# SUSTAINABLE DEVELOPMENT UNDER BELT AND ROAD INITIATIVE: A CASE STUDY OF CHINA-PAKISTAN ECONOMIC CORRIDOR'S SOCIO-ECONOMIC IMPACT ON PAKISTAN

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#### Abstract:

Railways, airports, highways, seaports, and an optical fiber system are all part of the plan to revive the historic Silk Road and reestablish communication between China and Africa, the Middle East, and Europe. There are three parts to the BRI, or Belt and Road Initiative. The BRI is the foundation for One Belt, One Road (OBOR), which focuses on the seaborne Silk Road and the land-based Silk Road Economic Belt. Six economic arteries form the backbone of OBOR. After its completion, the China-Pakistan Economic Corridor (CPEC) would offer a secure and cost-effective way for China to purchase oil and energy from the Middle East and beyond.

Many initiatives to enhance Pakistan's infrastructure and economic growth have been launched as part of CPEC, which is a multifaceted project with many goals. Economic expansion is impossible without the development of infrastructure, which in turn facilitates industrialization. This research was done in Pakistan and examined the benefits of CPEC-funded infrastructure development for the country's long-term progress, as well as the specific types of infrastructure improvement projects that have been included in the CPEC. A sample of 500 respondents was obtained by a multistage sampling procedure from the two-node cities. The basic data came from a survey questionnaire. The findings of the research suggest that the CPEC is a catalyst for Pakistan to enhance its socio-economic circumstances and to achieve sustainable growth. Respondents to the study were unanimous in their belief that CPEC would assist Pakistan accomplish its sustainable development objectives and enhance the country's socioeconomic paradigm.

**Keywords:** belt and road; economic corridor; China-Pakistan economic corridor; infrastructure development; socio-economic development; sustainable development.

#### 1. Introduction

The development process is now primarily focused on achieving sustainable development objectives. The improvement of a region's transportation and infrastructure is crucial to its economic growth. Trade and economic support are bolstered by transportation and infrastructure, which in turn contributes to long-term growth, stability, and peace. Foreign investors may feel safe in this stable economy because to the country's first-rate infrastructure and cooperative trade policies.

Developing outlying, economically disadvantaged regions of a nation mostly requires investment in infrastructure, transportation, and economic zones (Ramachandran, & Linde, 2011). Shipping methods are improved by the presence of a railway system and road networks, leading to overall societal and economic growth.

#### 1.1. Belt and Road Initiative (BRI)

The Belt and Road Initiative (BRI) of the Chinese government is rooted in the past. The phrase "Silk Road," referring to a commerce route between China and Europe and the camels used to convey various

products, was coined by a German traveller in 1800. High-speed railroads, rather than camels, will be used to convey commodities under this plan. The BRI project ushers in a new era of international cooperation and regional economic integration (Irshad, & Xin, 2014).

#### Components of Belt and Road Initiative

Silk Road Economic Belt (SREB), Maritime Silk Road (MSR), and Digital Silk Road (DSR) are all parts of the Belt and Road initiative (BRI), a global project of the Chinese government to link China with other nations of the globe (Kazi, 2017). Figure 1 displays the many parts that make up The Belt and Road (BRI).



Figure 1. The components of The Belt and Road initiative (BRI).

China-Mongolia-Russia Economic Corridor (CMREC), New Eurasia Land Bridge Economic Corridor (NELBEC), China-Central Asia-West Asia Economic Corridor (CCWAEC), China-Pakistan Economic Corridor (CPEC), Bangladesh-China-India-Myanmar Economic Corridor (BCIMEC), and China-Indochina Peninsula Economic Corridor (CICPEC) are the six economic corridors upon which the Silk Road Economic Belt is based (Jinchen, 2016).

Marine Trade Route (MSR) During Xi Jinping's first trip to Southeast Asia, the idea of the MSR was born. The MSR is an all-encompassing strategy for improving marine infrastructure in the nations that are members of the BRI. As part of the MSR, the Chinese government is expanding its efforts to build and link other ports to China (Tiezzi, 2014).

The State Council issued the 13th five-year plan of "National Information" in 2016, which included the Digital Silk Road (DSR). To get more local IT firms involved in the global digital economy, "National Information" sought to create a "online Silk Road" (Hong, 2017).

