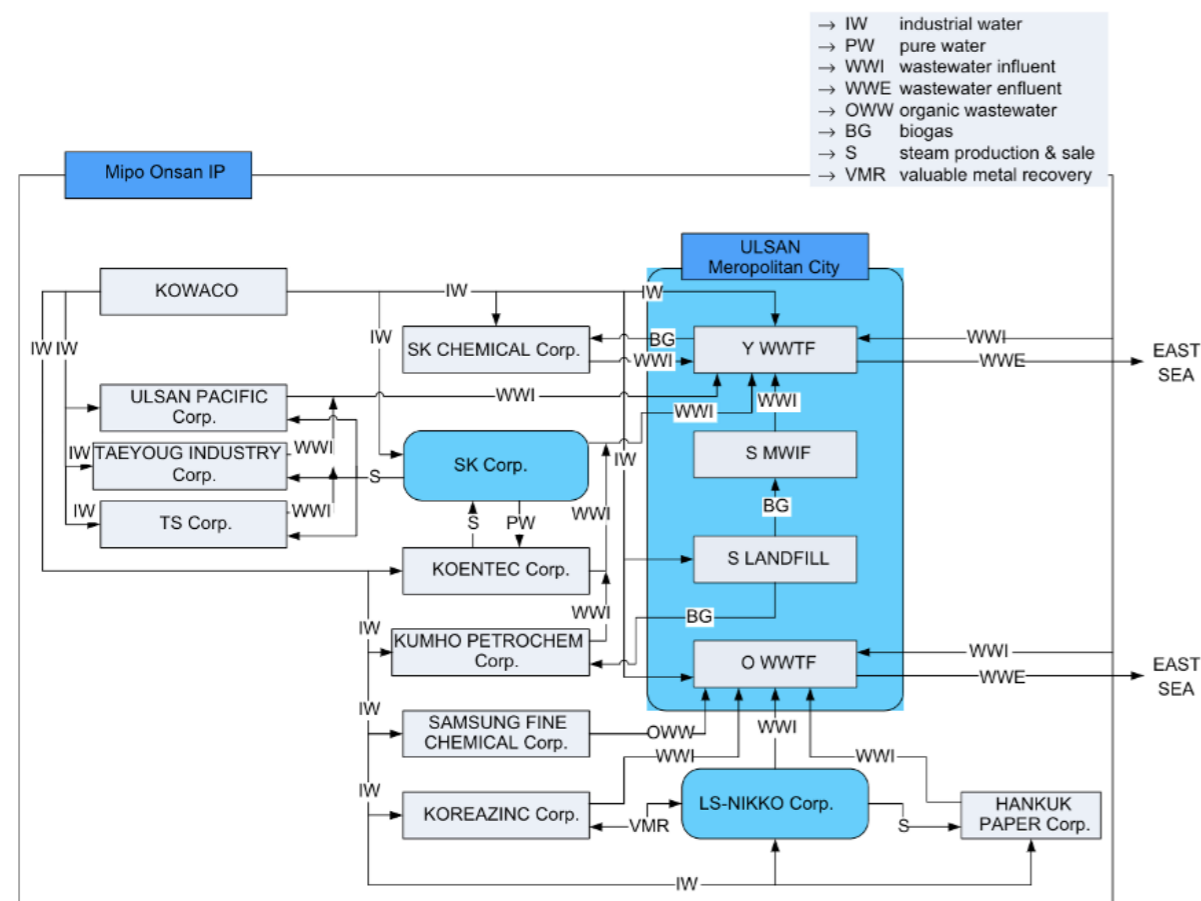


Figure 4: A layout of an industrial complex in Ulsan, South Korea utilising industrial symbiosis  
Image Courtesy: cited in Park, Hung-Suck, Eldon R. Rene, Soo-Mi Choi, and Anthony S.F. Chiu, 2007

planning process, led by a top-down planning process with a long-term vision of the whole system acting as the final goal.

