

## A HARBINGER OF SOCIO-ECONOMIC DEVELOPMENT: REFLECTIONS OF PRACTITIONERS ON THE ENVIRONMENTAL IMPACT OF CPEC ON GILGIT BALTISTAN

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### ABSTRACT

*Gilgit-Baltistan, an environmentally disaster-prone region embarked upon a 21-century mega development project through the CPEC initiative. CPEC is considered to be a harbinger of socio-economic development for Gilgit-Baltistan, Pakistan, and beyond. The CPEC route is passing through an extraordinary landscape and immensely rich natural resources region of Gilgit Baltistan that provides the land bridge between the host countries of the corridor. The mega-project of CPEC was initiated in 2013 with a worth of 62 billion USD, one of the Chinese largest overseas investments to date. It is considered the game changer and fate changer of the region but to the larger extent of its benefits, it has also some negative impacts as well among which are its environmental hazards which could destroy the God-gifted nature of Gilgit-Baltistan. Therefore, this research is to be conducted to probe the short-term and long-term measurements that could be a handful to protect its adverse effects.*

### INTRODUCTION

The China-Pakistan bond has grown-up with time from 1960 to now. In 1959 both countries collaborated and worked on the construction of the Karakoram Highway and completed in 1979 which strengthened and enhanced the bilateral relationship between both countries<sup>1</sup>. China-Pakistan Economic Corridor (CPEC) is a part of China's broader Belt and Road Initiative (BRI). The multidimensional framework of infrastructure and public work projects, energy supplies, and many other developmental projects is intended to promote the interconnectivity between Pakistan, China, and many other countries. Initially, CPEC was started as a \$46

billion investment in 2015, but in 2017 its worth was greater than before to \$62 billion. Due to CPEC, China will determine a convenient means of travel and connection between the Middle East, Africa, and Europe<sup>2</sup>. That also benefits Pakistan's infrastructure which results in the normalization of the Pakistan economy.

CPEC has numerous benefits like roadway networks, infrastructure, and energy benefits in Pakistan. The advantages have both social and economic implications driving progress and growth in various aspects yet it needs to address all possible socio-political and environmental challenges. The benefits of CPEC projects will

<sup>1</sup> "China-Pakistan Economic Corridor: Will It Sustain Itself? | Fudan Journal of the Humanities and Social Sciences."

<sup>2</sup> Rasheed, Kanwal, and Abbas, "CPEC AND THE CHALLENGES FOR THE ENERGY SECTOR OF PAKISTAN."

help meet the country's energy needs providing valuable benefits like international standard roads, railway network, skill development of human resources, and an increase in employment percentage. On the other hand, to mitigate potential environmental challenges, it would be very appropriate to carry out the Environmental Impact Assessment (EIA), indeed a requirement in China and Pakistan's national environmental legislation as well as of the Declaration on Environment and Development, formalized by both countries. Under this research, there are two main hurdles facing Chinese foreign direct investment which are the quality of air and consumption of water particularly given existing environmental problems in Pakistan. The environmental and societal uncertainties are another study that warns that the execution of investment projects will have the biggest and most noticeable effect on water air and biodiversity and the consequent threats would be significantly greater compared to the risk to soil and noise<sup>3</sup>

The main objective of this paper is to look at the environmental impact of CPEC in the different districts of GB and identify the environmental impact and the districts that are at high risk of exposure and dreadful conditions from the modernization processes through the construction of road activities and developing industrial zones. This anticipates recommending some possible solutions through control and needed to mitigate and protect the identified affected environment, furthermore to safeguard the health of people of GB under study. Based on the International Sustainable Development Report 2020 Pakistan has achieved SDG 13 on climate action. That's remarkably accomplished for Pakistan to meet the target however this achievement does not eliminate the country's vulnerability to climate change nor does it absolve the government of its responsibility to reduce carbon emissions. So far, the government has not revealed whether any actions have been taken to guarantee sustainable development, or if there is a more advanced approach to

monitoring and reporting on environmental matters. It would be equivalent to an upgrade plan for an enhanced environmental monitoring and reporting plan

**The following primary research questions are to understand the CPEC and prevailing environmental challenges and opportunities.**

1. Under what environmental conditions CPEC projects may yield sustainable economic benefits?
2. What provincial legislative frameworks are crucial to address issues pertinent to the environment?
3. What are the main areas of investment under CPEC projects?
4. How does CPEC influence environmental protection and quality of life? How does the provincial government plan to balance the CPEC's influence on poverty reduction and environmental pollution in Gilgit-Baltistan?
5. How and why it is important to understand the CPEC projects, its objectives, and future socio-economic outlook? What are the main areas of investment under the CPEC project?

**Caring For Environment:**

Environmental issues are receiving a lot of attention on the global stage. G8 countries generally work on environmental issues like climate change, pollution, and other major issues. With almost 50 years of international environmental diplomacy, it has become crucial to view the environment through the lens of global politics. Recognizing the interconnectedness of environmental issues and political decision-making is vital for effective actions and sustainable solutions. The same cannot be said for green politics and perspective on key global issues coming from more radical green positions<sup>4</sup>. China and Pakistan have recognized the importance of environmental impact assessment in their national environmental legislation. It shows their commitment to sustainable development and the protection of the environment. By requiring such assessments they can ensure that the

<sup>3</sup> "Preliminary-Environmental-Impact-Assessment-Study-of-CPEC-NRRC-Activities-in-KPK-Pakistan(PB-59).Pdf."

