



ECONOMIC AND SOCIO-CULTURAL IMPACTS OF CHINA-PAKISTAN ECONOMIC CORRIDOR (CPEC) UNDER ONE BELT ONE ROAD (OBOR)

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ABSTRACT

In this age of making continual growth, economic Corridors are an important need for the development of any country. As compared to other regional countries, China is a more reliable and all-time partner of Pakistan without any doubt. Over the years, both countries have developed strong bilateral trade and economic collaboration. Economic Corridor from Gwadar to Kashgar through rail and road connections would be a great source of change and development in the region. Furthermore, it will provide the best and the shortest supply route to China as well as countries in central Asia. The current study explores the economics and socio-cultural impacts of CPEC. The method used in this study is based on literature review and analysis of (OBOR), (CPEC), economic and socio-cultural impacts. (CPEC) provides a unique opportunity for Pakistan to bolster its strategic and economic position coupled with many socio-cultural and economic benefits. The research depicts some knowledge-provoking results about (OBOR), (and CPEC) and their socio-cultural and economic impacts.

Keywords: OBOR, CPEC, Economic Impacts, Socio-Cultural Impacts.



Introduction

CPEC provides a new window through which Pakistan's economy can reach its height. Pakistan may get various opportunities through which its economic, as well as socio-cultural and economic stability may be increased. CPEC has various industrial zones which are beneficial for the economy; it has multiple electric power plants, which will boost Pakistan's industrial sector followed by overall improvement in the economic and socio-cultural conditions. CPEC will provide a third fully functional seaport to Pakistan (After Karachi Port and Port Qasim Karachi), which indicates that Pakistan's geopolitical importance will be increased along with an increase in trade through sea routes. All the indicators are positive once the CPEC project is complete.

As stated earlier "transportation plays a vital role in the economy of any nation". In support of this, studies have demonstrated that investments in highways and other public transport capital reduce the costs of transportation and production, and consequently, contribute to economic growth and productivity. Anderson and Barkan (2004) reported that every \$1 billion invested in transportation infrastructure generates more than \$2 billion in economic activity and creates up to 42,000 jobs. It has been estimated that highway construction directly generates an average of 7.9 jobs per \$1 million spent dollars on construction (Keane, 1996); public transportation directly supports an average of 24.5 jobs per million passenger miles; and air transportation supports as many as 1000 on-site jobs per 100,000 annual passengers, depending on site-specific factors (Weisbrod & Weisbrod, 1997). In general, economic development impacts should be considered when the transportation project requires substantial investment and/or when public concerns are significant.

On the other hand, compared to most other types of transportation system impacts, social and cultural impact assessment is a relatively inexact science because social environments differ from place to place and the impacts depend on the manner of social change interpretation, the level of anticipation, and the resilience of the affected population (Ali, Daud, & Ibrar, 2021; Ibrar, Kakepoto, Manzoor, & Khan, 2022). Sánchez and Silva-Sánchez (2008) define social impacts as the destruction or disruption of human-made resources, social values, community cohesion, and availability of public facilities and services; displacement of people, businesses, and farms; and disruption of desirable community and regional growth. Next, according to the Section 106 Compliance Plan of the National Historic Preservation (CPNHP) of 1966, a transportation project is considered to have adverse effects on the cultural environment if "it alters, directly or indirectly, any characteristics of a historic property in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." The emphasis on sociocultural consideration of transportation system impact in evaluation and decision-making was provided by legislative action such as the 1970 Federal Highway Act and the 1970 National Environmental Policy Act (NEPA) and was fostered by several executive orders in the 1990s. In the context of the developing world, multilateral lending agencies such as the World Bank require borrower countries to undertake social impact assessments to ensure that funded projects will yield significant favorable impacts on the lives of people in those countries in terms of sociocultural, institutional, historical, and political effects (World Bank, 2002).



However, ensuring the effective use of transportation not only depends on the infrastructural networks but also on the safety and security of that network. If the transportation route and network are not secure, it may not reap the intended benefits. Therefore we also focus on the security challenges of the CPEC route and intend to propose solutions for any challenges ahead (Ibrar et al., 2022; Ibrar et al., 2018; Ibrar, Mi, Rafiq, & Ali, 2019).

