

Building Back A Better CPEC

Post-COVID Sustainable Recovery Perspectives for the China-Pakistan
Economic Corridor

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Introduction

As Oxford University Silk Road Society moves from strength to strength, we are extremely happy to introduce our second report focussing exclusively on the China-Pakistan Economic Corridor (CPEC), the flagship initiative of the BRI.

To quote CPEC Project Team Leader, Sabriyah Saeed, "Since the initiation of the China-Pakistan Economic Corridor (CPEC) in 2013, both China and Pakistan's governments could not have foreseen that of the many challenges anticipated in the implementation of such an ambitious initiative, a global pandemic would be one of them." Building on our work in "CPEC 2.0.", this current report aims to dig into how exactly CPEC can and should respond to these unprecedented times, suggesting pathways through which Pakistan can build resilience and transform its post-pandemic economy as narratives of "building back better" are growing globally, including in the mooted flagship Western BRI alternative, "Build Back Better World".

The report is made up of six case studies, which analyse various aspects of CPEC's current condition, and what it might become. From offering China's claimed "Ecological Civilization" (Shēngtài wénmíng, 生态文明) as an overall green CPEC framework, to mapping out futures for SEZ investment in Pakistan, this report aims to draw on the intellectual and disciplinary diversity of the University of Oxford's highly talented students, through which we offer a kaleidoscope of valuable, data-driven research to both a general and specialist audience.

Many thanks to all of our analysts, and Sabriyah Saeed our Team Leader, for their ambition, creativity, and most of all for the exceptional quality of academic work they have produced. Their abilities and efforts are demonstrated in the quality of this report. We hope that you enjoy reading this report as much as we have enjoyed researching it.

Ben Hales and Jasper Verschuur,
President and Vice President
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Building Back A Better CPEC

Sabriyah Saeed

Introduction

Since the initiation of the China-Pakistan Economic Corridor (CPEC) in 2013, both China and Pakistan's governments could not have foreseen that of the many challenges anticipated in the implementation of such an ambitious initiative, a global pandemic would be one of them. COVID-19 has significantly thwarted the progress that Pakistan had envisioned for itself, particularly through CPEC, with a collapse in economic activity, half the working population experiencing severe job or income loss¹, and an unsustainable debt situation following increased borrowing. This policy report seeks to provide multidimensional perspectives on leveraging the COVID recovery process as a window of opportunity to promote the long-term, sustainable growth of CPEC and, subsequently, of Pakistan. Sustainability is examined in the following chapters through environmental, social and economic lenses, which are inextricable from one another. Ultimately, the findings of each chapter - although diverse in approach - convene over three common conclusions: (a) that there are notable discrepancies between the crafting of existing sustainability policies and the ground reality which they endeavour to reflect, as well as their implementation in practice; (b) that meaningful and effective engagement with local stakeholders in sustainability initiatives is often insubstantial; (c) that for developing economies like Pakistan, long-term goals need to be central to the recovery process beyond short-term economic gains. This report proposes various solutions to address these difficulties, which will allow CPEC to meet its ambitions of becoming a model green Belt and Road Initiative (BRI), as China's flagship BRI project. Each chapter focusses on different economic mechanisms - from COVID stimulus packages to debt-for-nature swaps - as vehicles through



which sustainability policies can be effectively implemented in the recovery process. As such, “Building Back a Better CPEC” envisions a route which leverages the potential that CPEC presents to Pakistan’s recovery, as well as the country’s long-term prosperity.

Context

Oxford University Silk Road Society’s previous report - “CPEC 2.0.” - illuminated Pakistan’s accelerated success in meeting the United Nations Climate Action Sustainable Development Goal (SDG), ten years in advance of the 2030 target. The integration of the SDGs into the fabric of Pakistan has manifested through multitudinous initiatives: the Protected Areas Initiative, Ten Billion Tree Tsunami Programme, Recharge Pakistan, Plastic-Free Pakistan, Clean Green Pakistan.² These sustainability initiatives have been interrogated by critics who are wary of the potential ‘greenwashing’ of CPEC projects and indeed, past infrastructure projects have warranted this sentiment. This report addresses such discrepancies, from the investments in additional coal plants, insubstantial considerations of social and environmental impact in CPEC initiatives, to Pakistan’s unsustainable debt burden to China, which have, in the past year, become all the more pressing questions as a result of the

impacts of the pandemic. For developing BRI countries, COVID-19 has marked a momentum gathering behind recovering more sustainably³ or ‘building back better’⁴; Pakistan, notably, has started to incorporate environmentally and socially conscious policies into its COVID economic recovery plans.⁵

In the wake of Pakistan’s pandemic-induced economic decline, which saw GDP growth contract by an estimated 1.5% in FY20,⁶ the Pakistani government and CPEC stakeholders are at risk of relying on quick, short-term fixes to immediate problems, undermining the overarching agenda for a sustainable CPEC. Whilst rescue spending is imperative for relief to the immediate health and social crises, protracting this type of spending could set Pakistan back.⁷ Spending can instead be geared towards instilling sustainable practices through COVID-stimulus packages, which either originate domestically from the Pakistani government, such as Imran Khan’s Green Stimulus, or from external sources. The Asian Infrastructure Investment Bank (AIIB) and Asian Development Bank (ADB), for example, recently co-financed the COVID-19 Active Response and Expenditure Support (CARES) package to support the Pakistani government’s management of the socio-economic impacts of the pandemic.⁸

“Building Back a Better CPEC” envisions a route which leverages the potential that CPEC presents to Pakistan’s recovery, as well as the country’s long-term prosperity.”

However, as the following chapters bring into relief, ‘green’ branded initiatives or policies may satisfy sustainability targets in a superficial sense, but fall short of ensuring any meaningful or appropriate sustainable impact that has longevity.

It is integral that Pakistan implements long-term sustainability into its recovery process and reflects this in CPEC projects, since the repercussions are significant. An article in *Nature* highlights the failure of governments in factoring in the effect of climate change on their ability to pay off their immense debts accrued from pandemic borrowing.⁹ Not investing borrowed capital into greening the economy nor assessing and disclosing climate risks could negatively affect the ‘credit-worthiness’ of a government for foreign lenders in the long run. There are also implications for interest rates on sovereign bonds in accordance with the perceived higher risk of investing, particularly in the context of potential climate shocks. This is salient for Pakistan, as a nation that is particularly vulnerable to the damaging brunt of climate change (according to the Global Climate Risk Index¹⁰), and subsequently heightened climate shocks. Effective, implementable, and transparent policy frameworks are therefore key for Pakistan’s recovery strategy. Solutions that are analysed, proposed and interrogated in this report range from COVID stimulus packages, debt-for-environment swaps, Special Economic Zones and investments through foreign multilateral banks.

Our conclusions find that the sustainability policy and legal frameworks employed in these respective mechanisms necessitate

better synergies with either their contexts, the financial mechanisms to which they are attached or across the governmental bodies which implement them, particularly on a federal-provincial level. Furthermore, the ‘Clean Green Pakistan Movement’, which was announced in October 2018 by Prime Minister Imran Khan, outlines itself as a vision which encompasses “institutional strengthening” at a federal level, but importantly a centring of citizens who will also “[make] themselves equally accountable and responsible”¹¹ for Pakistan’s sustainability. The unevenness of this bilateral relationship between citizen stakeholders and the government is something which this report additionally finds to be a common issue. The following chapters illuminate that policy frameworks must be binding to be effective, must possess viable implementation strategies (without which policies are defunct), and must be crafted to accurately reflect the input and lived reality of local community stakeholders, as well as the specific regional and environmental needs.

Chapters

Whilst there are numerous green recovery pathways that can be examined, this report treats those most pertinent and applicable to CPEC and Pakistan’s national agenda. The six chapters of this report explore the following: (i) China’s concept of Ecological Civilisation; (ii) the social risks and opportunities of COVID stimulus packages; (iii) debt-for-environment swaps; (iv) the implementation requirements for effective SEZs; (v) sustainability frameworks of foreign multilateral bank investments; (vi) the phase-out of coal plant investments.

Uniyal’s chapter assesses the viability of China’s ideology of Ecological Civilization as a potential framework through which to implement a holistic sense of sustainability across CPEC projects, by examining the synergies between Pakistan and China’s ‘greening’ agendas. Elmoussati’s section of the report focusses on the potential social and environmental incongruities and opportunities of COVID-stimulus packages,

through looking specifically at the ‘Green Stimulus Initiative’, a package loan from the World Bank to Pakistan. She questions whether the provision of opportunities comprising these recovery packages come at the expense of other sustainability concerns. Jeffery considers how Debt-for Environment swaps can best provide a multi-pronged strategy for debt relief, environmental conservation and addressing the current social and health crisis. Following this, Lusted’s chapter illuminates the challenges of implementation frameworks of SEZs in Pakistan; gender inequities, interprovincial and intergovernmental disparities, and ensuring the survival of small-scale businesses, emerge as central focal points for consideration. Coleman addresses the sustainability frameworks of international multilateral banks as a promising alternative to government-government lending, by examining the particular investment policies of ADB and the AIIB in co-financing arrangements. Finally, Yang questions whether COVID stimulus packages will accelerate or hinder Pakistan’s attempts to phase-out investments in coal power in Pakistan.

Greening the CPEC through the Chinese Vision of Ecological Civilization

Krittika Uniyal

The discourse surrounding efforts to confront ecological destruction and to avoid catastrophe has been dominated by the notion of sustainable development, primarily perceived as a Western solution. China’s answer to these challenges is Ecological Civilization, a core concept within Chinese politics, and is increasingly presented, not only as a response to environmental degradation in China, but also as a global vision to be implemented throughout the BRI.