<sup>4</sup> Newell, *Global Green Politics*.

development projects consider the potential environmental impact and take necessary measures to mitigate them<sup>5</sup>. According to the study the challenges posed by existing ecological problems in Pakistan and the potential impact on China's foreign direct investment air quality water consumption and biodiversity. It is crucial to consider these risks and take appropriate measures to minimize the negative effects on the environment and the well-being of local communities. Environmental sustainability should be a priority in development endeavors<sup>6</sup>.

### Theorization:

Ecological thoughts deal with the interest in its intrinsic to the natural world rather than only human presence within the environment. Green theory grasped the political stance which encompassed the concept of one's inherent worth or significance and their capacity to make choices and take control of their life<sup>7</sup>. In IR, green politics assists to re-exam the correlation between states, and the impact of economic activities on the natural world. A green theory understands climate change is indeed a direct outcome of the collection action of humanity. It stems from the activities and behavior of people that contribute to the emission of greenhouse gasses ultimately leading to a significant alteration in the earth's climate change.. Green theory assistance in identifying the major issues such as environmental degradation, global warming, and climate crisis in both ecological values as well as political wellbeing. Liberal economists highlight international collaboration as having of favorable impact on its country. If more critical consciousness then environmentalism may adapt itself to an examination or evaluation of the capitalist system. Liberalism addresses relations between human communities with non- the non-human environment liberalism focuses on the rights of

<sup>5</sup> "Environmental Impact Assessment of CPEC: A Way Forward for Sustainable Development | Emerald Insight."

<sup>6</sup> "Environmental and Social Risk Evaluation of Overseas Investment under the China-Pakistan Economic Corridor - PubMed."

<sup>7</sup> Newell, *Global Green Politics*.

human decision-making and buying but not essentially eco-friendly or environmentally aware consequences of consumption. If we talk about liberalism and environmental policies, we must talk about whether market instrument green taxes and other practices linked with the neo-liberalism market approach are well-matched to achieving environmental objectives<sup>8</sup>.

### Environmentalism and Human Security

Environmentalism is intense on sustainable development, an idea originally made use in 1980 by the World Conservation Strategy IUCN and mainly trendy in 1987 by the World Commission on Environment and Development WCED<sup>9</sup>. Sustainable development assumes that progress and development are directly proportional to environmental crises. If the level of growth and development increases, there is a probability of to increase in the environmental crisis. In 1980 sustainable development became fashionable and belief in limits to growth. The word restricted expansion came from a significant and very well-recognized book *The Limits to Growth*<sup>10</sup>. The book argues that the economic and population growth of human societies was leading to a series of unrelated crises. Due to rapid growth, the use of resources was exponentially diminishing and these materials were used for industrial growth which can exceed carrying capacity and producing capacity. They predicted that due to the increase in growth rate many natural resources would speedily run out, which can create impurity and automatically affect the environment. Environmentalists accept the existing framework of world politics such as its social, economic, and political structure. They try to reduce environmental problems within those structures. Greens thought that these structures were the main origin of environmental crises<sup>11</sup>.

<sup>8</sup> Dyer, "Introducing Green Theory in International Relations."

<sup>9</sup> Jeronen, "Conservation."

<sup>10</sup> "Theories of International Relations : Scott Burchill : Free Download, Borrow, and Streaming : Internet Archive."

<sup>11</sup> "Theories of International Relations : Scott Burchill : Free Download, Borrow, and Streaming : Internet Archive."

damage but indirectly mitigates economic growth<sup>14</sup>.

### Development and modernization:

No one can deny the impact of Modernization and development on the environment both in positive as well as negative ways. Development is the root cause of ecological degradation and the security and recovery of the environment are central to an eco-friendly environment. Modernization is good in that it increases the rate of production but bad in that it harms the environment. Modernization can lead to substantial chemical addition in nature which can create environmental pollution like air, water, as well as land pollution. It can also lead to resource depletion. Both development and environmental protection have great importance in any society. A healthy environment supplies the necessities of life like water, food, and air<sup>12</sup>. Environmentalists and economists have been cat and dog. They need each other as Environmentalists see economists sometimes as supporters of cultures that prioritize greed and advocate for it and these supporters are an abundance of uncertainty. Economic experts see environmentalists as nostalgic traditionalists wanting to slow the economic powerhouse that is responsible for eradicating global poverty<sup>13</sup>.

### Trade and Environment:

The connection between trade, development, and the environment is complicated and not fully understood. Trade can have both positive and negative effects on the environment. Due to trade expansion, economic growth increases, which directly or indirectly affects the environment. Increasing trade can support economic growth, social welfare, and development which can reduce global poverty. Most countries that are unlocked for international trade can raise faster, increase efficiency, and have high incomes which produces more opportunities for people. Trade liberalization directly aggravates environmental

### Green political theory:

Green political theory is a theory of International Relations. It contradicts the dominant theories of international relations. It focuses on environmental crises as central to the study of international relations. Green theory mainly focuses on international equity, global progress, worldwide advancement, and modernization.

In the 1960s, international environmental degradation arose from the disaster— of common sense, which is the notion that self-interested individuals will overuse shared resources such as land, water, and fish<sup>15</sup>. The first United National Conference was held in the 1970s on the theme of the environmental crisis. In the 1980s, ecological party and governmental policies developed. In the 1990s, the natural environment became the basic source of question for the discipline of IR. The green movement acknowledges that the common folks are ready to embrace the commitment concerning the environment<sup>16</sup>. This requires conceptual as well as applied attention especially due to rising evidence that human actions are the factors that radically change our climate, security problems as well as environmental ones. To correspond with the requirements of the subject matter under discussion the green theory helps to clarify and grasp these environmental challenges. Green theory captures the positioning of the political terms as well as the values and agency<sup>17</sup>. Basically, how do agencies work, and what is the value of these agencies? Green theory critically analyzed these environmental issues because theory and practices are linked. Green theory understands climate change as a direct

<sup>12</sup> "Supporting Environmental Sustainability in Developing Countries."