So, in this present research, we focused on both perceived economic benefits and socio-cultural impacts and how they will affect the overall local community attitude towards CPEC support. Furthermore, regional identity moderates the relationship between perceived economic benefits and the overall attitude of the local community; and gender moderates the relationship between perceived socio-cultural impacts and the overall attitude of the local community. Additionally, both regional identity and the overall attitude of the local community mediate the relationship between perceived economic benefits and perceived socio-cultural impacts on CPEC support. Finally, this research also focuses on proposing an advanced solution for the internal and external security challenges faced by the CPEC project by using satellite imagery.

One Belt One Road (OBOR)

Globalization and trade liberalization have benefitted China by making it the world's largest manufacturing center and the country has emerged as an engine of Asian economic growth (Sheu & Kundu, 2017). However, in recent years, China has faced a slowdown in its domestic economy that has affected global and inter-regional trade (Karlsson, Cornett, & Wallin, 2018). To overcome this falloff various foreign trade policies and transnational agreements have been made by the Chinese authorities in recent years. One of them is reviving the ancient silk route (Yue, Yunlong, Ka, & Yadong, 2018) into the New Economic Silk Belt that links China overland to Europe, through Central and Western Asia, and the 21st Century Maritime Silk Road that connects China and Southeast Asian countries via the sea to Africa and Europe. The two initiatives are jointly referred to as the "One Belt One Road" (OBOR) (Sooksripaisarnkit & Garimella, 2018). The OBOR initiative features prominently in China's 13th five-year plan (2016–2020) and aims to support a paradigm shift in inter-regional and foreign trade (Sooksripaisarnkit & Garimella, 2018).

Concerning the infrastructure and strategy development for the OBOR initiative, improving and reconfiguring logistics and transportation networks along the OBOR trade corridors and connectivity among them are the primary objectives of the initiative (Sheu & Kundu, 2017). But the logistics and transportation-related activity tend to change over time (Rodrigue, Comtois, & Slack, 2013) being induced by various political and international trade agreement decisions. Subsequently, the logistics distribution flow adapts to the new spatial structure, resulting in various uncertainties that are difficult to handle instantly leading to financial losses. To handle the stochastic and time-varying challenges of logistics distribution flows in the OBOR strategic context, international logistics networks must be restructured with reconfigured resources from the perspective of space-time interaction technically referred to as spatial-temporal interaction of the logistics distribution flows.



Figure Error! No text of specified style in document.-1 Map of OBOR/New Silk Road

China-Pakistan Economic Corridor (CPEC)

The focus on Economic Corridors (EC) has become a trend of strategic development in various countries and regions worldwide (Alden & Boland, 2013). An EC is a development project aiming at the increase of economic growth over a certain period and in a specific area. Therefore, ECs link economic agents along a defined geographical entity and provide important connections among major economic nodes or hubs centered in urban landscapes (Wolf, 2018). Consecutively, ECs link production, trade, and infrastructure within a specific geographic framework of the center of economic activities and extend benefits to rural areas through transport development and expansion of production activities (Wolf, 2018). As such, an EC is designed to create global, regional, and domestic value chains through the creation and/or connection of economic centers and ideally produces positive multi-sectorial spillover effects.

Having such a conceptual framework in mind, the CPEC, a multi-billion-dollar infrastructure investment project, is heralded as a game changer for Pakistan's economy and regional cooperation. Being a crucial part of a major development initiative led by China, known as OBOR, to connect Asia with Europe and the Middle East with Africa via a 'land (belt)' and 'sea (road)', for the CPEC project and for those involved it evokes hopes and a myriad of interests and spurs a significant geopolitical shift. Praised as a new economic lifeline, the CPEC is an essential link between the belt and road