Introduction

Infrastructure projects under CPEC have entered their second phase wherein now the focus has shifted towards environmental responsibility; a greener economy through green channels of production, and a green transportation system within Pakistan. These trends similarly align with the shifts observed within China’s domestic policy towards a green economy over the last two decades.

In 2017, the United States’ withdrawal from the Paris Accord (a withdrawal which has since been reversed) allowed China to project itself as a committed player in tackling climate change and to plan for global environmental leadership.¹ In September 2020, at the UN General Assembly, China committed to their CO2 emissions peaking before 2030, carbon neutrality before 2060, and to incorporating net-zero goals in their Five-

Year Plan.² For this, China has been undertaking numerous structural reforms and has adopted the ideological framework of Ecological Civilization (生态文明, *shengtai wenming*). Ecological Civilization is a philosophical concept derived from the Confucian and Daoist tenets, providing a solution to transforming the economic development style of China. The concept, however, has led to conflicting interpretations. Given that economic recovery after the COVID-19 pandemic has raised new views on the sustainability of large-scale infrastructure investments, it is debatable how well the original concept of Ecological Civilization assimilates to the current situation. This chapter investigates the idea of Ecological Civilization vis-à-vis China’s environmental development style and the viability of its coalescence within CPEC.

Ecological Civilization and its relevance in China’s BRI

President Xi called for the Belt and Road Initiative (BRI) to be “green, healthy, intelligent, and peaceful”, nodding to the fact that it cannot be disregarded that the BRI’s vast scale ought to have irreversible and progressive ecological implications.³ The inclusion of green policies based on Ecological Civilization is a direct response to counteract the projection that the BRI is and will become “the riskiest environmental project in history.”⁴ Although there isn’t an exact definition of Ecological Civilization, its construction complements the core dimensions of Sustainable Development by the Brundtland Report,⁵ covering intertwined aspects of society, environment, culture, and economy with additional features of Chinese political civilisation.⁶ In 2018, the ideology became a constitutional principle pervading “all aspects of economic, political, cultural, and social progress.”⁷

Anthropologist Mette Halskov Hansen and her colleagues have described Ecological Civilization as a “new kind of Communist Party led utopia wherein market economy and consumption continue to grow, and technology and science have resolved the challenges of ecological

damage.”⁸ The article, “*China’s new Eurasian ambitions: the environmental risks of the Silk Road Economic Belt*”, explores these developments and argues that China’s domestic green policies do not imply that its projects outside its borders will be green too. In fact, China could use the BRI to conveniently export its physical waste, fossil fuel-based economy and high-emission manufacturing industries to the developing countries that comprise the BRI,⁹ whilst meeting its domestic targets of a greener and low carbon economy.¹⁰ Furthermore, in 2020, *Belt and Road Through My Village*, shared the experiences of populations living close to BRI Projects in Asia - notably, CPEC projects have huge and direct implications on the lives of the people working or living in close proximity to project sites. The locals fear the consequences of contaminated air and water on their soil and life.

During the same year, the Chinese Ministry of Ecology and Environment (MEE) released the *Green Development Guidance for BRI Projects Baseline Study Report* (*Green Development Guidance*) published by the BRI International Green Development Coalition, and based on the 2017 Guidance on *Promoting Green Belt and Road*¹¹ and the *Belt and Road Ecological and Environmental Cooperation Plan*.¹² The Green Development Guidance outlined a system, formerly known as the Traffic Light System, which would identify and evaluate the implications of the BRI. For instance, ‘red’ signified something as environmentally harmful, ‘yellow’ equated to environmentally neutral, and ‘green’, environmentally beneficial. The report suggested a project evaluation mechanism to improve the performances of

these projects through the Traffic Light System, alongside recommending requirements of a stricter mandate from the government, and more rigorous financing disclosures.¹³ This is an elaborate and detailed report, but at this stage, it is merely a non-binding policy recommendation to improve green standards in China’s overseas investments.

Although the *Green Development Guidance* is non-binding in practice, for CPEC projects, it could assist in formulating and implementing holistic policies for mitigating environmental risks, as well as contribute to the sustainability frameworks for Green Stimulus investments in CPEC projects. Attention should be paid to any implementation of a non-binding policy framework, regardless, since there runs the risk of investments being promoted as ‘green’, but not materialising as so in practice.

Green Pakistan for a Greener China?

Hu Jintao’s idea of retaining a “beautiful homeland and blue sky” whilst building a “harmonious socialist society” is reflected in CPEC projects which are modified to retain the “unimaginable beauty”¹⁴ and natural landscapes of the given region, channeling the characteristics underpinning Ecological Civilization. The province of Gilgit and Baltistan, which hosts large CPEC projects, is where the Imran Khan-led government has launched a parallel economic drive for eco-tourism.¹⁵ The 2014 afforestation drive - Ten Billion Tree Tsunami Project - offering debt-for-nature swaps in Khyber Pakhtunkhwa¹⁶ further demonstrates Pakistan’s contributions towards tackling global warming. The ‘Pak-China Green Zone’ Initiative

“We have emphasized the need to put people first and to pursue comprehensive, balanced and sustainable development; we have called for building a harmonious socialist society and speeding up ecological progress, and we have adopted overall implementing steps for advancing the cause of socialism with Chinese characteristics.”

Hu Jintao

18th Party Congress, November 2012

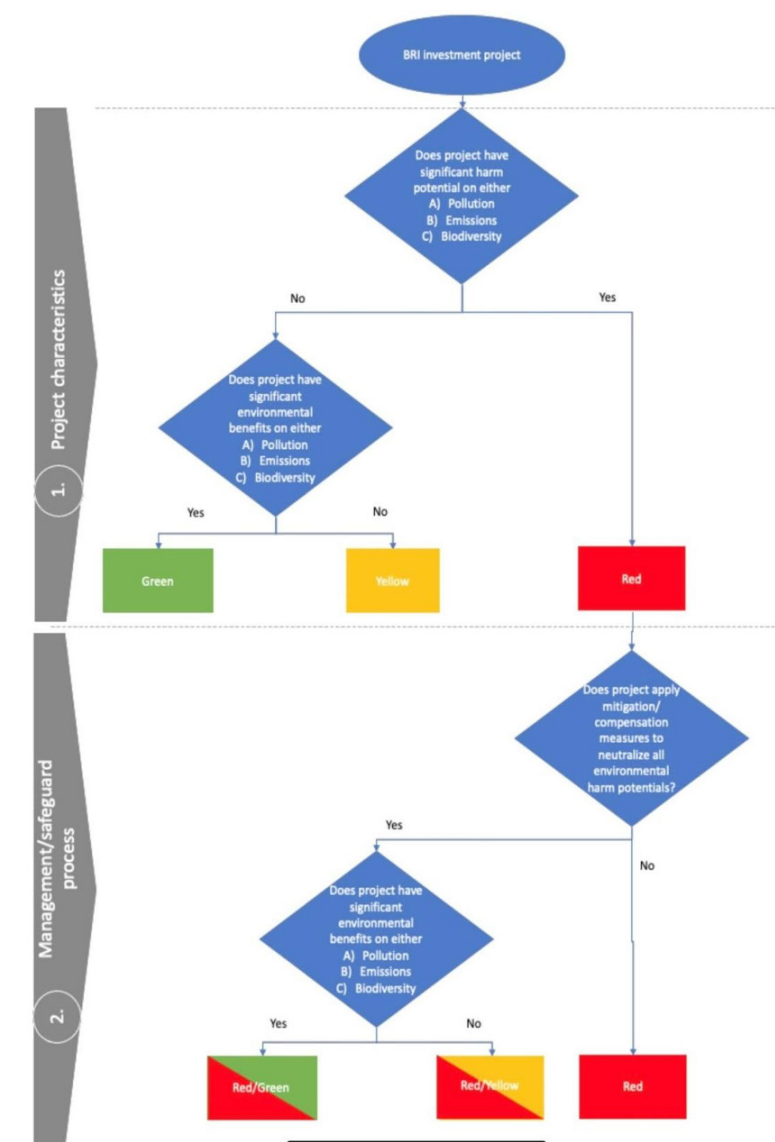


Figure 1: Project Classification Process for the BRI Green Light System

Image Courtesy: Published in the *Green Development Guidance for BRI Projects Baseline Study*, 2020

and the sovereign guarantee, ‘Green Bonds’ for hydropower projects, present other steps in the same direction.

China aims to turn CPEC into a blueprint for a green BRI¹⁷ and has extended support through post-COVID green recovery packages, such as the Green Stimulus Initiative. Pakistan, too, has projected its vision of ‘Clean Green Pakistan’ in alignment with the green China vision. On the fifth anniversary of the signing of the Paris Climate Agreement, Pakistan announced plans to replace two coal power projects with hydroelectricity and pledged that by 2030, 60% of all energy

should come from renewable sources.¹⁸ On the other hand, CPEC CO2 emissions are calculated to be 51 million metric tons annually, which is 10.3% higher than Pakistan’s total electricity and heating emissions,¹⁹ ultimately increasing Pakistan’s dependence on coal.

A study by Pakistani scholars asserts that the absence of an assessment of environmental implications of CPEC projects and a lack of management of these environmental risks will turn Pakistan into a major CO2 contributor - this could worsen Pakistan’s rank in the global climate risk index after completion of CPEC projects.²⁰

These projections can be reversed or at least slowed down through greater investment in clean energy and low-emissions infrastructures, but only if certain conditions are met, such as binding environmental assessments and climate stress-testing of projects in line with the Paris Agreement.