<sup>13</sup> "The Plundered Planet: Why We Must--and How We Can-- Manage Nature for Global Prosperity | Oxford Academic."

<sup>14</sup> "An Empirical Analysis of the Hydropower Portfolio in Pakistan - ScienceDirect."

<sup>15</sup> "(PDF) Introducing Green Theory in International Relations | Hugh Dyer - Academia.Edu."

<sup>16</sup> "The Green Movement: Climate and Transition | SpringerLink."

<sup>17</sup> "(PDF) Green Political Theory."

effect on human collective choice. Green theory helps to define the major issues like climate change in both the short as well as long term. With the concern for this matter, environmental political theorists contended that structural ecological preservation required an approach that goes beyond the negotiation haggling in favor of collective decision that articulates the ordinary goods<sup>18</sup>

### **Human security**

The concept of Human security can be described as peace of mind and economic security. Many people think that the world is an unstable and unpredictable place with absolute menaces like unforeseen emergencies, environmental calamities, warfare, hostilities, destitution, terrorism, health pandemics, and economic and financial downturns. These crises are multifaceted and entail multiple forms of human security. Today most of the development and humanitarian challenge arises from numerous aspects that are interrelated and are equally supporting. These factors necessitated a higher place of integration of actions throughout the United Nations system and collaboration with others. During times of hardship and severe poverty acting on a sole problem or primary focus is not enough. Its a need to address insecurities collectively as a team, extensively. After that, the people will feel safe in all perspectives of their lives. People who have incomes and opportunities realize emotional and physical well-being and know their liberty and integrity which are fully respectable they appreciate human security and are more influential, in finding a sustainable solution to the most challenging gap in achieving peace and development<sup>19</sup>. Certainly when faced with ongoing academic examination on the unrestrictedness of thoughts and conceptions are reemphasized the requirement for a flexible understanding of human safety and well-being, stating: what people consider to be essential and

crucial what they consider to be the necessities of life and fundamental requirement which are very important to individual societies and state. That's the reason the notion of human security is always in a progressive way<sup>20</sup>.

Under the China-Pakistan Economic Corridor, these are comprehensive projects that predict a bright future for both Pakistan as well as China and these enrichment activities which contribute to educational institutions, skill-building activities, and upgraded infrastructure have shaped individual lifestyles<sup>21</sup>. Although the project has a larger extent of its benefits, it also has some negative impacts among which are its environmental hazards which could destroy the God-gifted nature of Gilgit-Baltistan. The research personified the idea of environmental sustainability and the need to protect our environment from unrestrained extension and find a way to make change and protect human welfare before it's too late<sup>22</sup>. For the development across multiple domains in the Gilgit Baltistan amplified to the improvement and expansion of what CPEC shaped the environmental protection, standard of living, and life satisfaction, Zhang discusses in his article that The fast depletion of natural resources, atmospheric condition air purity land degradation and ecological destruction confirm that the industrial construction and activities are heavily interrupted the global sustainability initiative caused and that potential ecological and biophysical transport capacity is considered to reduce<sup>23</sup>. he global investors invest the capital overseas to stimulate economic development and overcome environmental dangers to the host

<sup>18</sup> "The Green State: Rethinking Democracy and Sovereignty | Environmental Practice | Cambridge Core."

<sup>19</sup> "Fostering Peace and Sustainable Development | United Nations."

<sup>20</sup> "A Critical Evaluation of the Concept of Human Security."

<sup>21</sup> "CPEC: Governance and Security Challenges—Implications for the Belt and Road Initiative | Chinese Political Science Review."

<sup>22</sup> "Sustainability | Free Full-Text | The Sustainable Development of the China Pakistan Economic Corridor: Synergy among Economic, Social, and Environmental Sustainability."

<sup>23</sup> "Environmental and Social Risk Evaluation of Overseas Investment under the China-Pakistan Economic Corridor - PubMed."

country<sup>24</sup>. For emerging technology that is reducing energy usage and using alternative energy resources, further financial assistance is needed to maintain environmentally friendly development, and green project paths are needed. Both Chinese and Pakistani try to make CPEC a green corridor which is beneficial for both countries. Trees will be planted all along the CPEC routes and industrial centers are going to increase. It should not be harmful to the health of people and try to reduce environmental pollution through emissions to maintain a friendly atmosphere. China introduced a mass transit project which is very helpful in addressing the overcrowding troubles. Under the vision of a green corridor China and Pakistan try to make a sustainable future for the whole region. The experts and officials of both China and Pakistan believe that the various projects of CPEC such as infrastructure, industrial, and energy projects can not only boost up economic growth but also provide green jobs and clean energy which have a positive impact on the life of humans. Taking into consideration the development of CPEC it is clear that Pakistan and China aim to participate in sustainable and green energy and work together to secure energy resilience, environmental responsibility, and ecological balance in Pakistan however there are remaining pragmatic hurdles, that are complete visual perception and align objective to the cleaner energy projects road map to deal with environmental concerns and societal hazards of CPEC investment<sup>25</sup>.

The governmental officials of China, financial organizations, and banking institutions play a crucial and indispensable role in taking a more inclusive leadership which involves the establishment of effective mechanisms and framework of global governance in energy role in line with the concept and vision of global energy governance, the dedication of the Paris

agreement and eco-friendly policies focus on sustainability. Pakistan's policymakers must make coordinated efforts to promote the use of cleaner energy resources and overcome the barriers to making policies for renewable energy. To support these targets Pakistan needs to add variety and richness to making policies for environmental economic and social laws and pollution responsibilities in CPEC projects. One potential component for this could be to introduce environmentally friendly transport policies to enhance or strengthen sustainability across the transportation route and incorporate natural capital accounting in environmental policy design. Additionally, taking into account Pakistan throughout the establishment of the special economic zone beneath CPEC and the carbon-efficient SEZ eco-friendly policies can be implemented and utilizing the planning for progress and advancement for the eco-friendly investment vehicles, climate change mitigation measures, sustainable infrastructure, and investment<sup>26</sup>.