Financial incentives such as tax reliefs and duty-free importation of capital should be tied to policies that promote environmental protection. Yet a balance must be struck such that they do not impact business operations and profits. Industry-specific standards relating to energy efficiency, supply chain sustainability, waste management, and labour protection must be created in consultation with the private sector and enforced. A regional carbon market could also be established. An example of this is Shenzhen in 2013, which has helped internalise the negative externalities of production, and incentivised enterprises to embrace clean technology.

The government should also collaborate with

overseas companies to actively promote the absorption, research and development of technology to improve production efficiency and sustainability. KP's agricultural and mining sector has great productive potential, and Rashakai should play a key role in modernising these industries to the benefit of the rural population and the local environment. SEZs can be used as an import or manufacturing hub of advanced mining and farming equipment both within KPK and nationally, while providing a platform for educational institutions and companies with knowhow to research and implement more efficient, optimised and sustainable farming practices.

### Conclusion and Policy Recommendations

There have been previous attempts by Pakistan to utilize the SEZ as part of their strategy, and results have been mixed. The most successful ones tended to be located in locations near

*"Financial incentives such as tax reliefs and duty-free importation of capital should be tied to policies that promote environmental protection. Yet a balance must be struck such that they do not impact business operations and profits."*

environment. Growing a SEZ requires care and patience. However, if successful, they promise to bring enormous socio-economic benefits regionally and nationally.

major urban centers, with existing linkages to labor, raw materials and trade routes. At the national level, the Pakistani government must strive to reform its institutions to lessen the interference of politics in economy policy, and ensure dialogue, understanding, and compromise between different political parties. Transparency and consultation with regard to SEZ project planning must be enhanced to ensure projects are financially, socially and environmentally sustainable, and investments must be made to utilise and train local human capital and facilitate the transfer of technology. The Khyber Pakhtunkhwa Economic Zones Development and Management Company (KPEZDMC) should continue striving to promote investment by simplifying bureaucracy, proactively engaging multinational investors, and improving and maintaining supporting infrastructure. Business-friendly policies and regulations must be implemented to promote confidence and economic investment, driving a competitive and innovative businesses environment.

SEZs should be established to serve the region, and planning should be done taking into account the needs and strengths of the regional economy to ensure proper spillover effects that lead to economic and social benefit for the local population. Thorough and transparent project feasibility studies must be conducted with lessons learned from previous local and international SEZ cases. Project planning must incorporate sustainable development policy, strategy and planning with the use of climate-friendly technology to ensure economic productivity does not come at the cost of the

## CPEC's impact on rural women's lifestyle change: the Sahiwal Coal Power Plant Project Initiative

Alice Politi

*China-Pakistan Economic Corridor (CPEC) has a significant impact on social sustainability. In particular, on a macro-level, the construction of Sahiwal Coal Power Plant project in Qadirabad, Punjab, Pakistan, can contribute in creating opportunities for women in the site-specific rural areas. This can be achieved indirectly through infrastructural rural development which would consequently improve quality of life.<sup>1</sup> However, on a micro-level, the project, which is built on agricultural private land, contributed to the displacement of local people, exposing the need of assessing the role of the project and its social implications.*

### Introduction

The most recent Census of Pakistan, conducted in 2018, highlights how 63.3 per cent of the population live in the rural areas in the provinces of Baluchistan, Khyber Pakhtunkhwa, Punjab and Sindh. 64 per cent of them are women.<sup>2</sup> In these areas a lack of infrastructure such as schools, hospitals, industries and housing facilities is acknowledged, which in turn impacts the quality of life of the population, particularly women.<sup>3</sup> This gender gap is aggravated by traditional conventions, which are particularly strong in rural areas, with little or inexistent employment opportunities, a reduction in accessing socio-economic opportunities, consistent wage

discrimination, harassment and disincentives from accessing health facilities.<sup>4</sup> The lack of infrastructure and general living conditions of rural areas, particularly affecting women, led to a consistent migration of population to urban areas. In order to target these problems in rural areas, programmes for rural development have been encapsulated by the Pakistan government in CPEC mega projects.<sup>5</sup>

In 2013, a Memorandum of Understanding was signed between the Punjab government and China Western Power Company<sup>6</sup>, for the construction of two 660 MW coal plants in Sahiwal, starting in 2015, with Unit 1 of the Coal Power Plant becoming operational in May 2017 and Unit 2 in June 2017.<sup>7</sup> The production of energy is an important factor in a country's economic progress and growth of its GDP, thus construction and development of energy infrastructure is often part of economic development programmes.