Conclusion

China has presented Ecological Civilization as an ideological rival to the Western frameworks of sustainability, a rival which has ambitions - beyond domestic China - to establish new norms across the BRI's Global South. Beyond promoting Ecological Civilization as an idea through Clean Green Pakistan, CPEC projects would benefit from the scientific and technological support provided through Ecological Civilization's flexible framework for effective environmental governance. However, for this route towards CPEC sustainability to have any significance or be useful, the lack of a legally binding law vis-à-vis the inclusion of Ecological Civilization frameworks into CPEC projects should be addressed. The lack thereof could lead to a centralised and non-participatory approach to environmental policy for the BRI member countries.

Policy Recommendations

- Render the environmental guidelines from the Chinese MEE on *Building the Green Belt and Road* binding and implementable. Doing so will help counter double standards in environmental norms and oblige Chinese companies to follow the guidelines even in host countries, addressing criticism of cheaply selling low-efficiency coal technology abroad.
- For China's Ecological Civilization to become a credible international environmental policy, it must have a standard green policy domestically, as well as one for BRI member countries, which adapts to the domestic laws of these host countries.
- As a guiding policy for greening CPEC, there should be some flexibility and scope to include other civilisations and cultural ideas within the green BRI policy structure. This will help the member countries to formulate new, diverse, and inclusive versions of Ecological Civilizations.

COVID Green Recovery Packages: the Sustainability Risks and Opportunities in People-focussed Projects

Bushra Elmoussati

Whilst COVID green recovery packages have encouraged a directional shift of the economy towards sustainable growth by providing opportunities for people in Pakistan, there are also social and environmental risks that complicate these very projections of sustainability.

Introduction

CPEC is a long-term project, extending beyond 2030, and is divided into three phases with Early Harvest Projects (EHPs) as the first phase. 11 out of 22 EHPs have been completed thus far¹, and look to address Pakistan's energy shortfall of 5,000 megawatts, as well as to create an environment which boosts trade and mobility. Pakistan, however, has severely felt the social and economic shocks of COVID-19; total revenue has declined by more than \$6 billion, contributing to Pakistan's fiscal deficit by 2% and unemployment has increased in formal and informal sectors. Faced with the pressures of a health crisis on top of a vulnerable environment and budgetary deficit, the pandemic has strengthened a desire in Pakistan to become more environmentally and socially friendly. A solution to these pressures is the Green Stimulus Initiative, a package announced in April 2021, which consists of a \$120 million loan from the World Bank², supporting attempts to revitalise the Pakistani economy alongside Imran Khan's vision for 'Clean Green Pakistan'. This chapter not only explores how the Green Stimulus

"Faced with the pressures of a health crisis on top of a vulnerable environment and budgetary deficit, the pandemic has strengthened a desire in Pakistan to become more environmentally and socially friendly."

Initiative has encouraged a directional shift of the economy towards sustainable growth by providing opportunities for people in Pakistan, but also interrogates the equitability of these sustainability practices and policies at a grassroots level.

The completion of the EHPs mark a shift towards its Phase Two, which targets people-focused (or social sector) projects. These align with the UN's Sustainable Development Goals (SDGs), which can be seen through the creation of vocational training institutes (SDG 8) and agriculture, and poverty alleviation projects (SDG 1 and 2).³ People-focused projects aim to create an enabling environment for the employment of Pakistanis through several investment projects, and emerging infrastructure trends shaping Asia's post-COVID recovery reflect the need for the infrastructure sector to manage the short-term challenges of the pandemic, whilst keeping the long-term in mind. In this sense, recovery-centred public policy must be aligned with future climate objectives whilst supporting people-focussed projects. Furthermore, research shows that almost 50% of global GDP is directly dependent on the natural environment, and a study regarding the pandemic also notes that damaged ecosystems have a causal link with a rising incidence of infectious diseases⁴. It is, therefore, evident that the appropriate level of attention to environmental sustainability must be reflected in CPEC related policy decisions. Discussions of people-focused projects stirred during the second BRI forum in May 2019 when China allocated \$1 billion for 27 new projects, falling under health, education, agriculture, human resource development and



Figure 2: Volunteers at the Billion Tree Tsunami Plantation drive
Image Courtesy: Ministry of Climate Change, Pakistan



more.⁵ So far, 70,000 Pakistanis have gained employment through CPEC projects, but the infrastructure sector must holistically adjust to changes in demography, climate change, and digital transformation. This raises the question of how Green Stimulus Initiative ('Green Stimulus') projects can complicate sustainability trajectories if not implemented in a coordinated manner with the integration of sustainability factors into investment decisions. To align the infrastructure sector and public policies with socially and environmentally sustainable factors (green infrastructure), there must be effective engagement with all stakeholders involved, particularly local communities, who will inevitably be the winners or losers of any implemented (or non-implemented) policies.

1) What Will COVID Recovery Packages Look Like?

Imran Khan's vision for Clean Green Pakistan attempts to avoid the risk of locking in a carbon-intensive infrastructure whilst supporting CPEC's people-focussed projects. In December 2020, at the Climate Ambition Summit held to mark the fifth anniversary of the Paris Climate Agreement, Imran Khan announced a moratorium on coal, calling a halt to a Chinese-backed coal power boom.^{6,7} Whilst the question of Pakistan's phase-

out of coal is a complex and conflicted matter, the redirection in thinking from coal projects has worked to encourage commitments for green growth and green financing. Pakistan's current five-point plan, proposed by Imran Khan to alleviate world poverty, is built upon the investment in nature: 10 Billion Trees Tsunami, Clean Green Pakistan Initiative, a plastic ban, an electric vehicles policy, and the Recharge Pakistan initiative. The Green Stimulus builds on this premise of trusting in nature with its clear focus on two objectives: protecting nature and creating green jobs. As part of these objectives, the focal areas for intervention are afforestation, reviving protected areas, and improving urban sanitation to generate employment opportunities quickly. Poor and vulnerable women have significantly felt the social and economic shocks brought by the pandemic.⁸ Thus, it is no coincidence that the targeted beneficiaries for the Green Stimulus are unemployed women, youth populations, and daily-wagers who are suddenly out of jobs and migrating to rural areas. The Green Stimulus aims to deliver climate-aligned 'green infrastructure' whilst providing avenues for jobs, labelled as "nighabaans" (custodians of the environment), through the Ecosystem Restoration Fund.⁹ Before these projects, which have plans for green job creation, rural women were primarily

employed in the agricultural sector. Whilst this project is set to encourage rural development due to its emphasis on introducing socio-economic and environmental infrastructures, the on-ground implementation of green jobs creation and ecosystem restoration funding can be detrimental to rural communities that are now confronted with unanticipated forms of inequity. .

2) Green Jobs Creation: Opportunities and Risks

The ongoing first phase of the Green Jobs Creation is funded through Pakistan's self-budgetary provisions. The government-financed activities of this phase have already delivered 85,000 daily wage jobs across the country in fields such as nursery raising, plant care, protection of natural forests, and fire fighting activities.¹⁰ There are plans to raise this number to 200,000 within the next few months. One strategized avenue for this is through afforestation, which has included allocating \$90 million from the Pakistani government to an afforestation program that hires workers to plant saplings throughout the country. The rise in unemployment brought by COVID-19 triggered this program to provide work for daily-wagers whilst simultaneously protecting the natural environment by helping to promote carbon sequestration. These tree-planting initiatives appear to meet many of the social, environmental, and economic goals that underpin socio-economic recovery. One example is the successful implementation of the Billion Tree Tsunami programme in the province of Khyber-Pakhtunkhwa (KPK), which has already generated 500,000 green jobs¹¹, proving that the revival of nature and the economy can work simultaneously. On a macro-level, there are opportunities being provided for vulnerable women, and yet this nature-based solution ignores the challenges of such a programme. For instance, the siting of the afforestation programmes has negatively impacted rural communities by disregarding their land rights, and insufficient biodiversity in monoculture-type afforestation presents ecological risks. With regard to the former, land ownership in KPK is asymmetrical between Pashtuns and Gujjars. For

"So far, 70,000 Pakistanis have gained employment through CPEC projects, but the infrastructure sector must holistically adjust to changes in demography, climate change, and digital transformation."

Gujars, the land is critical for their subsistence economy, and without it they cannot provide grass for their animals in winter, which can potentially harm their livelihood.¹² Furthermore, the most dependent on forests for their livelihood are landless herders, and landowners have been taking their land back from these tenants for the purpose of contracting with the Forest Department. The promotion of afforestation on private land without consent has led many Gujjars to lose their access to land and the ability to use the land as pasture in the winter. In this sense, there is a need for a transparent and formal process of land acquisition with the informed consent of residents at its centre. This particular example epitomises the access challenges to forest resources, and if such issues are managed, this program could have the potential for high returns socially, economically, and environmentally.

3) The Ecosystem Restoration Fund: Opportunities and Risks

The Ecosystem Restoration Fund allows public and private partners to credibly and transparently join Pakistan's green recovery as part of the Green Stimulus. Led by the World Bank, the \$120 million in funding has been secured through multilateral partners to support the expansion of the tree planting initiative and the ecological preservation of 15 national parks, which were recently announced. Additionally, the National Parks Service aims to generate 5,000 nature jobs for the youth population, who will train to become "nighabaans".¹³ This project similarly provides an opportunity to both address the spike in unemployment and link economic activity to preserving nature. Compounding this is the fact that the new Protected Areas Initiative will mean



that the amount of protected land in Pakistan will increase from 13% to 15%. The creation of Pakistan's first National Parks Service is modeled on the U.S. agency of the National Park Service, where local communities become involved in running national parks, earning an income as they protect conservation areas. As part of the Pakistan model, community members are also employed as guards and game inspectors, with 80% of the employment opportunities going to residents. It is also agreed that local communities will receive 75% of the revenues generated from these parks. Khunjerab, the country's oldest and largest national park, is a model of successful community-led management in Pakistan. It was established 45 years ago and has managed to create an undisturbed habitat for biodiversity through community-involvement. Malik Amin Aslam, the climate advisor to Imran Khan, outlined that the National Park Service plan fits into Pakistan's Green Stimulus vision and will contribute to addressing the spike in COVID-linked unemployment across the country.