### **Understanding CPEC and its Prospects for Gilgit-Baltistan**

Gilgit Baltistan is the doorway of the showcase initiative and is one of the most daring global economic integration endeavors in contemporary history. Due to its geostrategic and geo-economic importance, China offered to install CPEC. This corridor will enable Pakistan especially Gilgit Baltistan to be rich through infrastructure, economic zones, industrial zones, power plants, highways, technology and communication, bilateral investment, cultural exchange, and tourism industries in Gilgit Baltistan. CPEC refers to the China-Pakistan economic corridor<sup>27</sup>. It was first proposed by President Pervaiz Mushraff later on Prime Minister of Pakistan Nawaz Sharif signed the bilateral economic relation and investment program with China in 2013. The geo-strategic

<sup>24</sup> "Pakistan's Quest for Coal-Based Energy under the China-Pakistan Economic Corridor (CPEC): Implications for the Environment | Environmental Science and Pollution Research."

<sup>25</sup> "CPEC & Environmental Sustainability – South Asian Voices."

<sup>26</sup> "Sustainable Infrastructure, Energy Projects, and Economic Growth: Mediating Role of Sustainable Supply Chain Management | Annals of Operations Research."

<sup>27</sup> "CPEC and Pakistan: Its Economic Benefits, Energy Security and Regional Trade and Economic Integration | Chinese Political Science Review."

importance of Gilgit Baltistan attracted the Chinese government to invest some part of the CPEC program in Gilgit Baltistan. CPEC aims to improve the lives of citizens of Pakistan and China by building infrastructures, Highways, Economic zones, Railways, electric power plants, and communication connectivity. It is one of the biggest six corridors of China. Regarding connectivity, it will interface Gwadar port with far-southern Xingjian province in China through Gilgit Baltistan and Wakhan. Approximately by reducing the 12000 km distance, will close China to Asia country and the Middle East countries. China expects that it will be proved as a paramount important program by improving China for Gilgit Baltistan and Pakistan's GDP at its climax in the world. The main objective of CPEC is to overcome the ongoing energy crisis in Pakistan and most of these energy projects are CPEC energy projects will serve as the backbone of a strategy to overcome the energy crisis in Pakistan. In this scenario, these energy projects are funded by using a build-operate model. Chinese investors are investing in the energy sector as independent actors and provide special protection in the market industry in Pakistan. There are multiple benefits under CPEC projects like construction of roads from Kashgar region to Gwadar, railway and highway networks infrastructure industries but it is also a huge contribution to the energy sector and construction of almost 12 to 13 special financial zones. Both states need to stabilize their social economic and political condition China must be aware of the history, norms culture, and perceptions dominant in Pakistan concerning the old Silk Road and CPEC. It will be a challenging task for policymakers and diplomats of China to tackle and effectively communicate the goals and timeline of CPEC projects in the host country and their people and Chinese foreign policymakers need to carefully manage any negative perception and voice regarding CPEC initiative and ensure to clear consistency and positive response that what can be expected to CPEC initiative.

With the help of the CPEC projects, Pakistan maintains friendly relations with their neighbor

countries like India, Afghanistan Iran, and also with Bangladesh and the Middle East region. The CPEC projects are turning into a beacon of hope not only for Pakistan and China but also for economically underdeveloped and developed countries like Afghanistan Iran Turkey and it is the start of economic cooperation among these countries to develop cooperation and maintain peace<sup>28</sup>. While the CPEC projects have many positive effects, their ultimate success is dependent on regional integration and promoting and enhancing regional integrity. Due to this reason, the China-Pakistan Economic Corridor must be indulged along with energy hubs, a vibrant trade nexus, and a road network that extends the connection and builds trust, cooperation, and mutual development<sup>29</sup>. Furthermore, due to CPEC, there are certain environmental issues to address, some researchers suggest that the economic corridor led to land pollution including the contamination of bottom sediments with harmful and toxic substances and it's very important to mitigate these issues before any negative impact on the environment<sup>30</sup>.

The development of China Pakistan economic corridor may cause noise pollution due to the construction of road and ship traffic and also due to cargo operation which is likely an environmental challenge and quite daunting, it may be beyond Pakistani capacity to address these issues<sup>31</sup>. Furthermore, civil activist political and social organizations at domestic and international levels are likely to be concerned and address these environmental issues. It is also important for all stakeholders to address these issues and find any sustainable solution to ensure the corridor development is environmentally responsible. In addition, the most significant feature of the economic corridor is cost-effective and time-efficient in connecting Central Asian states which provides the most

<sup>28</sup> "The Potential and Prospects of Gwadar Port on JSTOR."

<sup>29</sup> "(PDF) Will Change in Government Affect China-Pakistan Economic Corridor: The BRI, CPEC and the Khan Government: An Analysis."

<sup>30</sup> Nolintha, "Economic Sub-Corridors and Potentials for Regional Development in Lao PDR."

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convenient and economical pathway for trade and connectivity<sup>32</sup>

The economic corridor also plays a crucial role in enhancing the interaction of people and facilitating the exchange of information and ideas at the political as well as at cultural levels. China has very important investment potential and the potential is for two-sided trade which is significant for improving the relationship between Pakistan and China<sup>33</sup>

China is indeed the biggest trade partner in recent years and one of the most friendly states. As per reports, the two-sided trade between China and Pakistan has crossed the threshold of 4 billion US dollars. This highlights the success and acceptability rate of CPEC as a significant economic initiative between both countries. However, there is still a need for fine-tuning and engagement at a high level to ensure the long-term success of both nations.