The Coal Power Plant project has had a significant role in changing women's lifestyle in Qadirabad, Sahiwal. Before this project, rural women in the area were mainly employed in the agricultural sector. Whilst on a macro-level the project is expected to contribute to rural development because of the construction of social infrastructure, hence positively impacting rural women's lifestyle, on a micro-level following the construction of the power plant the community has faced several issues such as occupational displacement. This is due to the coal plants being built on private agricultural land, hence creating unemployment in the agricultural sector. A major issue that emerges is the non-inclusion of local women in regulatory discussion, highlighting the need for more transparent and cohesive communication.<sup>8</sup>

*"The lack of infrastructure and general living conditions of rural areas, particularly affecting women, led to a consistent migration of population to urban areas."*

### The potential of CPEC for rural development

Women in rural areas of Pakistan have been active in the agricultural sector for a long time, not only through employment, but also through improving social status and allowing them to contribute to the family's income. However, the quality of life and living standards are limited by a lack of infrastructure and social facilities.<sup>9</sup> Whilst several development projects have been introduced by local government agencies, these are very rarely completed because of both domestic political and economic reasons.<sup>11</sup> This trend exposes the need of changing the approach towards these issues and prioritising investments in technological progress and infrastructure instead of only concentrating on a particular factor, in order to develop these areas in a more comprehensive way.<sup>12</sup>

In light of these considerations, it is clear that CPEC has the potential to play a fundamental role in infrastructure development in rural areas. On a macro level, CPEC's projects would allow the construction of social infrastructure, which are currently lacking. This would in turn provide access to education, healthcare and increasing economic opportunities, consequently improving the quality of life of local communities, especially of women.<sup>13</sup> Examples are the China-Pakistan Gwadar Faqeer Primary School<sup>14</sup> and the Pak China Friendship Hospital<sup>15</sup>, both established in Gwadar and built with Chinese support, in the framework of the BRI-related project in the Port of Gwadar.<sup>16 17</sup> Moreover, in Punjab, the area where the Sahiwal Coal Power Plant is established, University of the Punjab joined the China-Pakistan CPEC Consortium of Business Schools, promoting academic collaboration between the two countries.<sup>18</sup> Another example is the infrastructural upgrade of Punjab Tianjin University of Technology Lahore, including provision of machinery and equipment together with the establishment of a faculty exchange programme.<sup>19</sup> Different projects have also been proposed to improve healthcare in Punjab, such as the establishment of burn unit at Bahawal Victoria Hospital.<sup>20</sup> CPEC's projects have the potential of seeing stakeholders investing also in industrial projects building necessary facilities

*"On a macro level, CPEC's projects would allow the construction of social infrastructure, which are currently lacking."*

in the area, provided that Chinese and Pakistani authorities produce safe investment policies that encourage stakeholders in investing in these initiatives. The main target of the \$1,912.2 million<sup>21</sup> investment Coal Power Plant Project in Sahiwal is to supply the electricity shortage in close areas, by generating electricity through coal energy. Moreover, the project also includes the construction of a railway track connecting the project site with the village of Yusuf Wala<sup>22</sup>. These targets would facilitate the formation of opportunities for local businesses and would help women in initiating new businesses in those fields that would benefit from CPEC connectivity, such as education, infrastructure, the health sector and energy development. Moreover, it would improve the living standards of local communities, as electricity shortages are a major issue in the area.<sup>23</sup> The idea of CPEC bringing hope for the future is reflected in the perception of local women, as when interviewed on the topic, 19 rural women of 32 responded that they believed that CPEC would have created opportunities for them. However, transparency issues and an inefficient communication by authorities with local people remain, as 13 women answered that, whilst potentially CPEC could bring opportunities, they would not benefit from them due to lack of trust in authorities, which "have never listened to their voices".<sup>24</sup>