Muzaffar Uddin, a founding member of the local Shimshal Nature Trust, argues that the shift to community-managed parks offers the chance to tap into the "amazing indigenous knowledge" that local people possess of the land.¹⁴ Incorporating local communities into the establishment and management of these parks, means that they can better manage their natural

resources whilst earning an income. However, when looking at the selection of *nighabaans*, the process is also a way for landowners to consolidate ethnic and social power structures in their favour. For example, in Agror Tanawal, all village development committees are Swatis, a Pashtun tribe, and have distant kinship ties with each other. This factor has led to the exclusion of Gujjar families in the area.¹⁵ Therefore, although this can be considered a directional shift of the economy towards sustainable growth, the role of local politics and power dynamics with regard to inclusion and exclusion in community participation needs to be fully explored. This will ensure that people-focussed projects benefit all members of local communities.

Conclusion

On a macro level, the Green Stimulus Initiative will create beneficial opportunities for vulnerable women, youth populations, and rural daily-wage workers in Pakistan. Furthermore, the implementation of 'green infrastructure' to simultaneously address revenue losses and unemployment resulting from the pandemic will work well to ensure both environmental sustainability and economic revitalisation. On a micro level, however, integrating sustainability factors into investment decisions requires the effective engagement with all stakeholders to avoid the possibility of projects adversely impacting rural communities or disregarding

rights to land access. If such issues are addressed, the Green Stimulus Initiative is a chance for Pakistan to come out of the economic recession with a strategy sustained by nature protection and climate resilience, driven by youth engagement, and supported through community participation. The following policy suggestions will be helpful in improving the transparency of projects and communication with local people to facilitate an awareness of and solution to physical, social and economic displacement:

Recommendations

- Ensure that there is greater transparency, and legally regulated compensation provisions for communities that agree to secede in land or resource acquisition processes as part of establishing green infrastructure. By engaging local residents and obtaining consent, these projects can hugely benefit from their management and regional knowledge.

- Ensure that the regulation of the afforestation programmes does not negatively impact the livelihood of rural communities by disregarding their land rights and livelihoods (even if informal). This should materialise in implementing legally binding consent obligations in the establishment of these programmes, in order to guarantee they do not lose access to their resources.

- Ensure that adequate training programmes are provided for local communities affected to make sure that they are professionally prioritised in the assignment of jobs and Protected Areas responsibilities.

Debt-for-Environment Swaps: the Path to a Fairer, Greener CPEC?

Amelia Jeffery

Development of the China-Pakistan Economic Corridor may contribute to environmental degradation, financial burdens, and social inequality. Debt-for-environment (DFE) swaps can provide an innovative incentivisation scheme to holistically address these issues by unifying the dual objectives of industrial development and environmental sustainability. DFE swaps, however, must be highly sensitive to adverse outcomes, including exacerbated social inequality, inadequate scale, and inefficient implementation.

Introduction

On the 5th of June 2021, Pakistan's Prime Minister, Imran Khan, announced a proposed debt-for-nature swap with Germany, Italy, Canada, and the United Kingdom, as a strategy to prevent the rapid degradation of Pakistan's environment.¹ Debt-for-nature swaps have also been proposed as a possible solution for achieving a 'green' Belt and Road Initiative (BRI) due to their ability to provide debt relief whilst promoting environmental conservation.² Debt-for-nature (DFN) swaps are a subset of debt-for-environment swaps (DFE), the latter term representing the reduction in a country's foreign debt in exchange for commitments by the indebted nation to invest domestically in environmental conservation initiatives.³ Other forms of debt swaps exist under the umbrella of DFE – for instance, debt-for-climate (DFC) swaps target the mitigation of and adaptation to climate change, whereas debt-for-nature swaps

target environmental protection.⁴ A well-known example is the 2016 collaboration between Seychelles, South Africa, Paris Club, and The Nature Conservancy that allowed the Seychelles to convert \$27 million USD of debt into climate adaptation strategies and ocean conservation.⁵ With nations increasingly experiencing the impacts of environmental degradation and climate change, DFE swaps have gained greater attention in the geopolitical sphere. However, they have not been closely evaluated within the specific context of CPEC. The mutually beneficial arrangement of a DFE swap can capitalise on three features of the China-Pakistan relationship:

- (1) Both countries have agreed that CPEC should be a model for a 'green' BRI;⁷
- (2) China is forecast to lead the way in economic recovery post-pandemic, and thus is in a strong position to offer debt relief⁸; and
- (3) Pakistan has one of the highest outstanding debts owed to China of the 52 countries that are eligible for the Debt Service Suspension Initiative (DSSI) and that have also joined the Belt and Road initiative.

Dr Ulrich Volz, director of University of London's Centre for Sustainable Finance, has highlighted three crises that debt swaps should address: debt, climate and environmental, and health and social.⁹ This chapter will explore the potential synergies between these crises and the principles of DFE in the context of CPEC.

DFE Relieving Pakistan's Debt

Between 2014 and 2019, Pakistan's debt to China rose from \$4.9 million USD to \$20.2 million.¹⁰ Some commentators have argued that CPEC has worsened economic disequilibrium within Pakistan^{11 12}. For example, capacity payments for CPEC power projects have exceeded \$30 billion, leading Pakistan to request an easing of payment obligations to China.¹³ In addition, a committee established by Khan released a report alleging that Chinese coal plant companies were inflating costs by \$3 billion, initiating further payment renegotiation talks. The Pakistani government has called for the use of health, climate, and SDG debt swaps as a potential



tool for renegotiating public and commercial debts to China.¹⁴ DFC swaps that encourage sustainable climate investments can stimulate economic growth in the long-term, a perspective that current methods of debt restructuring lack.⁶ Indeed, a *Science* paper,¹⁵ published in January 2021, identified Pakistan as having a 'moderately high' eligibility to participate in a DFC scheme. Eligibility was determined based on a high threat from climate change (Figure 1) and a high percentage of payments committed to Chinese finance (Figure 2). Within the context of a country significantly indebted to China and facing high costs associated with the construction of CPEC, DFE swaps may provide a mechanism for debt relief and increase the fiscal space for climate finance.

Addressing the Climate and Environmental Crisis

Pakistan is ranked as one of the 10 most vulnerable countries to climate change, but providing the resources for sufficient adaptation and mitigation is a challenge – the country requires between \$7–14 billion per year to fulfill the needs of climate adaptation.¹⁶ Efforts to mitigate climate change may be hindered by

the projected increases in emissions between 2015 and 2030 as a result of CPEC construction, leading to glacier melting, extreme flooding, and drought events. Furthermore, the costs to reduce just 20% of 2030 emissions will amount to \$40 billion. The environmental impacts of CPEC construction have also been implicated in predicted water shortages and consequent food insecurity.¹⁷

Home to three of the most polluted cities in the world,¹⁸ Pakistan has announced a goal to generate 30% of energy through renewables by 2030, yet coal will account for 38% of CPEC projects' generation capacity.¹⁹ This highlights the inherent conflict between achieving greater energy sustainability and investing in large-scale industrial infrastructure. The 2017 – 2030 CPEC Plan emphasizes the need for the promotion of alternative energy sources, yet there is no mention of measures for climate change adaptation and mitigation. Furthermore, the CPEC Plans do not mention the 2005 National Environmental Policy or the 2006 Clean Development Mechanism when emphasizing the need for environmentally friendly industry.²⁰ In order to facilitate a smoother transition away from coal,

the Climate Policy Initiative has advocated for the creation of a Coal Retirement Mechanism (CRM), funded by DFC swaps. In such a scenario, the debt payments would be redirected to a CRM fund that retires (and purchases, if needed) coal plants.²¹ A crucial aspect of a DFC swap is that it not only encourages activities that mitigate climate change, but it also enhances the resilience and adaptability of those affected by climate change. As a result, a DFC-funded CRM should also include a 'financial and skills package' for communities and laborers affected by the transition, to ensure that efforts to reduce emissions do not come at the expense of those most vulnerable to climate change.

Addressing the Health and Social Crisis

According to the ND-GAIN index – a ranking of a country's climate change vulnerability and their ability to improve resilience – Pakistan has high vulnerability and low readiness, requiring urgent innovation and investment to increase resilience.²² The Pakistani government has called for DFE swaps to support the financial sustainability of the recently announced Green Stimulus Initiative ('Green Stimulus') package, which targets ecosystem restoration and job creation through improving sanitation, establishing the Protected Areas Initiative (PAI), and planting trees through the 10 Billion Tree Tsunami program (BTT)²³. Though widely celebrated for their ambition, job creation, and pro-environmental attitude, these latter two initiatives have been criticised for overlooking crucial social impacts of their implementation. The PAI has reportedly been plagued by failures to pay community watchmen salaries, suggesting that institutional issues have gone unaddressed.²⁴ The government has proposed a DFE scheme to accelerate the BTT program - however, application of a DFE swap to this context may lead to an exacerbation of social issues, as the "Tree Tsunami" has been accused of forced evictions, corruption, and loss of traditional herding practices.²⁵ A DFE swap with China that enhances the Green Stimulus package and brings positive environmental impacts may be an important way to counteract the environmentally damaging impacts of

"Within the context of a country significantly indebted to China and facing high costs associated with the construction of CPEC, DFE swaps may provide a mechanism for debt relief and increase the fiscal space for climate finance."