In addition, the funding for the economic corridor is a driving force for economic growth for both Pakistan and China. This investment will boost economic advancement and industrial infrastructure in Gilgit Baltistan. Furthermore, it will have a favorable outcome on the industrial sector resulting in improving infrastructure and resources. The corridor will overwhelm the whole region into a bustling economic and industrial hub. The development and infrastructure communication sector, specially focused on the road and railway construction, particularly around Gwadar port and nearby region presents a huge opportunity for Pakistan to attract important foreign direct investment and position the country as an attractive investment destination in the global market<sup>34</sup>.

The China policymakers, officials, and executives have suggested that the issue facing Pakistan due to setting up settlement funds is still pending, to facilitate China's investment in power and energy projects under CPEC. One of

the Chinese former deputy directors Zhang Yuqing (Chinese National Energy Administration) said that the establishment of these funds must be implemented on time by the government of Pakistan which led to Chinese firms which an improvement in Pakistan's investment environment that further Chinese firms more executed and motivated to do business in Pakistan<sup>35</sup>. Furthermore, an executive from Power China said that the main reason and challenge of investing in a power station in Pakistan is the issue of delaying payment. Both Power China and the National Energy Administration strongly support the idea of the establishment of resolution funds by intergovernmental agreements on CPEC energy cooperation and these funds ensure uninterrupted payment of Chinese power producers<sup>36</sup>

GB is an entryway of CPEC that would open the land route for Xinjiang which is a west side province of China to Gwadar Port located in Pakistan. China aims to foster economic enhancements, social growth as well as political advancement and stability in the Xinjiang province of China which is considered the most developed region of China in the east<sup>37</sup>. In recent times Gilgit Baltistan seems to be getting more attention from media coverage along with recognition from international platforms and participation in debate and academic discourse. Gilgit Baltistan is an entrance point for CPEC to run their projects like Gwadar port is seems to be a successful project of CPEC in the short term as well as long term. More precisely Gilgit Baltistan is the only land way to connect China to Pakistan and all their projects like the construction of roads, building pipelines, communication networks, and other energy projects must run through this mountainous

<sup>32</sup> "China–Pakistan Economic Corridor: Will It Sustain Itself? | Fudan Journal of the Humanities and Social Sciences."

<sup>33</sup> "China – Pakistan Economic Corridor: A Harbinger of Economic Prosperity and Regional Peace | Asian Journal of German and European Studies | Full Text."

<sup>34</sup> "Securing CPEC: Challenges, Responses and Outcomes | SpringerLink."s

<sup>35</sup> "A Study on the Belt and Road Initiative's Trade and Its Influencing Factors: Evidence of China-South Asia's Panel Data | PLOS ONE."

<sup>36</sup> "Environmental and Social Risk Evaluation of Overseas Investment under the China-Pakistan Economic Corridor | Environmental Monitoring and Assessment."

<sup>37</sup> Beg, Baig, and Khan, "Impact of China-Pakistan Economic Corridor (CPEC) on Human Security and the Role of Gilgit-Baltistan (GB)."



region<sup>38</sup> In addition, the significant location of Gilgit Baltistan located western side of China near Xinjiang province linked with the Wakhan corridor in Afghanistan and also connected with Indian Jammu and Kashmir gives extra privilege to Gilgit Baltistan and without Gilgit Baltistan, it would be a challenge for success rate of CPEC projects<sup>39</sup>

### Analyzing CPEC, Social Goals in the Context of Gilgit-Baltistan

The potential environmental consequences of the Belt and Road Initiative's mega infrastructure projects have become a growing concern among political analysts. Infrastructure, including roads, power plants, transmission systems, mining projects, and heavy industries, can have a significant impact on the environment, resulting in air and water pollution, deforestation, wildlife mortality, and greenhouse gas emissions. These challenges undermine global efforts to combat climate change. Unfortunately, many of the power projects under the China-Pakistan Economic Corridor (CPEC) appear to deviate from Beijing's commitment to constructing an environmentally friendly BRI. It is worth noting that the Chinese government has placed great emphasis on green development as a key objective of the Belt and Road Initiative (BRI). In fact, in August 2016, six central governmental agencies, including the People's Bank of China, released guidelines for establishing a green financial system. These guidelines urged Chinese banks and multilateral development banks, with China actively participating, to embrace green financing and enhance environmental risk management for BRI projects. In 2017, the Chinese Ministry of Environmental Protection, Ministry of Foreign Affairs, and National Development and Reform Commission jointly issued guidelines for promoting a green Belt and Road, highlighting China's commitment to environmentally sustainable development within the BRI

framework. It is encouraging to see efforts being made to ensure that the BRI is not only economically beneficial but also environmentally responsible<sup>40</sup>

It is important to consider the environmental impact of the development projects under the China-Pakistan Economic Corridor (CPEC), particularly concerning the construction of numerous coal power plants with Chinese financing. While China claims that these plants use advanced and environmentally friendly technologies, it is necessary to critically evaluate these claims and assess the potential impact on the environment and local communities. The ultimate goal of CPEC is to improve the quality of life and reduce poverty, but it is important to explore the perception of local communities and ensure that they are not adversely affected by the initiative. Overall, a balanced approach is necessary to ensure that the benefits of CPEC are realized while minimizing any potential negative consequences. CPEC will directly or indirectly affect household welfare through surging industrial growth and competitiveness. CPEC has the potential to boost the progress of several industrial and non-industrial sectors in Pakistan. This includes industries related to small and medium-sized enterprises (SMEs), as well as exports and imports. The project can also contribute to the growth and competitiveness of various other sectors in the country. With the implementation of CPEC, Pakistan is expected to experience a significant improvement in its economic growth and development. However, it is important to note that the project also poses some environmental and social challenges that need to be addressed to ensure sustainable development<sup>41</sup>. CPEC is viewed as a significant factor in reducing poverty and is expected to commence operations soon to boost Pakistan's economy by creating employment opportunities and reducing poverty. According to reports, CPEC is a mega-project that is likely to generate

<sup>38</sup> "Unrest in Gilgit-Baltistan and the China-Pakistan Economic Corridor."