(Ibrar et al., 2019; Ibrar, Mi, Rafiq, & Karan, 2016). To provide this connection, the CPEC should connect Kashgar in China's western, landlocked province of Xinjiang with Gawadar port on the Baluchistan coast in Pakistan's southwestern region (Athukorala & Narayanan, 2018). According to the plan, the CPEC will be implemented through a '1 plus 4 cooperation structure' as follows (Wolf, 2018): the Economic Corridor as an overall, multi-sectoral development project at the center and Gawadar Port, energy, infrastructure, and industrialization as its four key areas of collaboration. To operationalize this plan, the corridor combines several cross-sectional components, such as infrastructure, trade, connectivity, transport, energy, and services. More concretely, it consists of various components: roads, railways, airports (Gawadar), local transportation (e.g., metro), and pipelines for oil and gas. In this context, in addition to building a completely new supporting infrastructure to create connectivity, several major upgrades of existing outdated infrastructure systems are required (e.g., the Karakorum Highway). Besides infrastructure, the major focus [around two-thirds of the investments, roughly \$35 billion (Lim, 2017)] will be placed on the increase of energy capacities—both renewable and non-renewable—such as solar, wind, and hydropower energy and coal. The planned pipeline projects are also expected to improve the imports of gas and oil. Additionally, all these projects are flanked by substantial security measures to guarantee a safe environment for CPEC development. Essentially, the CPEC encompasses three routes through Pakistan, plus a northern extension: first, the so-called route of Eastern Alignment, which passes mainly through central Punjab and Sindh (Wolf, 2018). Second, the Central Route passes partly through KPK and hitherto unconnected parts of Punjab and Sindh. The third route, known as the Western Alignment, passes through the relatively underdeveloped areas of KPK and Balochistan (Shahzad, 2017). Finally, there is also a so-called Northern route (drawing on the existing Karakorum highway), which will connect all three Pakistani alignments with the Pakistani–China border at Kunjarab and will continue to the Chinese territory. The whole project, which is mainly financed by China, is expected to be completed in 2030 (i.e., the long-term projects) and some parts within the next one to three years (i.e., the early harvest projects).

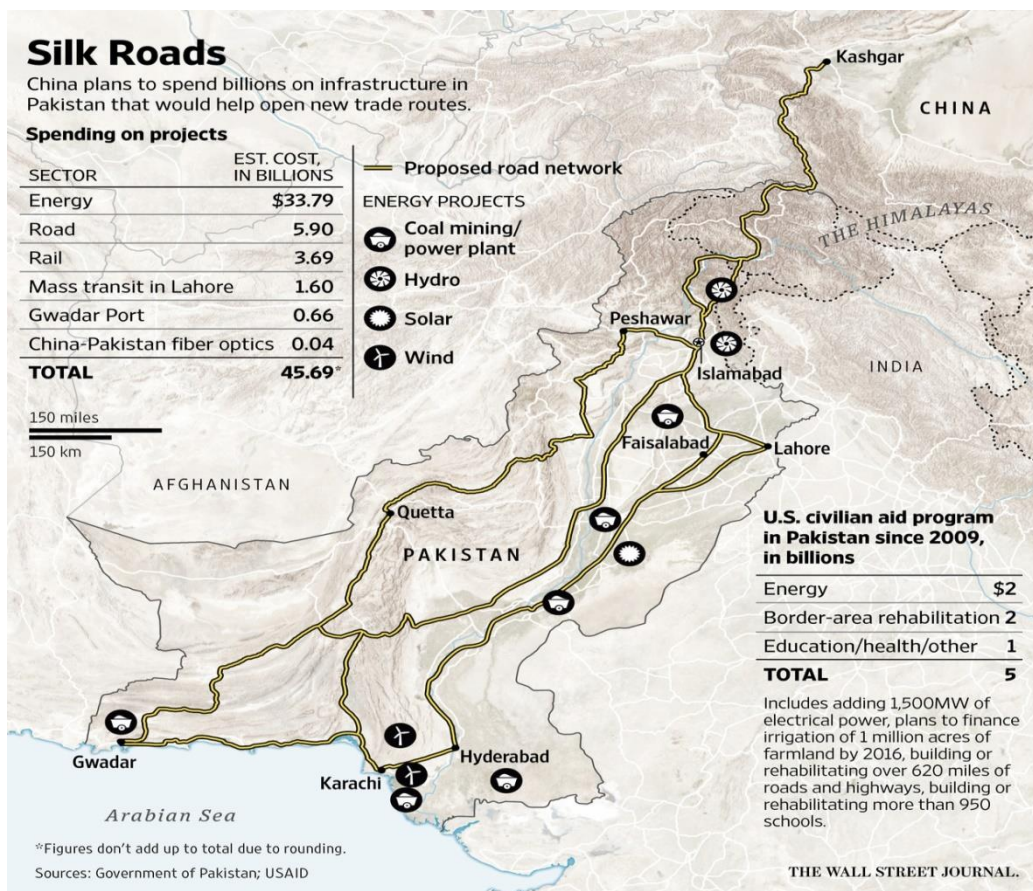


Figure Error! No text of specified style in document.-2 Internal Map of CPEC with Funds by Projects