CPEC, and yet, it also highlights the danger of prioritising pro-environmental behaviour above social issues. Dr Volz emphasises the need for appropriate monitoring and supervision of DFE mechanisms to prevent "greenwashing".²⁶ Moreover, Pakistan is the only country within the top 10 indebted to China that does not include 'health' as a vulnerable sector or as an adaptation priority in their Nationally Determined Contribution, despite the considerable health risks associated with CPEC construction.²⁷ DFE swaps may compensate for this oversight by requiring improvements in aspects of adaptive capacity, including education, health, and social development. Ideally, this would minimise the exacerbation of social inequalities; incentivize the government to ensure local prosperity in CPEC areas; and contribute towards achieving the Sustainable Development Goals. For example, DFE swaps could be used to support medical and health infrastructure funds or strengthen disaster risk financing.²⁸ This would also align with Pakistan's 2025 vision, which emphasises the importance of developing human and social capital.²⁹

Conclusion and Recommendations

Debt-for-environment swaps are a multifaceted mechanism with the capacity to address environmental, social, and debt-related challenges in a country undergoing CPEC-driven transformational change. However, DFE swaps must be employed with transparency and stakeholder consultation, large-scale commitments, and system alignment in order to achieve meaningful and sustainable change. Considering the legitimate concerns regarding the efficiency, transparency, and applicability of DFE swaps, as raised throughout this chapter,



the following recommendations are provided for the implementation of DFE swaps within the CPEC framework:

- Transparency

Projects funded by DFE swaps – such as the BTT campaign and PAI – must have wide stakeholder engagement and local support in affected areas, by consulting local governmental agencies and non-governmental organisations to identify the most effective DFE applications. The DFE swaps must be updated to better reflect the needs of humans and biodiversity most vulnerable to climate change,³⁰ which will in turn help prevent "greenwashing" and encourage transparency in the implementation of DFE swaps. Involvement of local government may also raise public support for "international finance with strings attached,"³¹ particularly where the programs funded by DFEs emphasise bottom-up, community-based natural resource management initiatives.

- Large scale

DFE swaps have historically been too small in scale to meaningfully impact national debt relief and institutional change. As a result, Pakistan and China must commit to implementing DFE swaps that are both large in scale and long-

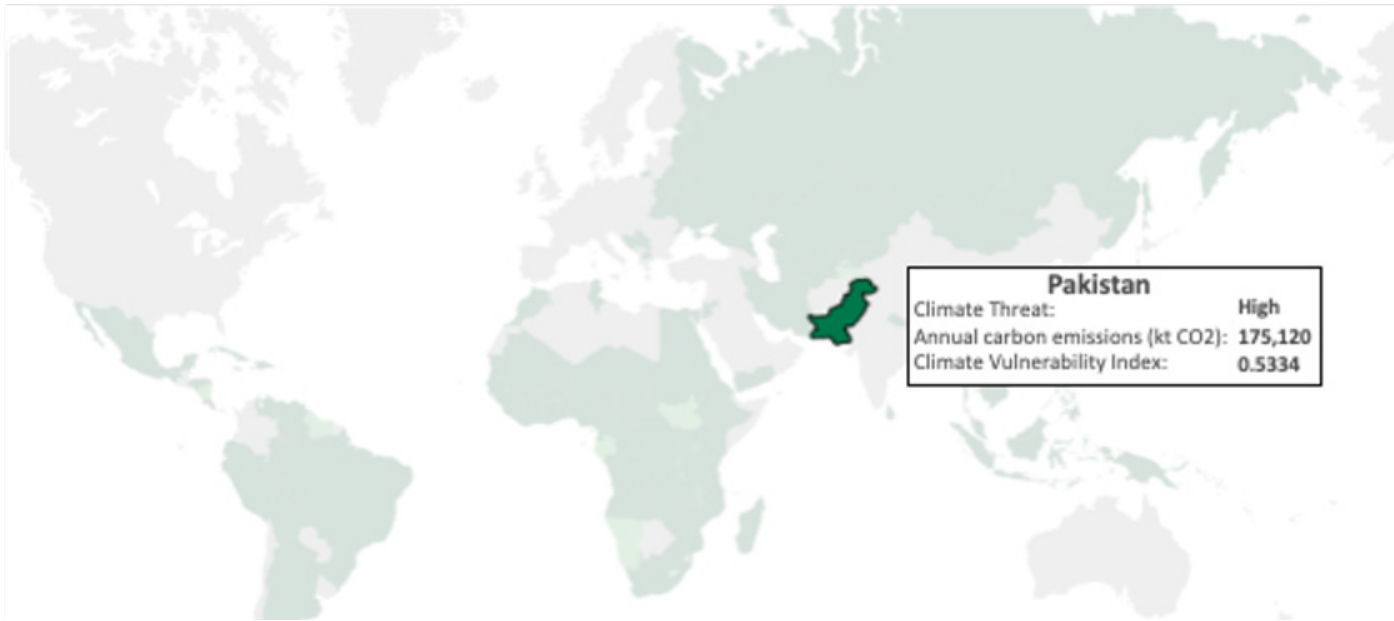
term, whilst retaining awareness of contextual needs. Integrating adaptation or Sustainable Development Goals (SDGs) into debt swap mechanisms may better address these larger-scale issues, in particular by using the restructured debt payments to bolster health and capacity-building infrastructure or to directly target productive sectors (e.g. forestry, fishery, and agriculture).

- System alignment

Alignment of DFE schemes with provincial and federal governments' policies is highly important. Pakistan demonstrates this to an extent considering their 2030 vision for renewables and the PAI and 10BTT programs. However, there are inconsistencies in Pakistan's institutional and policy frameworks and CPEC plans, that will make the application of DFE swaps more challenging. Consequently, employment of DFE swaps would require explicit recognition of DFE objectives and greater coordination throughout the governmental system. Ultimately, a successful outcome may incentivise greater integration of environmental concerns into the long-term vision of CPEC.

Figures at bottom

Metric: **Climate Threats** – Climate Vulnerability Index & Annual Carbon Emissions



Metric: **Debt Exposure** – China finance commitments (% of bilateral and external payments)



■ High ■ Low

Figure 2: Pakistan 'High' debt exposure determined from Chinese payments due as percentage of bilateral and external debt. Modified image courtesy: Simmons et al., 2021

Shaping Economic and Social Sustainability: the Future of Special Economic Zone Policy and Implementation in Pakistan

Madeleine Lusted

The “fruits of globalisation” are indeed “innumerable.”¹ Zia and Waqar describe a brave new world which is transformed “into a small village.”²

Introduction

Special Economic Zones (SEZs) are an important element of CPEC Phase 2. Given that COVID-19 has devastated many consumer-driven sectors in Southeast Asia,³ the focus is now likely to be on growth via industrial activity, making the development of SEZs a top priority for Pakistan in its quest for economic recovery.

Since the birth of Pakistan’s SEZ Act 2012 (‘the 2012 Act’), SEZs have been established in 9 different provinces in the nation and have been growing in importance since. Nonetheless, a central question facing these legal archipelagos is that of balancing sustainability with economic prosperity. This chapter addresses this question by analysing the particular challenges facing the formulation of SEZ policy vis-à-vis its implementation frameworks, questioning the disparity in some areas and provinces, and asking how existing gaps can be closed.

What is an SEZ?

The purpose of SEZs is to create a free-trade zone where commercial laws differ from non-SEZ areas. SEZs exist to attract domestic and foreign investors via the creation of favourable economic conditions (for example, the exemption from some duties and taxes).⁴ Section 3(n) of the 2012

“Given that COVID-19 has devastated many consumer-driven sectors in Southeast Asia, the focus is now likely to be on growth via industrial activity, making the development of SEZs a top priority for Pakistan in its quest for economic recovery.”

Act defines an SEZ as “a geographically defined and limited area which has been approved and notified by the [Board of Approval]”, which is the executive body responsible for the creation, administration and management of an SEZ. CPEC is expected, by 2030, to have a “robust sustainable economic growth mechanism” in place⁵. SEZs are thus one of the main pillars on which ‘sustainable economic growth’ rests.

1. Employment Generation

The capacity for job creation through SEZ-based industrialisation is immense. Employment generation has a concrete impact at grassroots level, which is quantitatively and quantitatively measurable. For example, the four SEZs, - Rashkai MI-1 Nowshera; Shabeji Thatta; Allama Iqbal Industrial City Faisalabad and Bostan Balochistan - will create around 1.47 million jobs, according to a government spokesman.⁶ Since 72% of workers in the manufacturing sector suffered with job loss or a decrease in income due to COVID,⁷ the creation of new jobs could help alleviate financial pressure on low-skilled or manual workers. However, new employment opportunities could also benefit women, a high proportion of which are employed in the informal sector⁸ which has been particularly hard-hit by COVID.⁹

SEZs thus have the potential to affect not only Pakistan’s economy but also its social fabric. The UN recognises the intrinsic link between “legal, social and economic barriers”¹⁰ to female empowerment and the participation of women in the economy. As such, the generation of



Figure 1: Illustration of an SEZ. Image Courtesy: Invest Pakistan; Prime Minister Office, Board of Investment (2020)

employment opportunities and investment in local communities via SEZs has the potential to carve out new spaces for women in terms of the country's overarching sustainability policies. Gender is thus likely to become an increasingly important lens through which to assess the 'social sustainability' of CPEC and the vehicles for its implementation.

A potential issue relates to the establishment of laws and regulations ensuring a decent work environment for women. The government has already encouraged female participation in the labour force by introducing quotas for jobs, particularly managerial positions,¹¹ pursuant to existing discrimination legislation (such as Article 25 of the Constitution and ratified international agreements, including the Discrimination (Employment and Occupation) Convention (No. 111)).¹² However, there is the possibility that gender equality may be left behind by the drive towards a fast economic recovery, with economic benefits being prioritised over genuine reform. Critics have, more broadly,

cited concerns that mere "political speculation" will give rise to "white elephants."¹³ Moreover, in some SEZs in other nations, such as India,¹⁴ union rights have been discouraged or legally constrained.¹⁵ The federal government will need to maintain a strong political will and guide provincial authorities in alignment with the UN's Sustainable Development Goal on Gender Equality (SDG5). This will require ongoing collaboration between provincial and federal authorities, notwithstanding the hurdle of regional politics.