### Lifestyle change of rural women: critical aspects

Despite its huge potential in improving rural development, on a micro-level the Coal Power Plant Project in Sahiwal does not efficiently consider social norms of rural communities, in particular women. Whilst women substantially contribute to the economic and social status of their families, their status is linked to the man they share the household with and who normally

Occupational change	Before the construction of plant		After the construction of Plant	
	Respondents	Percentage	Respondents	Percentage
Dairy cattle breeding	40	66.6%	10	16.6%
Maids	0	0%	25	41.6
Tailoring	6	10%	22	36.6
Farming	14	23.3%	3	5%
Total	60	100%	60	100%

Table 1: Occupational change  
Image Courtesy: cited in Komal Niazi, Guoqiang He and Shakir Ullah, 2019

owns the lands. Agricultural work is not only an employment, but also connected to social status.<sup>25</sup> Moreover, it is one of the few activities where women can meet and spend time together without having to stay with men and this creates an empowering social environment. In the village of Qadirabad the economic and social development of the area has been negatively impacted by the construction of the Coal Power Plant, especially affecting women’s occupational status. The construction of the power plant implied a decrease in availability of agricultural lands and consequently the agricultural production of this area dropped.<sup>26</sup> The project did not include jobs being specifically allocated to women who were unemployed, thus increasing unemployment among rural women who used to rely on the agricultural sector for income. Together with decreasing household incomes, this caused a situation of precariousness, where some women began to work as domestic servants or other low-wage roles. This has not enabled the provision of a social environment and the stability associated with agricultural work that previously maintained the nutritional sustainability and income for families and has removed previous social spaces that served to empower women in the community.

This can be seen most clearly through the occupational change among local women who used to work in dairy cattle breeding (66 per cent), but lost their job due to sales of lands to the government, resulting in lack of space for keeping livestock.<sup>27</sup> Farming and agricultural activity was not only a source of employment for women, but also an indicator of social status.<sup>28</sup>

However, because of the unemployment in the agricultural sector caused by the loss of lands for the construction of the coal plants, many of them ended up working as domestic maids or in tailoring. This meant a decrease in income and a perceived loss of social status and identity. An important issue which arises is the authorities’ lack of transparency on the project’s processes and the failure of an efficient communication with local communities. These communities have been affected by CPEC’s projects, but have not had the chance to benefit in development projects such as the Coal Power Plant Project in Sahiwal. This results in economic and social losses faced by local people, in particular women.

Conclusions and recommendations

On a macro-level, CPEC would create useful opportunities for rural women in Pakistan and, more generally, for rural development (lack of infrastructure, quality of life). However, women’s social status and quality of life will not be directly improved until CPEC’s projects develop the necessary social infrastructure. On a micro-level, as the case of the Sahiwal Coal Power Plant Project shows, there is a lack of consideration of rural social norms and community organisation, which generates unemployment, precariousness, a lower income, a perceived loss of social status and identity and a struggle to build a sustainable livelihood. This is caused by lack of transparency, failing communication and lack of inclusion of the local community in development projects as the process is quite centralised. The following policy suggestions will be helpful to improve the transparency of projects and

communication with local people, together with minimising displacement and encouraging women’s participation in development projects. It is recommended that the government:

- Decentralises the management of development projects in order to have more efficient communication with local communities and involve them in the rural development process. Moreover, this would increase the level of transparency, consequently improving rural communities’ trust in authorities. Involving local communities in the decision-making process would also help in understanding rural social norms and reduce mistakes such as those occurred in the Sahiwal Coal Power Plant Project, which generate unemployment and precariousness among women.
- Introduces concrete measures to oppose gender discrimination and include women in the decision-making process, such as gender quotas and the creation of a unit conducting gender needs analysis for CPEC projects. These types of solutions have been shown to improve equality and empower women.<sup>29 30</sup>
- Prioritises rural development by leveraging investor interest in long term success of Coal Project, and earmarking revenues from industrial projects (such as Sahiwal Coal Plant) to invest in social infrastructure projects (schools, hospitals etc.), which would have a positive and concrete impact on rural women’s quality of life. This would incentivise the creation of women-led local micro-businesses.
- Improves connectivity between rural areas and urban centres, allowing for better access to urban infrastructure and services. One example is the track connecting the coal power plant project site with the village of Yusuf Wala.