Economic Impacts

CPEC project consists of more than \$ 46 billion in direct investment in Pakistan. This massive amount may change the destiny of Pakistan because it will be used on roads, electric power projects, better communication facilities, industrial zones, exclusive development of Gwadar City to make it at international standards, etc. This development will boost Pakistan's economy followed by the creation of job opportunities for talented people. Adnan and Fatima (2016) stated that Pakistani economic position is projected to be on a sound uphill path due to projects like the CPEC.

Applied Economic Research Centre has estimated that the completion of the mid to long-term plan will produce 700000 direct jobs from 2015 to 2030. Official data revealed that by mid-2017, almost 30000 Pakistani doctors and engineers are being directly employed in early harvest projects (see Table 1-1 and Figure 1-3) ^[19].



Table **Error! No text of specified style in document.**-1 Description of Employment in Different Projects and Sectors

Project Name	Pakistani workers Employabili
Early harvest project	30000
Energy Sector	16000
Port Qasim power plant	5000
Sahiwal solar power project	3000
The Guide-e-Azam solar power proje	3000
Transport Sector	13000
Free zone project Gawadar	2500

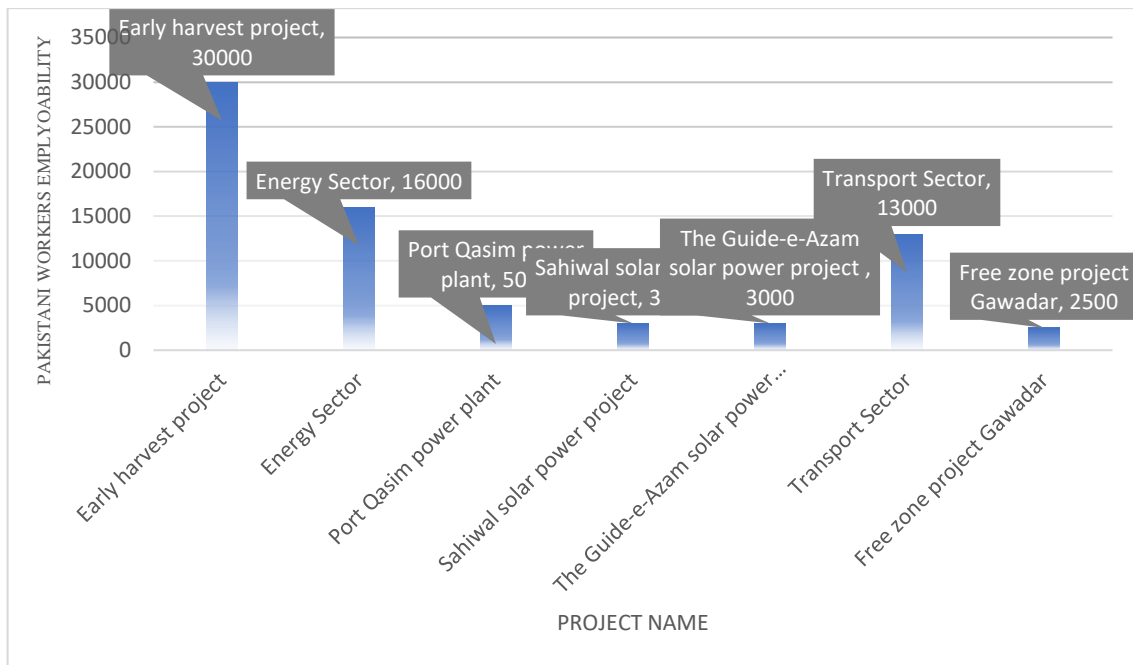


Figure **Error! No text of specified style in document.**-3 Description of Employment in Different Projects and Sectors

The CPEC - a bilateral cooperative initiative, a 3,000 Km network of highways, railroads, oil pipeline, and links of optical fibers - connects Kashgar-China's north-western autonomous region of Xinjiang- to Gawadar Port in Pakistan. The Chinese government highlighted the "OBOR initiative" in their 13th five-year development plan because this project will materialize the dream of the Chinese government to become the economic king of the whole world. "The OBOR initiative" is not only beneficial for China but it will also benefit 4.4 billion people in the world and enhance 29 percent of the world's total economic prosperity [19]. This corridor is critical to developing rapid, extensive infrastructure in the whole of Pakistan, Azad Kashmir, and Baluchistan, and profound economic connections to Europe, Africa, and the entire hemisphere with the purpose to promote trade and



growth in Pakistan as well as in China.