2. Legal framework

The legal frameworks of SEZs are multi-layered and complex. The administration of SEZs takes place on two levels. At the macro-level, the federal government provides basic guidance (such as guiding potential investors as to the possible incentives available) and creates a broad legislative framework for the operation and creation of SEZs. The main legal instrument through which this takes place is the 2012 Act. However, the federal government has delegated

implementation at the micro-level to the Provinces. Section 10(1) of the Act states that "each Province" is to establish an authority to be known as the SEZ Authority "of that Province."

The advantages of this two-tier model are that CPEC functions with respect to the different cultural and political norms of, as well as to the specific economic needs of each Province. Unnecessary bureaucracy and administrative hold-ups would prevent the efficient inflow of foreign investment. Nonetheless, the division of policy between the macro and micro levels of government raises some critical questions as to how sustainability might be implemented. Whilst the federal government leads the sustainability agenda, the implementation of environmental policies rests with the Provinces as well as with local stakeholders. A resulting issue is that sustainability policies are likely to vary across Provinces. Although the government has recognised the importance of environmental sustainability at a federal level,¹⁶ uneven implementation across the Provinces is likely to

pose obstacles.

Secondly, the presence of regional stakeholders over each SEZ means that regional politics influences the creation of public policy. This manifested itself via the 'route controversy' of 2015, in which political parties, such as Awami National Party (ANP), demanded a greater voice for smaller Provinces such as Khyber Pakhtunkhwa (KPK). The dispute concerned a disagreement between parliamentarians from different Provinces as to the route that CPEC must take through their Provinces. They expressed particular discontent over the fact that the federal government had ignored their concerns.¹⁷ The Sindh government also registered its discontent over the route issue, and nationalist forces within Gilgit-Baltistan demanded a greater role within CPEC management. Similar issues may arise as SEZs are further established, and the competing interests and voices of different Provinces may cause some to eschew the guidance from the federal government in order to appease foreign investors.



Figure 2: A girl works on a loom in Karachi where there is an SEZ. Image courtesy: OpenGlobalRights (Oct 27, 2020)

3. Local Businesses: Crowded in, or crowded out?

Concerns have been cited in relation to the potential impact of SEZs on local communities. The creation of conditions favourable to foreign investors will pit smaller, local businesses (many of which are vital for the sustained livelihood of locals) against larger corporations, leading to a battle which local businesses simply cannot win. In China, SEZs accounted for approximately 50% of national Foreign Direct Investment (FDI) (2012).¹⁸ Although Wong and Buba found that in China SEZs did not seem to crowd out local investment,¹⁹ this is an important point on which Pakistan and China can be said to differ. Local disgruntlement may also lead to pressure on provincial authorities to adopt stances on FDI which culminate in conflict with the broader policies promulgated from Islamabad.

The Pakistani government has attempted to counter these concerns by adopting several strategies. It announced a \$8 billion USD stimulus package (1.5% of GDP) with an additional \$0.4 billion specifically to protect small businesses and the unemployed.²⁰ Whilst this fiscal support is commendable, it is ultimately not large enough to address the concerns of informal works, and the government is likely to be constrained as to how much relief it can provide.

A more sustainable possibility is to encourage and support joint ventures, in which local businesses are engaged as stakeholders by becoming integrated into the supply chain for larger companies, for instance. Success using this model has been seen in Costa Rica, where it has been shown that domestic firms, which supply to multinational corporations (MNCs), see their productivity grow from 6% - 9%.²¹ In particular, best practice can be said to involve three steps:

- 1) Sharing of blueprints or details about expected product and/or services;
- 2) Visits of the domestic supplier to the MNC;
- 3) Visits of the MNC to the supplier to audit and offer guidance.²²

Such a model is likely to improve the visibility of Pakistani firms in the domestic market, whilst retaining the economic benefits of SEZs.

Conclusion

The case of SEZs in Pakistan demonstrates how economic statecraft can act as a vehicle for environmental and social sustainability in a post-COVID era. Nonetheless, numerous hurdles remain, both within the realms of environmental and social sustainability. In particular, attention must be paid to implementation frameworks and not merely to the creation of new policy. It is critical that such issues are resolved so that SEZs contribute to, rather than hinder, sustainable development in CPEC projects and thus Pakistan.

Final policy recommendations:

- Create an appropriate labour rights framework to protect the retention of women within SEZ labour forces, and in particular, a centralised approach in which Islamabad guides Provinces regarding gender quotas and female employment. Moreover, create a review of existing legal frameworks that may undercut the new regime with regard to the retention of women, so as to maintain consistency.
- Engender an updated legal framework in which the competences of Provinces are retained and respected, but final approval and direction resides in Islamabad rather than foreign direct investors.
- Ensure government support for joint venture projects, based on a model of co-operation between domestic firms and MNCs, so that local businesses are not shut out from supply chains by foreign investors.

Multilateral investment: a Sustainable Way Forward for CPEC?

Callum Coleman

The rapid growth of CPEC has raised concerns in relation to political tension, debt sustainability, and the environmental impact of large-scale infrastructure projects. An increase in investment through international multilateral banks has been proposed as a way to mitigate these issues. With their presence in Pakistan only likely to rise, this study analyses the environmental frameworks of two such banks -the Asian Development Bank (ADB) and Asian Infrastructure Investment Bank (AIIB) -to evaluate how their frameworks can be improved to better alleviate the challenges facing CPEC.

Introduction

China has received criticism for undertaking development projects with minimal consultation of local populations. This has prompted a number of protests, such as the recent backlash against the construction of a fence through a number of communities in Gwadar with no prior warning given to residents.¹ Chinese investment has also contributed to rising tensions with regional rival, India. One Indian official noted "we have a problem with CPEC, our problems are well known because it completely encroaches on our sovereignty and territorial integrity".² Against these concerns regarding government-government borrowing, investment through a multilateral bank has merits. Both AIIB and ADB have extensive consultation processes built into their investment frameworks, and India is more

comfortable with investment through multilateral banks, particularly as they own significant shares in both AIIB (8%) and ADB (6.3%). Moreover, with a recent Green BRI Center study recommending an increase in investment through multilateral mechanisms to reduce Pakistan's share of Chinese debt, investment through the banks could also allay concerns regarding debt sustainability.³

The AIIB and ADB have invested in a significant number of projects in Pakistan, with total ADB investment on projects in the nation standing at \$36 billion USD. This figure will only increase, particularly in light of the renewed impetus placed on CPEC projects as a result of the COVID-19 pandemic. For example, the banks recently co-financed a \$500 million recovery package.⁴ As their investment in Pakistan is only likely to rise, it is important to ask whether the frameworks that form the basis of this investment are sufficient to meet the environmental commitments made by both the banks and the Government of Pakistan.

This study finds that the investment frameworks deployed by both banks could be improved to produce more sustainable outcomes. First, the ADB framework should require an analysis of projects against greener alternatives using a consistent criteria. At present, the framework allows for more sustainable options to be judged solely on economic grounds. Second, it finds that though their consultation process is extensive, AIIB projects should be designed to better match the views of relevant stakeholders. Investment through multilateral mechanisms provide a solution to the CPEC shortcomings outlined above, but with small changes to their practice they could produce better results.

Environmental Policy Frameworks

Both the AIIB and ADB have made commitments to achieving sustainable outcomes through

"Against these concerns regarding government-government borrowing, investment through a multilateral bank has merits."



AIIB President Jin Liqun.

their investments. Despite this, both have been criticised for a lax approach to environmental safeguards and for their projects' contributions to global warming. In response, the two banks have made repeated assurances on the green nature of their future investments. AIIB President, Jin Liqun, for example, noted in a 2017 speech that the bank is committed to being "lean, clean, and green".⁵ Both banks have environmental policy frameworks that work to ensure the good practice of environmental and social planning in relation to their projects. Both ADB's Safeguard Policy Statement (SPS) and the AIIB's Environmental and Social Framework (ESF) are formulated with an emphasis on identifying risks and working towards their mitigation, but the two do have subtle differences that raise issues.⁶

Analysis of alternatives

In undertaking any project, a crucial aspect of

the Environmental Impact Assessment requires the banks to prove that they have given due consideration to alternative projects and the prospect of undertaking no project whatsoever. The Environmental Impact Assessment of the AIIB-ADB co-financed Balakot Hydropower Development Project can be used to demonstrate a first issue, namely that the current evaluation process leaves too much discretion in the hands of the individuals responsible for interpreting the ADB framework, typically a team of specialists. The Balakot project will see the construction of a 300 MW hydropower plant located on the Kunhar river in Khyber Pakhtunkhwa province.⁷ In relation to the Balakot Hydropower plant, the ADB concluded that the project was superior to the 'No Project' alternative on strictly environmental terms. They note that the project will improve air quality by reducing greenhouse gas emissions, increase the fish population in the river, and maintain

ecosystem integrity. Having rejected the 'No Project' alternative on environmental terms, the bank then dismissed the pursuit of solar and wind power as alternatives on economic grounds, with no mention of their potential to deliver more sustainable outcomes. It is simply noted that the cost of power generation in a large hydropower project is "lower than that for wind energy and solar PV projects".⁸

This case is indicative of a wider issue: the ADB framework allows the bank to select its own criteria on a case-by-case basis when analysing a project in relation to potential alternatives. Here, the 'No Project' alternative is dismissed on purely environmental grounds, yet when comparison is made to more sustainable alternatives in wind and solar, the analysis is given in strictly economic terms in order to support the proposed

project. In this manner, the framework gives undue discretion to the individual undertaking the assessment as they can choose to analyse the proposed project against alternatives on whatever basis is most favourable to the project at hand. In the Balakot case, this discretion comes at the cost of fair consideration of wind and solar alternatives to the hydropower plant, a move directly at odds with policy recommendations by Green BRI Center to decrease investment in hydropower in favour of solar and wind.⁹ This discretion promotes wider inconsistencies across ADB projects in Pakistan. For example, the ADB-financed Triconboston Wind Power Project in the province of Sindh is proposed in environmental terms and alternatives are dismissed in light of the sustainability of wind power,¹⁰ a clear departure from the analysis of the Balakot project using the same environmental



Site of the Balakot project, Kunhar river. (<https://highways.today/2021/06/04/adb-balakot-hydropower/khyber-3413028_1920/>)

framework. The ADB framework in this area stands in stark contrast to the AIIB framework, which demands that the proposed project is compared to potential alternatives using the same criteria. The following example from the Lahore Water and Wastewater Management Project ('the Lahore Project') shows how this AIIB model allows for a fair comparison of two potential sewerage technologies:

As seen below, the framework ensures that one technology cannot be dismissed through comparison to another on unfavourable terms. As this requires prospective projects to be evaluated against greener alternatives on environmental grounds, it should lead to more sustainable outcomes.