## Carbon Spillage of CPEC: A Lingerin Threat to K.P.K Province of Pakistan

Abdul Wahid Khan

*Pakistan has not fully considered the environmental impacts of the China-Pakistan Economic Corridor (CPEC), and this study highlights that the cutting of trees for the road construction and an exponential increase in the transportation will put Khyber Pakhtunkhwa (KPK) province at a serious risk of melting of glaciers, flooding and other hazardous events due to the spillage of carbon in the environment that is already extremely fragile. This article entails the discussion of a robust plan with a focus on the future of the environment to minimise the carbon spillage of CPEC.*

### Introduction

CPEC is the biggest external mega-project of the Belt and Road Initiative that aims to improve the infrastructure, economy and energy sector of Pakistan while giving China the benefit of access to regions like Africa, Middle East and Europe through the central geographical location of Pakistan.<sup>1</sup> While this project has been presented as a game-changer for Pakistan for the above-mentioned reasons, the environmental impacts of CPEC are neglected in place of political and profit seeking interests. This comes as a huge surprise because of the fact that Pakistan has moved up to number five in the list of the country's most vulnerable to climate change in 2020 according to the annual report of the Global Climate Risk Index, and climate change has resulted in the

loss of 9,989 lives, \$3.8 billion worth economic loss and witnessed 152 extreme weather events from 1999 to 2018 in Pakistan.<sup>2</sup> In light of such an alarming situation, this study highlights the carbon spillage due to CPEC in the province of KPK., one of the most vulnerable regions to climate change globally. This is because of a number of geographical reasons such as high mountain ranges leading to melting glaciers and flash floods from monsoons and other seasonal rains. This case study focuses on the spillage from the transport system including the cutting of trees for road construction. The term 'spillage' may seem rather unusual to use for carbon, but considering the fact that the atmosphere does not have the capacity to contain this enormous unplanned emission from the heavy trucks and other traffic that will pass through KPK, while also crushing thousands of trees on the way<sup>3</sup>, "spillage" is the perfect analogy for the CPEC carbon emission potentially causing hazardous outcomes. This paper suggests that although it is already too late, the project must ensure switching to clean means of energy and transport, plant seven trees for every tree cut as a collaboration of Ten Billion Tree Tsunami and attract the use of Chinese expertise on its Great Green Wall (GGW) project. Furthermore, making alternative routes for road(s) that cut through mountains closer to glaciers and regulate the traffic to minimally influence the local people and agricultural land will decrease the carbon spillage in KPK and throughout the country.

### Understanding the Environmental Challenge of CPEC Road and Transport:

Pakistan and China have had long-lasting ties and the mutually benefiting relationship has resulted in projects like the Karakoram Highway

*"While this project has been presented as a game-changer for Pakistan for the above-mentioned reasons, the environmental impacts of CPEC are neglected in place of political and profit seeking interests."*

in 1972 and CPEC in recent times as part of the BRI. As a major infrastructure project, CPEC aims to develop 2700 km network of roads including the reconstruction of KKH (254 km), Peshawar-Karachi Motorway (392 km) and N-30 (110 km), and up gradation of N-50 Phase-I (210 km) at an estimated investment of \$34 billion.<sup>4</sup> This huge network of roads will connect seaports in Gwadar and Karachi with Northern Pakistan as well as points further North in Western China and Central Asia.<sup>5</sup> The road will enable cargo transport, minerals, energy production and commercial activities. Although there is the lure of huge economic and infrastructural benefits from CPEC, a well-planned project that is environmentally feasible is necessary, or else it would be problematic for Pakistan. The road that enters KPK from Gilgit Baltistan at Sazin, Kohistan passes through Mansehra, Abbottabad and Haripur districts on one side and Dir, Chikdara starting from the district of Chitral, which has recently been added to the alternative route as well, exiting at Sarai Gadai. Constructing a road for heavy traffic along these places is surely to result in a significant increase in carbon spillage due to cutting of trees and exponential increase in transport, as explored below.