Moreover, under CPEC, an 1100km long motorway between Karachi and Lahore and the 2700km highway from Kashgar to Gwadar are proposed for construction. Moreover, the upgradation of the Karakoram Highway - between Rawalpindi and the Khanjar - and the Railway line – between Karachi and Peshawar- will complete by December 2019. This mega physical infrastructure not only improves the connectivity of Pakistan with China but also extends the potential connection to India, Iran, and Afghanistan [19]. The projects under CPEC are expected to complete in three episodes. Short-term projects are estimated to be completed by 2017 while mid-term is expected to be completed by 2025 and long-term will prolong up to 2030 [20]. The first phase consists of the development of Gawadar port and the construction of an international airport which will be completed in 2017. The government of Pakistan's ministry of information broadcasting and national heritage declared that engineers from China and Pakistan are working round the clock and accomplished almost 60% of their first phase of construction of the Gawadar free zone and it has been estimated that by the end of 2017, Gawader free zone causes to develop light industry, stainless steel factory that ultimately will provide a considerable number of jobs for the locals in Gawader [19]. Moreover, CPEC will enhance trade opportunities by providing access to the Arabian Sea which passes about 35% of the world's oil consignments. It will also increase the volume of trade by saving time and reducing almost 2000 miles distance. Correspondingly, Kousar, Rehman, Zafar, Ali, and Nasir (2018) argued that Gawadar provides fast-track exports and imports to and from the United Arab Emirates, Gulf Cooperation Council, Saudi Arabia, and adjacent regions. According to the assessment of this corridor, CPEC will change the fate of Pakistan by improving economic development, extending construction and connectivity of transportation infrastructure, increasing the volume of bilateral trade in multiple areas of major projects, and establishing multiple industrial parks and free trade areas in Pakistan. CPEC will connect three big engines of growth - south Asia, China, and central Asian republics – and develop their harmony in trade with entire south, northern and north-western regions. Only in Pakistan, it is expected that 70% of maritime trade opportunities will open the door of affluence for its citizens.

The role of infrastructure in trade and the economic growth of developing economies is well documented in the literature (Sunley & Martin, 2017). Literature documented that the development of economic infrastructure uplifts production facilities, reduces transaction costs, and provides employment opportunities in poor nations; whereas the lack of infrastructure suppresses economic growth by increasing by 40 to 60% cost on trading (Kousar et al., 2018). It has been experienced in the USA that by increasing the port efficiency, they have increased the volume of bilateral trade and reduced 12 % the trading cost (Zant, 2018). Additionally, improved infrastructure extended regional connections causing to increase in foreign direct investment and volume of trade (Yu, 2017). Moreover, another research investigated the impact of CPEC on social welfare in Pakistan and concluded that the districts, Sindh and Baluchistan, situated near or on the route of CPEC will get maximum social welfare as compared to the other districts (Kousar et al., 2018).



Sino investment can improve the GDP by up to 6% with direct influence in FY 2016-18. He further added that a part of the investment of about US\$ 18 billion undertakes a great investment in Gawadar port, Railways, and Hydropower plants 50-80% and less for the other machines goods for power plant of Coal 20% which added 2.1% GDP growth annually in the era of FY 2016-18 and raise the GDP growth to 6% in the FY 2016-18 based on FY 2014. While indirect impacts are too much which adds 15000 plus MW in the national grid station and power network which is 74% of Pakistan's current energy. This would affect the investment of the private sector investment activities and productivity. An average of 9.6% of GDP correlates to private investment during the era of last five years as opposed to 12.7% during the preceding five times, during the same time private sector credit to GDP fell from 28.8% to 12.6%, Pakistan's growth can leave up to 6% while the last year GDP rate of Pakistan was 4.1%. Moreover, the author added that energy shortfall covering can pick the economy of Pakistan by providing 10GW, and due to new power projects coal consumption and their contribution toward energy increased up to 16% in 2018 which is 1% in 2014. He further added that the extra demand for of cement 1.3 to 2.3 million tons shows a great investment in the infrastructure of Pakistan. Pakistan's main purpose is to enhance the GDP ratio in the coming 3 annum will reach from 12.6% to 20%. The notice by IMF stated that symptoms indicate that the economy of Pakistan is improved and predict to touch 4% in FY 2014-15, which is 0.3% more than the primary estimation. The GDP of China and Pakistan is shown in Figures 1-4 and 1-5.