Stakeholder Consultation

The environmental and social frameworks of both banks ensure consultation with a wide range of stakeholders prior to the commencement of the project, including with any project-affected people. In theory, consultation should serve as an effective remedy to any local concerns and avert potential backlash against projects. The surveys, instead, often demonstrate the indifference or opposition of the local population to projects that will have a significant impact on their daily lives.

Comparison of Open Cut Method & Trenchless Technology is discussed below:	
Open Cut Method	Trenchless Technology
Open cut method often involves risk	Pipe jacking are safer methods of working
Dismantling of road takes place throughout the pipe path	Dismantling of road only requires for launch and reception shafts for entrance of pipe jacking machine. Substantial cost saving.
Slow Construction, often takes more time	Speedy Construction
Public Inconvenience	No inconvenience to public.
More Traffic disturbance	Traffic disruption are reduced or eliminated, Mobility above ground is not affected
More Environmental effects, soil disturbance	Minimum environmental effects less soil is disturbed /excavated and movement.
Shifting of all underground utilities	Minimum shifting underground utilities, services Cost effective.
More Transportation & Re-handling of materials	Reduce the quantities of incoming and outgoing materials
Maximum visual impact to the local population	No impact to the local population
Less reliability	High degree of reliability
Cost Expensive	Cost effectiveness.

"As their investment in Pakistan is only likely to rise, it is important to ask whether the frameworks that form the basis of this investment are sufficient to meet the environmental commitments made by both the banks and the Government of Pakistan."

For example, in undertaking the Lahore Project, an AIIB investment to improve Lahore’s sewerage systems, the bank carried out a routine Impact Assessment Survey of the population in the project area. The consultation process, as specified in the framework, is strong. It entails the identification of stakeholders from local residents, government officials, and the general public. Consultation then takes place throughout the project and various methods are deployed, ranging from focus groups to informal meetings on the street. The Lahore Project survey had 422 respondents who expressed concerns over the negative impact of the project on their daily lives, particularly with regard to additional traffic that would affect their commute. The survey revealed the remarkable indifference residents felt towards the objectives of the project. The project aimed to ensure a supply of safe water and to reduce environmental impacts of untreated sewage disposal.¹¹ However, only 23% of the respondents believed that the project would improve environmental conditions, with 45% feeling that it would make “no impact”. The majority also stated that they were satisfied with the quality of water they received and 83% indicated their satisfaction with the current sewerage system in the area.¹² Despite the results, the AIIB approved the \$235 million project in April 2018. The ADB framework is much more effective in the area of stakeholder consultation. The ADB assessment demands specification of how every concern expressed by stakeholders will be addressed. Though some of the solutions may be considered insufficient, the framework provides for an effective consultation process that should ensure local stakeholders have consented to the project at every stage.

Conclusion and Recommendations

The study finds two key areas to improve the frameworks of the banks concerned in relation to analysis of alternatives and consultation. It should be noted that with the frameworks in their current form, investment through multilateral banks already offers a strong alternative to government-government investment. The extensive social and environmental analysis required to launch a project, the in-built mechanisms for consultation, and the fact that this investment can prevent political tension between regional rivals all point toward multilateral investment as a useful mechanism moving forward. This will prove important given increased ADB-AIIB investments in Pakistan as a result of the COVID-19 pandemic.

Despite this, it is clear that with minor changes to practice, multilateral investment could more thoroughly provide solutions to some of the issues currently facing projects across CPEC. Moreover, the research suggests that each framework has strengths in different areas. In order to ensure consistency in investments across the region, there should be greater cooperation between multilateral institutions to produce a single model of good practice. This would act as the greatest possible safeguard to ensure the sustainability of projects.

Therefore, it is recommended that:

- The ADB framework should develop consistent criteria for comparison between proposed projects and potential alternatives.
- The AIIB framework should be better informed by consultation with relevant stakeholders – deploying an analytical framework similar to that in the ADB framework would be a significant step forward.
- Multilateral institutions should work towards a standardised framework of good practice to ensure the sustainability of investments.

The Role COVID-19 Recovery in Accelerating Pakistan's Coal Investment Phase-out

Yang Yang

The extent to which successfully phasing-out coal can work within Pakistan, given China's massive investment into coal plants in CPEC, is debatable. This chapter specifically analyses the opportunities and challenges of coal phasing-out along CPEC projects within the context of COVID-19 recovery and the impetus of resulting economic stimulus packages.

Introduction

On December 12, 2020, Prime Minister Imran Khan, announced at the International Climate Ambition Summit 2020, that Pakistan had decided to phase-out new coal investments, and reiterated the nation's promise to mitigate climate change. Within the speech it was emphasised that, by 2030, 60% of all electricity produced in Pakistan will come from clean sources.¹ The country has already scrapped two coal power projects with a total installed capacity of 2,600 MW and replaced them with renewable energy sources. This decision seems contrary to Pakistan's support for coal power investments over the last couple of years. The implications of the COVID-19 pandemic have inevitably played a role, as demand for electricity has plummeted and the various proposed economic recovery packages are actively seeking green investment opportunities. Alongside Pakistan, other Asian countries with coal commitments are using this moment as a window of opportunity to accelerate the phasing-out of coal. However, it

is still unclear as to what extent coal phasing-out can work within the context of Pakistan given China's massive investment into coal plants across CPEC. This chapter first outlines the reasons as to why coal was initially essential in Pakistan and how its phasing-out can be accommodated. The opportunities and challenges of coal phasing-out in CPEC projects are subsequently interrogated within the context of post-COVID recovery and the recently announced economic stimulus packages.

Background: The Coal Moratorium of the Pakistani Government

Pakistan's coal power policy is closely connected to China, since the latter is the largest investor in coal within Pakistan, especially throughout projects affiliated with CPEC. Until 2016, Pakistan had just one coal-fired power plant. China has since then invested billions of dollars into Pakistan, installing at least nine coal-based power plants with more currently under construction.² The reasons for the initial commitment to China-backed coal were mainly driven by the lack of energy supply in the country. Pakistan could not provide reliable electricity to a large proportion of its 200 million population through the grid, with the Pakistani government ultimately filling in this capacity gap with coal power financed by China. In fact, 70% of the 13.8 GW worth of power projects in operation and planned are coal-fired. Ultimately, the installed coal plants did help Pakistan overcome years of power shortages in the country.³

The recent shift in perspective - as reflected in Khan's announcement - towards coal, therefore, appears contrary to Pakistan's previous policies. In 2019, Shahzad Qasim, the prime minister's former special assistant on the power sector, noted that since both wind and solar power are intermittent, the country would "have to continue with coal" until the baseload power can be replaced by cheaper batteries.⁴ Qasim added that it may take 10 to 15 years to shift away from coal. However, a week before Khan's statement, Pakistan's Minister for Energy met with the nation's Chinese ambassador and discussed



Credit: Xinhua / Alamy Stock Photo

<https://www.thethirdpole.net/en/energy/pakistani-military-in-charge-provinces-sidelined-in-a-revived-cpec/>

investments in renewable energy. These recent developments imply that coal investments under the framework of CPEC will gradually be converted into a new renewable energy model.

There are two economic reasons for this shift in thinking, which have been reinforced by the COVID pandemic. Firstly, Pakistan's power supply flipped to a surplus last year after a flurry of coal plants were built. Pakistan is likely to have as much as 50% overcapacity in power by 2023, according to Tabish Gauhar, the new special assistant to Khan for the power sector.⁵ The overcapacity of power plants leads to low utilisation rates, reinforced by the drop in energy demand due to economic shocks as a result of COVID. This culminates in a large financial burden on the government's balance sheet as plant operators receive subsidies to operate underutilised plants. The Pakistani government already pays approximately \$4.7 billion USD in such capacity payments, but is yet to come up with a robust plan to boost consumption or export its surplus energy.⁶ Secondly, overcapacity in the power system leads to high operational and

maintenance costs. Although power production has been increasing rapidly, consumption has been decreasing due to repeated tariff spikes, which can threaten the financial sustainability of operators. In effect, even with an energy surplus, almost 50 million people still have no access to electricity. In 2020, the future of Pakistan's power sector was a cause for debate; the country confronted huge electricity payments amidst persistent blackouts due to an inability to operate all its plants and handle the associated costs.