#### 1.2. One Belt One Road (OBOR)

One Belt, One Road refers to both the land path of the BRI Silk Road Economic Belt (SREB) and the maritime route of the Maritime Silk Road (MSR). As indicated above, the SREB is based on the six land route economic corridors, while the MSR is based on the sea route that links China to various seaports. The MSR is grounded on the "String of Pearls" idea, which originates in geopolitical theory and strategic tradition. Over 60 nations will be linked to China thanks to OBOR, covering roughly 70% of the world's population. China has officially begun building OBOR. The southern, middle, and northern paths are all accessible. China's worldwide endeavour to link the country to the rest of the world via the Silk Road Economic Belt (SREB) and the Maritime Silk Road (MSR) is known as "One Belt, One Road" (OBOR) [4]. Furthermore, 65 nations have committed to take members of the OBOR programme. In addition, the OBOR initiative's primary goal is to use the SREB and the MSR to establish connections between China and nations in the Middle East, East Asia, Central Asia, South Asia, and several European countries (Ranjan, 2015). Over 65 nations and other organisations have shown interest in taking part in OBOR's massive infrastructure initiative. There is a growing awareness of OBOR's significance, and now 34 nations have signed contracts with China to participate in this infrastructure initiative. The focus of the OBOR nations is on fostering economic and social growth as part of the programme.

#### 1.3. Economic Corridors under OBOR

The Asian Development Bank (ADB) coined the term "Economic Corridor" (EC) in 1998 to describe a route between two agents within a region that links to the supply and demand sectors of a market (2013).

China-Mongolia-Russia Economic Corridor, New Eurasia Land Bridge Economic Corridor, China-Central Asia-West Asia Economic Corridor, China-Pakistan Economic Corridor, Bangladesh-China-India-Myanmar Economic Corridor, and China-Indochina Peninsula Economic Corridor are the six economic corridors upon which the SREB is based (CICPEC). In March 2015, the CPEC was unveiled by China's National Development and Reform Committee (NDRC) as part of the One Belt One Road programme. Even though it only goes through Pakistan, the CPEC is often regarded as the most innovative part of OBOR (Markey & West) (2016). The initiative's focus is on constructing the SREB and the MSR as a means of establishing connections between China and countries in the Middle East, East Asia, Central Asia, South Asia, and several European nations. There is a growing awareness of OBOR's significance, and now 34 nations have signed contracts with China to participate in this infrastructure initiative. The nations taking part in OBOR see it as a top priority to advance their economies and social structures via this programme.

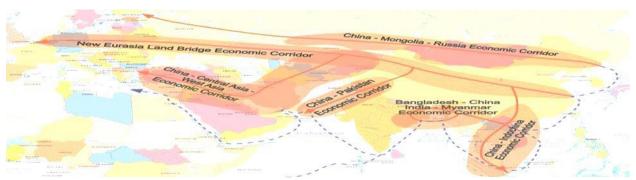


Figure 2. Economic Corridors under the One Belt One Road initiative (Winter, (2016).

The goal of economic development and strategic expansion has prompted the implementation of economic corridors plans all over the globe (Fujita, Krugman, and Venables) (2001)

Economists agree that economic corridors are crucial for fostering robust economic development and reducing economic volatility (Abednego & Ogunlana, 2010). (2006). Pakistan is a developing nation, and its economy is also regarded an emerging economy in the globe. In the future age, it will likely become a global economic centre.

#### 1.4. China-Pakistan Economic Corridor (CPEC)

Soon after China's founding in 1949, China and Pakistan established cordial ties. Pakistan was the first Muslim nation to recognise China as a legitimate nation. Friendship and cooperation between Pakistan and China are perennial. Pakistan and China's military links go back quite a ways, but the two countries are now shifting their focus to a new economic paradigm that prioritises trade, energy, infrastructure, and investment cooperation (Kumar, 2013). (2007)

China and Pakistan have cordial ties after 1950. The wars between China and India and Pakistan and India after 1960 strengthened these cooperative partnerships (Chaudhri (1986)

Pakistan's assistance in China's bid for permanent membership in the UN Security Council strengthened China's international standing. In addition, Chinese citizens now have easier access to international travel because to Pakistan's opening of its airspace to Chinese airlines. China and Pakistan had always gotten along well, but in 1970 they deepened their cooperation in many spheres; China even backed Pakistan when the United States put pressure on Pakistan.