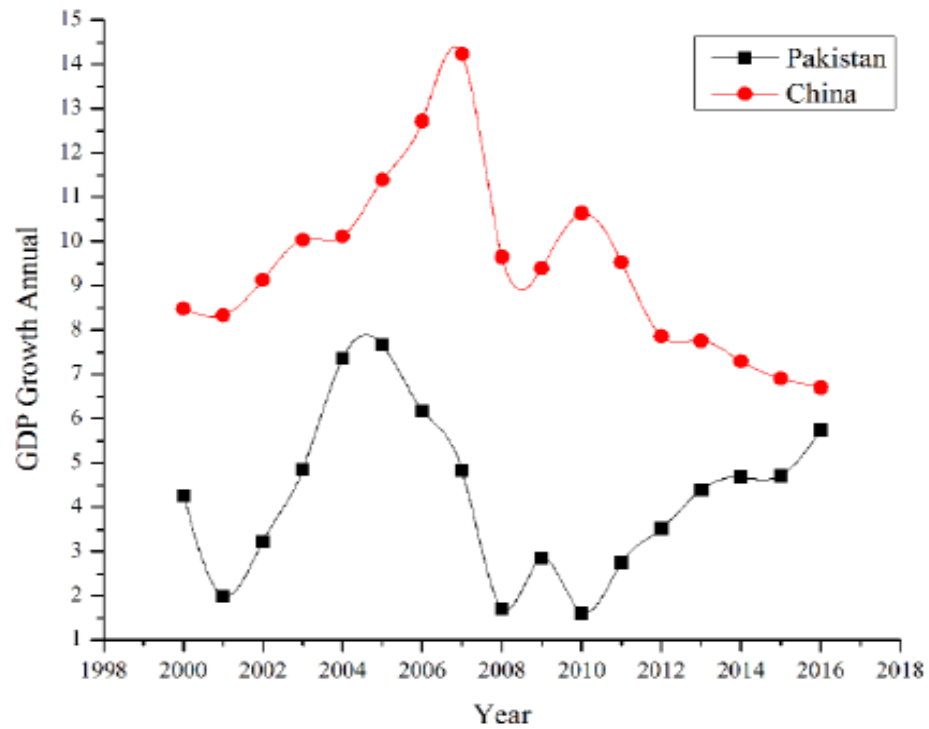


Figure Error! No text of specified style in document.-4 GDP Growth Annual

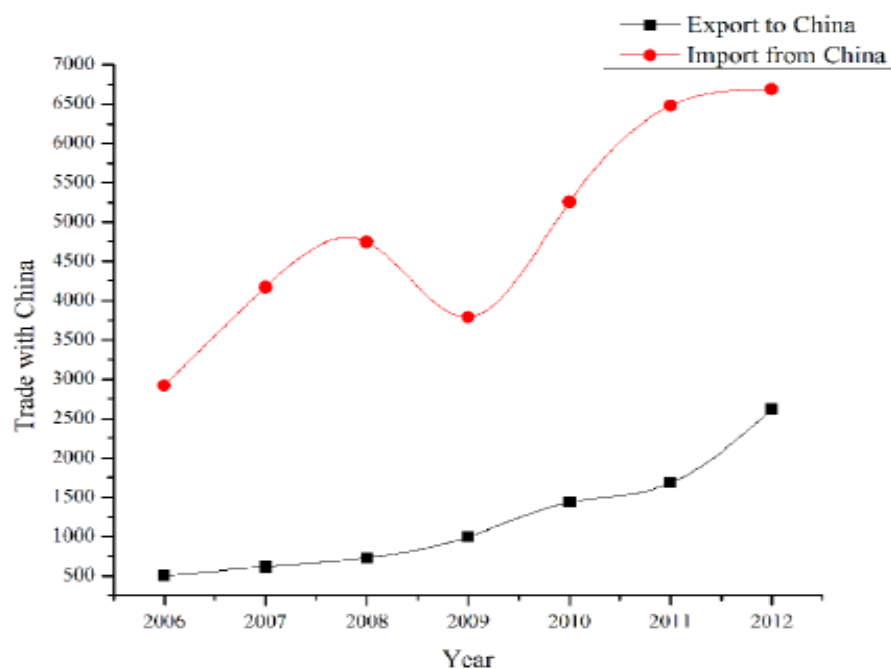


Figure Error! No text of specified style in document.-5 Trade with China

During the last decades, China experienced sustained economic growth by following the essence of the old Chinese proverb that massive development of physical infrastructure leads the nation toward prosperity (Kousar et al., 2018). Consistently, Yu (2017), documents that the development of trade in central Asian economies heavily depends on the development of infrastructure, and almost 8 trillion dollars of investment are required to bridge the gap in infrastructure by 2020. On the same line, it is expected that an extensive network of infrastructure will affect the economic growth of Pakistan directly by raising GDP and indirectly by raising factor productivity.

The above discussion indicates that CPEC causes development in infrastructure and trade in Pakistan and will open the door for the Goddess of fortune but at the same time CPEC will enhance the social and economic influence of China in this region (Adnan & Fatima, 2016) and Gawadar port will serve as headquarter for chine from where it will regulate the whole region. Only accountable and transparent policies can eradicate the negative impacts of this project and can protect the interest of the country, otherwise, CPEC could turn into another East India Company (Shah, 2018). East India Company was a British company that came to India for trading but later on become powerful enough that it overthrew the Mughals who ruled India at the time.

However, the government of Pakistan did not open the deal and cooperation policy with China



to avoid criticism (Sheu & Kundu, 2017) and all this cooperation is in shadow. Furthermore, India, Israel, and the USA are unhappy with this cooperation because it will restrict the role of the USA in the region. Especially, India considered this agreement as a thorn in its paw and continuously working on strategies that can slow down the pace of this project RAW has opened a special office in Delhi and has allocated \$300 million to disrupt the CPEC (Adnan & Fatima, 2016). Similarly, CPEC is also facing serious criticism and resistance from some political parties like Awami National Party, Bloch Nationalists, and Pakhtunkhwa Milli Awami Party. Even Pakistan Tahreek e Insaaf and Jamiat e Ultimate Islam (Kousar et al., 2018) also object and claimed that the government did not design the policy to distribute the fruits of this project equally in all provinces.