*"Although there is the lure of huge economic and infrastructural benefits from CPEC, a well-planned project that is environmentally feasible is necessary, or else it would be problematic for Pakistan."*

### Cutting Trees for a Greater National Good?

CPEC is a hyper-phenomenon in Pakistan with many paradoxes: it is everywhere and nowhere, it is extremely beneficial but also devastating to the environment, etc. A lot of people have heard about CPEC and there are constructions in different parts of the country with an estimated 2,442 km (1,517 mi) of resource roads<sup>6</sup>, but it does not have platforms or mechanisms that can enable locals to interact with the project's decision-making process, and track the construction of the infrastructure. It is due to this lack of clarity and limited information on CPEC that even a critical study on the project will have to use some speculations.<sup>7</sup> Nevertheless, it is clear that the construction of the road through KPK will come at the cost of cutting thousands of trees thus causing a more carbon spillage. A single grown tree has the capacity to absorb about 50 pounds of CO<sub>2</sub> annually and help



directly in climate mitigation.<sup>8</sup> Trees act as the container to stop the carbon from spilling into the atmosphere, if not cut. Unfortunately, according to reports<sup>9</sup>, more than 13784 trees were already cut from the Oghi and Darband forest areas of Mansehra district, along with different areas in Battagram, Kohistan and Torghar districts and 10075 trees were cut down in 28 villages of lower Hazara in the KPK province until 2017. The demolished species include pine, mulberry, populus ciliate, scrub, other fruit trees and local species. In many parts of the province, like Chitral, the trees are already being cut for fuel due to the unavailability of energy resources. Further deforestation for CPEC will make the region extremely vulnerable as it hosts more than 500 glaciers.<sup>10</sup> Furthermore, the very narrow villages will see their agricultural lands, pastures, mountains, and homes getting cleared for this very wide road system, thus threatening the lives of local humans and More-than-Humans<sup>11</sup>. Chopping down of trees is prohibited under Cutting of Trees (Prohibition) Act, 1975, but the conservation officers seem fine with cutting of trees for CPEC because of its “national

importance”<sup>12</sup>, and the question is if this larger national good is worth the cutting of trees and carbon spillage which in the long term could potentially destroy the province of KPK through major flooding and other hazardous events.

#### Leaving the Carbon for Moving the Transport

The diesel and petrol-based transport system in Pakistan is already a major contributor to the total of 342 million metric tons of CO<sub>2</sub> as estimated by word bank in 2012.<sup>13</sup> About 26 per cent of the total investment on CPEC is going towards the transportation sector<sup>14</sup>, and since this road is enabling international transport, the number of heavy trucks and traffic of other vehicles will be more than doubled after completion of the project in KPK. It is expected that more than 7000 trucks will go through KPK on a daily basis, releasing up to 36.5 million tons of CO<sub>2</sub> on the way to Gwadar.<sup>15</sup> This puts KPK in a very tough position specifically because even if the global warming is kept under 1.5 C, more than one third of the glacier volume in Hindu Kush Himalayan region will be lost by 2100 and if the average temperature hits 2C, 49 per cent of the volume



of the glaciers will disappear according to a report by the International Centre for Integrated Mountain Development (ICIMOD).<sup>16</sup> This kind of carbon spillage can push Pakistan to the top of countries vulnerable to climate change because the increase in GHG will eventually melt the glaciers in KPK, causing major catastrophic floods, destroying valuable real estate, and at its peak costing lives and debilitating the economy.