<sup>39</sup> Kumar et al., "Strategic Importance of Gilgit - Baltistan In India's Neighborhood Foreign Policy."

<sup>40</sup> Beg, Baig, and Khan, "Impact of China-Pakistan Economic Corridor (CPEC) on Human Security and the Role of Gilgit-Baltistan (GB)."

<sup>41</sup> Naz, Ali, and Fatima, "International Competitiveness and Ex-Ante Treatment Effects of CPEC on Household Welfare in Pakistan."

millions of jobs in various sectors, which will contribute to poverty reduction. Furthermore, in 2017, approximately 30000 Pakistani professionals, including management engineers, doctors, IT experts, and policy experts, were employed in various CPEC projects such as Qasim port and coal power projects<sup>42</sup>.

### **CPEC and Gilgit Baltistan:**

Gilgit Baltistan faced major problems of environmental pollution and health. CPEC directly or indirectly influences the environment and lives of people in both positive as well as negative ways. The positive way is in the sense that CPEC is predicted to expand the financial inflow of capital through the economic and production sector and other investments that can enhance eco-friendly activities and green practices, health, and security administration. Negative in the sense that CPEC is a developmental project and development may also cause pollution as well as climate change. Climate change plays an important role in shaping our beautiful environment. Mainly human health and development are dependent on them. Climate change can affect the lives of people as well as animals. Gilgit Baltistan will face serious environmental risks, such as low air quality, water pollution, waste management due to industries, deforestation, loss of biodiversity, and glacier melting in the future. CPEC may sometimes be considered a threat to our natural environment but governmental officials and policymakers must consider issues regarding the environment and make such policies overcome these risks<sup>43</sup>

### **Conclusion**

Policymakers express profound concerns regarding the potential adverse environmental impacts stemming from the infrastructural advancements associated with the Belt and Road Initiative (BRI). The Infrastructure projects, spanning roads, construction of railway lines,

advancement in thermal and hydropower plants, nuclear power plants, production of electricity in various regions, construction of oil and natural gas pipelines, mining projects, and heavy industries, exert a significant influence on the environment. The associated risks encompass elevated levels of air quality and overcoming water pollution, habitat loss and fragmentation, deforestation, increased wildlife displacement, the introduction of invasive species, and heightened emission of greenhouse gasses, all of which pose challenges to global initiatives combating climate change. Striking a balance between economic development and environmental sustainability is paramount for our state's long-term well-being. The shared commitment of both Pakistan and China to enhance environmental stability within the structure of the China-Pakistan Economic Corridor (CPEC) underscores the need to prioritize natural ecology. Recognizing that the health of our populace is intricately tied to the well-being of our environment, it becomes imperative to address environmental concerns with the same fervor applied to economic development. The pursuit of economic sustainability and development should not come at the expense of ecological disasters. Focusing on environmental protection and sustainability in parallel with economic objectives is vital for the holistic progress of our nation. Pakistan stands at the threshold of significant advancements, with the potential for increased employment opportunities, a higher quality of life, a boosted GDP rate, and expanded exports. Achieving the status of a developed nation requires giving due attention to environmental preservation, thereby ensuring a harmonious and sustainable trajectory for Pakistan. Motivated to play a meaningful role both nationally and globally, Pakistan is poised to contribute significantly to the collective goal of environmental protection and sustainable development.

<sup>42</sup> Kousar et al., "China-Pakistan Economic Corridor."

<sup>43</sup> Ali et al., "Local Residents' Attitude towards Road and Transport Infrastructure (a Case of China Pakistan Economic Corridor)."