In short, Chinese power capacity expansion (via coal) may have helped overcome power generation shortfalls in Pakistan, but chronic problems of a creaking transmission network and a poor bill recovery track-record have led to unsustainable balance sheets.⁷ The implications of COVID have therefore worsened this situation; capacity payments are likely to increase; power plant sustainability will be impaired as a result of reduced economic growth; and job losses may prevent households from paying the electricity bills. For instance, economic projections for the



Credit: Xinhua / Alamy Stock Photo

<https://chinadialogue.net/en/energy/will-china-continue-to-bank-on-coal/>

installed power plants were based on continuing the 6-7% growth rate of the economy before the pandemic, a direct contrast to the negative growth rate observed in 2020.⁸

The Opportunities and Challenges of Coal phasing-out During COVID Recovery

Based on the aforementioned, Khan's announcement is understandable given the unsustainability of coal plants in recent years. This shift finds allies amongst the recent developments in other countries that have committed to a phase-out of coal, as well as influx of economic stimulus packages that promote green recovery. Several opportunities and windows for future risk aversion have been identified for Pakistan which have the potential to accelerate the green energy transition of CPEC. Firstly, Pakistan's choice of a coal moratorium aligns with other developments on an international level. For instance, the UN development system has formed the Issue-Based Coalition (IBC) on Climate Mitigation and Air Pollution with a working group on coal phase-down. Additionally, in 2021, G7 countries announced the suspension of public funds for international coal financing, an active response to the UN's call for an accelerated green energy transition.⁹ Hence, Pakistan can strengthen

its partnership with other countries through affiliating their goals with international initiatives. Secondly, since China has already invested in renewable energy in Bangladesh by announcing to cancel all coal investments, the transition from coal to renewable energy investments should be easier in the context of CPEC. Lastly, a recent report from the Chinese NGO, Greenovation Hub, warned that Chinese-financed coal plants risk locking Pakistan into a high emissions energy pathway that can create "stranded assets" with potentially significant financial and reputational losses.¹⁰ Therefore, the accelerated coal phase-out has the opportunity to prevent long-term, unsustainable energy lock-ins.

Despite the willingness of the Pakistani government to phase-out coal investments, several challenges remain. Having produced and consumed around half of the world's supply of coal, China may be planning to build more coal-fired power plants, especially those belonging to 'new coal power'. China's 'new coal power' development is considered green and clean from their own perspective. In contrast to the stereotyped 'old coal power', 'new coal power' has applied advanced technology that will not cause severe environmental pollution. For example, the Thar Coal and

"These recent developments imply that coal investments under the framework of CPEC will gradually be converted into a new renewable energy model."

Electricity Integrated Project (which was put into commercial operation in 2019) specifically targets the low calorific value of Thar coal and has incorporated new technologies that reduce the amount of nitrogen oxide and sulfur oxide produced. Another project, the Hubco coal power project, does not only use supercritical technology boilers to improve combustion efficiency and reduce pollutant emissions, but is also equipped with electrostatic precipitators to reduce particulate matter emissions. For this plant, about 10% of the entire project cost is used for pollution prevention and control, and its emissions are in full compliance with Pakistan's national environmental quality standards, according to China.¹¹ However, 'new coal power' has not effectively solved the problems of high-power generation costs aggravating circular debts and the large capacity for obsolete power generation. Therefore, it is unclear whether China will continue to push their green coal technology or the state is committed to a coal phase-out with additional investments in renewables. Furthermore, the International Renewable Energy Agency (IRENA) estimated that, globally, renewables will be priced competitively against fossil fuels by 2020. At the time the initial coal investment decision was made, renewable energy had the challenges of high upfront costs, pushing the choice towards coal. The price of renewables is particularly low in Pakistan and can thus be seen as a financially sound investment decision compared to a few years ago. Therefore, investment decisions should be made based on the most relevant data to accurately reflect the benefits and trade-offs of different energy solutions.

Conclusion

The decision of the Pakistani government to phase-out new coal investments is rationalised

by both economic and climate mitigation factors. Compounding this, the reduced power demand due to COVID and the subsequent introduction of green stimulus packages have accelerated the prospect that coal phasing-out should (and should) happen sooner rather than later. Therefore, the introduction of the Pakistani government's coal moratorium policy will inevitably change CPEC coal investments, which, historically, have dominated their investment portfolio. Based on the identified opportunities and challenges, the following recommendations are suggested to ensure that a win-win situation is maximised in the process of CPEC's green energy transition:

1. China should make full use of the low-priced renewables that Pakistan's advantageously possesses to help the country realise its energy transition. Renewable energy investment should be supported by storage infrastructure and expansion, alongside the modernisation of the grid to support the higher penetration of renewable energy.
2. Stakeholder engagement in new investments should be emphasised. The governments and enterprises connected with CPEC projects should engage stakeholders in the private sector and civil society to ensure that the issues and concerns of all parties can be communicated and responded to in a timely and effective manner. In particular, it is necessary to understand how new investments will deal with the chronic problems of a creaking transmission network, unsustainable bill recovery, and in preventing an increase in emissions.
3. The Pakistani government should incentivise different parties that provide economic stimulus packages to tailor the funds to green purposes, such as renewable power investments. This can materialise new arrangements with foreign governments (China in this case), the alignment of foreign investments with domestic stimulus packages (such as Pakistan's Green Stimulus packages), or a shift towards investments coming from multilateral investment banks.

Conclusion

Sabriyah Saeed

The six case studies in this report highlight various economic mechanisms through which CPEC can support a sustainable recovery for Pakistan post-COVID, as well as address some of the core questions around environmental conservation and social equity that preceded the pandemic. The varied approaches of these chapters ultimately share a common concern around the formulation and implementation of the sustainability policy frameworks attached to such economic mechanisms.

Whilst solution pathways, such as debt-for-environment swaps and multilateral bank investments, present pivot in the right direction with regard to environmental, social and economic sustainability, there is a need for their policy frameworks to further coalesce themselves with the on-ground reality of CPEC projects and the particular regional contexts within which they exist. In essence, stakeholders should be wary of “greenwashing” policies, but should also recognise the co-benefits that such policy infrastructures can bring. The ability to effectively implement sustainable policies in CPEC projects through these mechanisms will allow Pakistan to not only landscape a successful economic recovery, but also a blueprint from which to realise the growth that the nation had envisioned before the pandemic. The following are some



overarching recommendations to be considered in light of this:

- Long-term sustainability considerations should be placed at the centre of short-term economic recovery strategies. Various solutions presented (e.g. coal phasing-out, reforestation initiatives) have demonstrated that the long-term economic and social benefits will greatly outweigh the short-term economic gains of alternative investments. This means that frameworks should be established so that investments can be compared against suitable alternatives, with indicators that can capture both the economic and environmental benefits and implications thereof. This includes taking into consideration whether investments can unlock the potential for alternative finance sources or debt recovery mechanisms (e.g. debt-for-climate swaps). This should always be based on up-to-date information, as was illustrated by the coal investments that now compete with renewable alternatives at approximately equal unit prices in Pakistan.

- Local community stakeholder needs should be more accurately reflected and addressed within the formulation of policy frameworks. Compounding that, protective measures, or suitable compensation schemes, should be established for populations affected by certain policies. Past CPEC investments have not always been fully transparent when it comes to community involvement and newly planned investments risk glancing over adequate community involvement throughout the process. For instance, the reforestation initiatives have large social and environmental benefits, especially if local communities are engaged in them, but can have potential negative consequences for herders, and for communities with insecure land tenure rights, which can be shaped by regional social and power dynamics. Active community involvement can help identify and accommodate issues that arise throughout the process. For SEZ development, for instance, small-scale businesses may be outcompeted by larger corporations and women may benefit

less from industrial development. This highlights that the aggregate economic gains can come at the expense of increasing inequalities in society. Although Pakistan's economic stimulus incorporates support for small-scale businesses, a wider set of compensation schemes or alternative business concepts (e.g. joint ventures) should be considered to prevent inequalities from being exacerbated during COVID recovery.

- The federal government must form a more cohesive and effective working partnership with provincial authorities in the implementation of green recovery solutions. The legal framework governing these intergovernmental relationships should allow for a flexibility whereby the provinces are still able to formulate region specific judgements and practices, but under the overarching direction and approval from the central government. This is important not only for the effective application of the economic schemes discussed in this report, but also for placating tensions or concerns stemming from the individual provinces, which could culminate in core objectives being sidetracked, as was the case with the 2015 'route controversy'. This is also imperative for coupling and streamlining green recovery policies with others in the country, such as existing climate change policies, to ensure that budgets are appropriately spent and do not counteract or substitute other on-going initiatives.

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Thanks

Many thanks to our speakers this term:

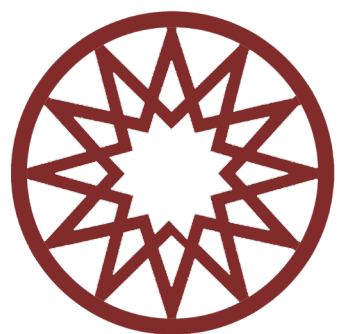
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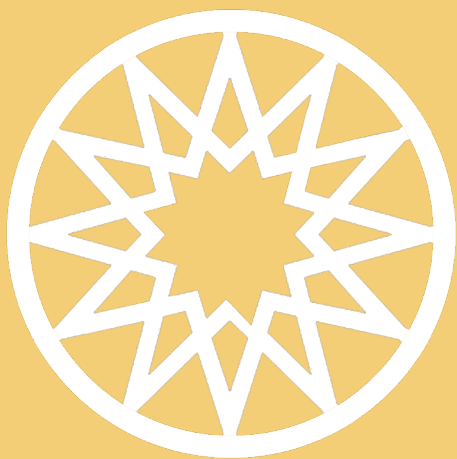
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