Socio-cultural Impacts

Compared to most other types of transportation system impacts, social and cultural impact assessment is a relatively inexact science because social environments differ from place to place and the impacts depend on the manner of social change interpretation, the level of anticipation, and the resilience of the affected population (Duerden, 2004). FHWA (1982) defines social impacts as the destruction or disruption of human-made resources, social values, community cohesion, and availability of public facilities and services; displacement of people, businesses, and farms; and disruption of desirable community and regional growth. Likewise, the FTA (2005) document describes social effects as the changes in physical layouts, demographics, and sense of neighborhood in local communities. According to the Section 106 Compliance Plan of the CPNHP of 1966, a transportation project is considered to have adverse effects on the cultural environment if “it alters, directly or indirectly, any characteristics of a historic property in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.” The emphasis on sociocultural consideration of transportation system impact in evaluation and decision-making was provided by legislative action such as the 1970 Federal Highway Act (FHA) and the 1970 NEPA and was fostered by several executive orders in the 1990s. In the context of the developing world, multilateral lending agencies such as the World Bank require borrower countries to undertake social impact assessments to ensure that funded projects will yield significant favorable impacts on the lives of people in those countries in terms of sociocultural, institutional, historical, and political effects (World Bank, 2003). Commencement in 1968, when the World Bank stressed the issue of poverty alleviation, social analysis has gained a prominent role in the agenda of international lending agencies and development organizations, including the United Nations (UN), the Asian Development Bank (ADB), and the European Economic Commission (EEC).