## REFERENCES

- A Critical Evaluation of the Concept of Human Security.” Accessed February 10, 2024. <https://www.e-ir.info/2014/07/05/a-critical-evaluation-of-the-concept-of-human-security/>.
- A Study on the Belt and Road Initiative’s Trade and Its Influencing Factors: Evidence of China-South Asia’s Panel Data | PLOS ONE.” Accessed February 16, 2024. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0282167>.
- Ali, Ghulam. “CPEC: A Gateway to Regional Connectivity.” In *Crossing the Himalayas: Buddhist Ties, Regional Integration and Great-Power Rivalry*, edited by Nian Peng, Ghulam Ali, and Yi Zhang, 91–109. Contributions to International Relations. Singapore: Springer Nature, 2022. [https://doi.org/10.1007/978-981-16-5808-2\\_7](https://doi.org/10.1007/978-981-16-5808-2_7).
- Ali, Liaqat, Jianing Mi, Mussawar Shah, Syed Jamal Shah, Salim Khan, Rizwan Ullah, and Kausar Bibi. “Local Residents’ Attitude towards Road and Transport Infrastructure (a Case of China Pakistan Economic Corridor).” *Journal of Chinese Economic and Foreign Trade Studies* 11, no. 1 (January 1, 2018): 104–20. <https://doi.org/10.1108/JCEFTS-08-2017-0024>.
- An Empirical Analysis of the Hydropower Portfolio in Pakistan - ScienceDirect.” Accessed November 18, 2023. <https://www.sciencedirect.com/science/article/abs/pii/S0301421512005733>.
- Beg, Saadia, Tasawar Baig, and Asif Khan. “Impact of China-Pakistan Economic Corridor (CPEC) on Human Security and the Role of Gilgit-Baltistan (GB).” *Global Social Sciences Review* III, no. IV (December 30, 2018): 17–30. [https://doi.org/10.31703/gssr.2018\(III-IV\).02](https://doi.org/10.31703/gssr.2018(III-IV).02).
- China – Pakistan Economic Corridor: A Harbinger of Economic Prosperity and Regional Peace | Asian Journal of German and European Studies | Full Text.” Accessed February 16, 2024. <https://ajges.springeropen.com/articles/10.1186/s40856-019-0044-2>.
- China Pakistan Economic Corridor: A Chinese Dream Being Materialized Through Pakistan | Semantic Scholar.” Accessed February 16, 2024. <https://www.semanticscholar.org/paper/China-Pakistan-Economic-Corridor%3A-A-Chinese-Dream-Ramay/120cdf7d05c8b7e4a43b6d13f5b37a4af258fb2>.
- China–Pakistan Economic Corridor: Will It Sustain Itself? | Fudan Journal of the Humanities and Social Sciences.” Accessed February 16, 2024. <https://link.springer.com/article/10.1007/s40647-016-0143-x>.
- China’s Xi Jinping Launches Investment Deal in Pakistan - WSJ.” Accessed February 16, 2024. <https://www.wsj.com/articles/chinas-xi-jinping-set-to-launch-investment-deal-in-pakistan-1429533767>.
- CPEC & Environmental Sustainability – South Asian Voices.” Accessed February 10, 2024. <https://southasianvoices.org/cpec-environmental-sustainability/>.
- CPEC and Pakistan: Its Economic Benefits, Energy Security and Regional Trade and Economic Integration | Chinese Political Science Review.” Accessed February 10, 2024. <https://link.springer.com/article/10.1007/s41111-020-00172-z>.
- CPEC: Governance and Security Challenges— Implications for the Belt and Road Initiative | Chinese Political Science Review.” Accessed February 10, 2024. <https://link.springer.com/article/10.1007/s41111-018-0109-z>.
- Dyer, Hugh. “Introducing Green Theory in

International Relations.” *International Relations*, n.d.

- Economics of Gas Transportation by Pipeline and LNG | SpringerLink.” Accessed February 16, 2024. [https://link.springer.com/chapter/10.1007/978-3-030-86884-0\\_2](https://link.springer.com/chapter/10.1007/978-3-030-86884-0_2).
- Environmental and Social Risk Evaluation of Overseas Investment under the China-Pakistan Economic Corridor | Environmental Monitoring and Assessment.” Accessed February 10, 2024. <https://link.springer.com/article/10.1007/s10661-017-5967-6>.
- Environmental and Social Risk Evaluation of Overseas Investment under the China-Pakistan Economic Corridor - PubMed.” Accessed February 7, 2024. <https://pubmed.ncbi.nlm.nih.gov/28477273/>.
- Environmental Impact Assessment of CPEC: A Way Forward for Sustainable Development | Emerald Insight.” Accessed February 7, 2024. <https://www.emerald.com/insight/content/doi/10.1108/IJDI-08-2021-0154/full/html>.
- Fostering Peace and Sustainable Development | United Nations.” Accessed February 10, 2024. <https://www.un.org/en/chronicle/article/fostering-peace-and-sustainable-development>.
- <https://www.nation.com.pk/22-Jun-2015/Cpec-May-Get-Extra-Billion-Dollars>.” Accessed February 16, 2024. <https://www.nation.com.pk/22-Jun-2015/cpec-may-get-extra-billion-dollars>.
- Jeronen, Eila. “Conservation: Sustainability.” In *Encyclopedia of Sustainable Management*, edited by Samuel O. Idowu, René Schmidpeter, Nicholas Capaldi, Liangrong Zu, Mara Del Baldo, and Rute Abreu, 698–705. Cham: Springer International Publishing, 2023. [https://doi.org/10.1007/978-3-031-25984-5\\_903](https://doi.org/10.1007/978-3-031-25984-5_903).
- Kousar, Shazia, Abdul Rehman, Mahwish Zafar, Kamran Ali, and Nadia Nasir. “China-Pakistan Economic Corridor: A Gateway to Sustainable Economic Development.” *International Journal of Social Economics* 45, no. 6 (January 1, 2018): 909–24. <https://doi.org/10.1108/IJSE-02-2017-0059>.
- Kumar, Ramesh, Associate Professor<sup>1</sup>, Akshat Pushpam, and Student<sup>2</sup>. “Strategic Importance of Gilgit - Baltistan In India’s Neighborhood Foreign Policy.” *International Journal of Multidisciplinary and Current Research*, October 1, 2021.
- Managing Glaciers along CPEC in Gilgit-Baltistan | The Third Pole.” Accessed February 10, 2024. <https://www.thethirdpole.net/en/regional-cooperation/managing-glaciers-along-cpec-in-gilgit-baltistan/>.
- Naz, Lubna, Adeel Ali, and Ambreen Fatima. “International Competitiveness and Ex-Ante Treatment Effects of CPEC on Household Welfare in Pakistan.” *International Journal of Development Issues* 17, no. 2 (January 1, 2018): 168–86. <https://doi.org/10.1108/IJDI-05-2017-0100>.
- Newell, Peter. *Global Green Politics*. 1st ed. Cambridge University Press, 2019. <https://doi.org/10.1017/9781108767224>.
- Nolintha, Vanthana. “Economic Sub-Corridors and Potentials for Regional Development in Lao PDR,” n.d.
- “Pakistan Signs New Pact with China to Kick off 2nd Phase of CPEC.” Accessed February 16, 2024. <https://www.newindianexpress.com/world/2022/Feb/04/pakistan-signs-new-pact-with-china-to-kick-off-2nd-phase-of-cpec-2415369.html>.
- Pakistan’s Other National Struggle: Its Energy Crisis | Wilson Center.” Accessed February 16, 2024. <https://www.wilsoncenter.org/article/pakistan-s-other-national-struggle-its-energy->

crisis.