#### Conclusion and Recommendations

Pakistan has signed up for a mega-project of road building that runs through the most vulnerable mountains in Gilgit Baltistan and KPK, also known as the roof of the world, and if the carbon spillage of CPEC from cutting of trees and transportation is not planned properly; it will result in an ecocide that is fatal not just to the province but for the whole country. The complication arises from the fact that even the local people want the road in a hope for better connection to cities and economic development but it is important to respond to the environmental risks proactively, before the losses are irreversible. It is for this reason that CPEC needs a more robust and comprehensive strategy for implementation, giving carbon spillage related risks the highest priority. Since the current-PTI government is already inclined towards environmental protection in the country through projects like the TBTT, there has never been a better time to re-evaluate the environmental complexities of CPEC that will best represent the political ideology of PTI.

The following policy suggestions will be helpful in minimising the carbon spillage:

- Helping the locals meet their energy needs in KPK by introducing smaller hydro-power stations as part of the CPEC project, thus reducing existing deforestation for fuel.
- Drawing on the detailed study of Ul-Haq et al., a transportation policy has to be developed that will ensure electrification of both heavy and normal vehicles under CPEC project and develop a clean energy infrastructure and facilities all over the country. This could involve heavy taxation on diesel and petrol run vehicles on the road to minimise carbon spillage.
- Introducing a comprehensive strategy and binding policies that govern future and current infrastructure foreign infrastructure projects such as the CPEC, ensuring necessary environmental protection.
- On an immediate basis, start the plantation of at least seven trees near the highway for all the trees that have already been cut or are to be cut<sup>17</sup> through a collaborative effort of TBTT and Chinese expertise on its GWG project.
- Minimising the flow of heavy traffic on roads that cut through fragile regions, which are close to glaciers in the mountainous parts of KPK, such as in Chitral.

# Conclusion

Maryam Altaf

## Conclusion and Policy Recommendations:

Given the diverse nature of the projects that the four case studies have covered, and the expanse of the CPEC itself, it has been difficult to work out a blanket strategy or conclusion for a more sustainable and socially equitable CPEC 2.0. However, the case studies have concluded that in order to meet certain sustainable development goals - of reaching environmental sustainability and social equity within the CPEC projects, there needs to be a way to improve transparency and communication with, and amongst stakeholders on the ground in Pakistan. Apart from having already met the UN SDG-13 for climate action, the case studies also highlight the need for further alignment with some of the other SDGs such as SDG-7 for clean and affordable energy; SDG-11 for sustainable cities and communities; SDG-5 for gender equality. None of the SDGs are stand-alone initiatives and in fact tie in closely with some of the other suggestions hence it would be crucial to push for ways in which they can be more beneficial. The following are some broad considerations:

## Stakeholders – China and Pakistan

- Thorough and transparent **project feasibility studies** must be conducted regularly by considering examples from successful local and international BRI projects, Project planning must ensure that economic policies do not come at the cost of the environment.
- CPEC projects must consider meeting **local area requirements** before any larger plans are set in place for implementation.
- The Chinese State could help **meet some of the costs** for greener infrastructure and energy projects while maintaining their non-interference principle.

## Local Stakeholders in Pakistan

- Must lessen the bureaucracy and red tape involved across different boards at the provincial and federal level.
- The decentralization of management **authorities** involved in the various development projects could facilitate the involvement of members from the respective local communities.
- The national government must **push back against the interference** of political agendas into economic policies to ensure policies and regulations that boost confidence and enhance competitive economic investment.
- The national and local governments must introduce a **binding environmental policy** for local and foreign investments into infrastructure projects in the country.



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Maryam Altaf

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## Developing a Vision for the Second Phase of the China-Pakistan Economic Corridor

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## CPEC’s impact on rural women’s lifestyle change: the Sahiwal Coal Power Plant Project Initiative

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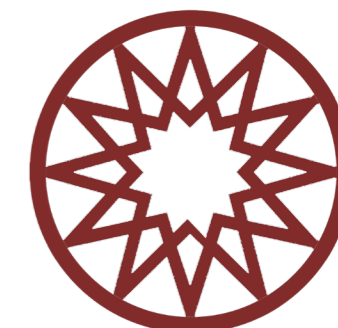
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