Similarly, continuing this debate, much debate has revolved around the pros and cons of CPEC's mammoth project being launched. Its economic potential is discussed at length and it is considered a "game changer (Awan, 2017)." The net result of regional connectivity is invoked which would ultimately profit the entire region (Awan, 2017). Though scarcely mentioned are possible socio-cultural implications of the project along the eastern and western regions where CPEC routes traverse and Pakistani society at large (Sternberg, Ahearn, & McConnell, 2017). China self-describes itself as



a 'socialist country with Chinese characteristics; it claims it is undergoing 'peaceful development (Tan, 2015).' Culturally, Confucian norms and roots in Buddhism define China's cultural life. If so, could it radiate some of its value systems in Pakistani society in the next decades while completing the momentous CPEC project?

Over the last seven decades, the Pakistan-China friendship has stood the test of time and the idiosyncrasy of home and international politics (Wolf, 2018). Pakistan is no stranger to the Chinese work ethics and value system; it has already built Karakoram Highway (KKH), dams, and defense and energy-related projects in Pakistan (Shah, 2018). If and when CPEC matures and fructifies after long gestation they are bound to have lasting socio-cultural spillover in Pakistan. For, any major economic development often brings in its wake significant socio-cultural changes in societies. Since the CPEC route will be passing through Northern regions, KPK, Punjab and Balochistan reaching Gawadar seaport there could be spill-over socio-cultural repercussions (Lim, 2017). When Pakistani and Chinese workers have a chance to work together and interact on the construction of these projects there is going to be some sharing of cultural values. Besides the transfer of skills by China, cultural and social values might be disseminated. For example, when people start observing and benefiting from the Chinese work culture and socialist ethics and the results produced they are bound to be some attitudinal changes (Kousar et al., 2018).

On the other hand, nowadays feudalism and tribalism are slowly resilient to forces of modernization and development. When the British came to the Indian subcontinent they built the physical infrastructure: roads, railways, bridges, some basic industry, military garrisons, bureaucracy, and education (Yu, 2017). Notwithstanding some resistance people welcomed their law and order, education, cultural values, democracy, work ethics, and policies of religious harmony (Zant, 2018). Similarly, when the Soviets came to Central Asia they propagated their values of education administration which persist today. This led to the erosion of feudalism and religious fundamentalism. Of course, they used persuasion with force in pushing their ideological system. Nowadays Central Asian states are comparatively modernized and developed as compared to different another Islamic worlds (Khalid, 2014).

Continuing this debate, these days China is involved more economically and not as socially in Pakistan - so the impact may not be as much as that by the Russians and British (Swanstorm, 2005). But the Chinese education system, language, and cultural mores may encroach upon Pakistan culture too. The Chinese language is already getting attention and China's soft power will affect doctors, engineers, and educationists who go for education in China and then return (Karlsson et al., 2018). Although, some may object that Chinese are used to living insular lives with a different language and eating habits and may not interact closely with Pakistanis. But cultural studies have shown that wherever development goes apace cultural/social norms and values intermingle and benefit from each other (Yue et al., 2018). Pakistan has a multi-cultural and multi-lingual past: it boasts of a rich heritage after having imbibed many foreign influences: Arabic, Turkish, Iranian, Greek, and Indian.



Thus CPEC, if pursued to its logical conclusion, with prerequisites of effective law and order, national focus and consensus, timely implementation, transparency and accountability, and benefits accruing to smaller provinces - may well turn into a 'cultural corridor.' Here China and Pakistan will mutually gain. In other words, a symbiotic relationship could develop among people-to-people which was lacking heretofore.

Conclusion

This CPEC investment under OBOR has significant direct and indirect socio-cultural and economic impacts. China is equally beneficiary of the current investment. CPEC will boost our socio-cultural and economic development through the rapid growth of GDP, cultural exchanges, employment, health and other opportunities like transportation will boost the tourism sector and connectivity. From an economic point of view, this corridor will bring deprived and troubled areas like Baluchistan (Pakistan) and Xingjiang (China) on the way of development. The peace, geo-political, economic stability, solidarity, and development of these less developed and deprived areas (Baluchistan and Xingjiang) would be expected to result in an economic Corridor. That will bring economic development and prosperity to both countries. CPEC is a God-gifted opportunity for the prosperity and welfare of Pakistan. It will be the real game changer in the region. Materialization of CPEC has the power to transform Pakistan into a regional hub for trade and investment building infrastructure and has great socio-cultural and economic benefits.



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