978-981-10-7116-4\_11.

- Pakistan's Quest for Coal-Based Energy under the China-Pakistan Economic Corridor (CPEC): Implications for the Environment | Environmental Science and Pollution Research." Accessed February 10, 2024. <https://link.springer.com/article/10.1007/s11356-018-3326-y>.
- (PDF) Green Political Theory." Accessed February 9, 2024. [https://www.researchgate.net/publication/327125044\\_Green\\_political\\_theory](https://www.researchgate.net/publication/327125044_Green_political_theory).
- (PDF) Introducing Green Theory in International Relations | Hugh Dyer - Academia.Edu." Accessed February 9, 2024. [https://www.academia.edu/en/65722965/Introducing\\_Green\\_Theory\\_in\\_International\\_Relations](https://www.academia.edu/en/65722965/Introducing_Green_Theory_in_International_Relations).
- (PDF) Will Change in Government Affect China-Pakistan Economic Corridor: The BRI, CPEC and the Khan Government: An Analysis." Accessed February 16, 2024. [https://www.researchgate.net/publication/335623564\\_Will\\_Change\\_in\\_Government\\_Affect\\_China-Pakistan\\_Economic\\_Corridor\\_The\\_BRI\\_CPEC\\_and\\_the\\_Khan\\_Government\\_An\\_Analysis](https://www.researchgate.net/publication/335623564_Will_Change_in_Government_Affect_China-Pakistan_Economic_Corridor_The_BRI_CPEC_and_the_Khan_Government_An_Analysis).
- Preliminary-Environmental-Impact-Assessment-Study-of-CPEC-NRRC-Activities-in-KPK-Pakistan(PB-59).Pdf." Accessed February 7, 2024. [https://sdpi.org/sdpiweb/publications/files/Preliminary-Environmental-Impact-Assessment-Study-of-CPEC-NRRC-Activities-in-KPK-Pakistan\(PB-59\).pdf](https://sdpi.org/sdpiweb/publications/files/Preliminary-Environmental-Impact-Assessment-Study-of-CPEC-NRRC-Activities-in-KPK-Pakistan(PB-59).pdf).
- Rasheed, Huma, Kinza Kanwal, and Nida Abbas. "CPEC AND THE CHALLENGES FOR THE ENERGY SECTOR OF PAKISTAN." *Bulletin of Business and Economics (BBE)* 11, no. 1 (March 30, 2022): 222-27.
- Securing CPEC: Challenges, Responses and Outcomes | SpringerLink." Accessed February 16, 2024. [https://link.springer.com/chapter/10.1007/Supporting\\_Environmental\\_Sustainability\\_in\\_Developing\\_Countries](https://link.springer.com/chapter/10.1007/Supporting_Environmental_Sustainability_in_Developing_Countries).
- Supporting Environmental Sustainability in Developing Countries." Accessed February 9, 2024. [https://www.international.gc.ca/world-monde/issues\\_developpement-enjeux\\_developpement/environmental\\_protection-protection\\_environnement/sustainability-viabilite.aspx?lang=eng](https://www.international.gc.ca/world-monde/issues_developpement-enjeux_developpement/environmental_protection-protection_environnement/sustainability-viabilite.aspx?lang=eng).
- Sustainability | Free Full-Text | The Sustainable Development of the China Pakistan Economic Corridor: Synergy among Economic, Social, and Environmental Sustainability." Accessed February 10, 2024. <https://www.mdpi.com/2071-1050/11/24/7044>.
- Sustainable Infrastructure, Energy Projects, and Economic Growth: Mediating Role of Sustainable Supply Chain Management | Annals of Operations Research." Accessed February 10, 2024. <https://link.springer.com/article/10.1007/s10479-023-05777-6>.
- The Green Movement: Climate and Transition | SpringerLink." Accessed February 10, 2024. [https://link.springer.com/chapter/10.1057/978-1-137-60035-6\\_5](https://link.springer.com/chapter/10.1057/978-1-137-60035-6_5).
- The Green State: Rethinking Democracy and Sovereignty | Environmental Practice | Cambridge Core." Accessed February 9, 2024. <https://www.cambridge.org/core/journals/environmental-practice/article/abs/green-state-rethinking-democracy-and-sovereignty/095F70CE522561CDE140BBF446DEE3FF>.
- The Plundered Planet: Why We Must--and How We Can--Manage Nature for Global Prosperity | Oxford Academic." Accessed February 9, 2024. <https://academic.oup.com/book/40921>.
- The Potential and Prospects of Gwadar Port on JSTOR." Accessed February 16, 2024. <https://www.jstor.org/stable/48527476>.

00burc.

Unrest in Gilgit-Baltistan and the China-Pakistan Economic Corridor.” Accessed February 16, 2024.

<https://www.cacianalyst.org/publications/analytical-articles/item/13396-unrest-in-gilgit-baltistan-and-the-china-pakistan-economic-corridor.html>.

Theories of International Relations: Scott Burchill: Free Download, Borrow, and Streaming: Internet Archive.” Accessed February 9, 2024.  
<https://archive.org/details/theoriesofintern>