#### What is the CPEC?

Infrastructure, transportation, energy generation, and free economic zones in Pakistan are all part of the China-Pakistan Economic Corridor (CPEC) initiative (Shah, 2015). (2015). Friendship and mutual

support between Pakistan and China extend to the national and international levels. They have common borders and are linked from Kashghar to Islamabad by the Karakorum Highway (KKH). In addition, the route connects the two nations and is known as the Friendship Highway between Pakistan and China (Ali (2015).

The CPEC would strengthen military and economic ties between Pakistan and China, altering power dynamics in South Asia (Small, 2013). (2015).

The CPEC project also includes China's building of Gwadar Port, which provides the country with access to the Indian Ocean. Eventually, China's fleet stationed at Gwadar Port in Pakistan will become a permanent fixture in the Indian Ocean (Barber, 2009). (2014)

Part of China's One Belt, One Road initiative, the China-Pakistan Economic Corridor (CPEC) aims to boost Pakistan's economy and improve the country's social conditions. In addition to facilitating cooperation between Pakistan and China, this project is also crucial to the growth of the surrounding area. Uzbekistan, Kazakhstan, Azerbaijan, and Turkmenistan will all benefit from having a new energy corridor thanks to the CPEC (Irshad, 2013). (2015)

### Approved Projects under the CPEC in Pakistan

In 2017, 2025, and 2030, respectively, various stages of CPEC projects will be carried out. The CPEC projects' primary goal is to meet the rising energy needs of both Pakistan and China. Power projects in Pakistan are scheduled to begin immediately, and according to the plans, they would generate 21,000 megawatts of electricity (2014).

About 20 percent of Pakistan's GDP would come from China's 46 billion dollar investment in the country under the CPEC projects (Stevens, 2013). (2015).

Table 1 below, shows the division of projects under the CPEC in Pakistan.

| Projects                                      | Cost (Million USD) |
|---|--------------------|
| Energy Sector                                 | 33,728             |
| Infrastructure and transportation Development | 11,636             |
| Gwadar Port Development                       | 792.6              |
| Others (Optical Fiber)                        | 44                 |
| Total   | 46,200.6           |

Table 1. Projects Division [24].

The CPEC is not just one highway building endeavour. It is a big project which encompasses regional interconnectivity, energy generation, infrastructure development, the formation of industry, the enhancement of agriculture, and poverty alleviation via the improvement of livelihood, education, and providing public health facilities. Additionally, CPEC has three alignments that will go across all of Pakistan's provinces (Rafiq (2016).

The CPEC is not just one road building endeavour. This massive undertaking aims to reduce poverty by enhancing regional connections, generating energy, building infrastructure, launching industries, enhancing agriculture, and facilitating access to public health care and education. Additionally, the CPEC includes three alignments that will go through all of Pakistan's provinces (Iqbal (2015).

#### 1.5. Sustainable Development through Infrastructure Led Development

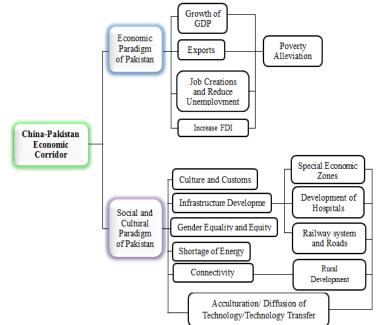
Pakistan's border is next to China, the world's largest economic power. The concept of building Exclusive Economic Zones (EEZ) is comparable to that of building an economic corridor (Iqbal (2015). Gwadar Port's growth in infrastructure and energy production installations, as well as the creation of special economic zones, are cornerstones of the CPEC (Ahmar, 2013). (2014).

The major purpose of the CPEC is to play a vital role all across Pakistan in socio-economic development. Pakistan's government and China's government inked a currency exchange deal in 2014, becoming Pakistan the first South Asian nation to do so. China is Pakistan's greatest partner and investor in the

areas of infrastructure, commerce, ports, energy production, and telecommunications. Not only that, but the Chinese government and corporate sector have shown interest in investing 20 billion USD in Pakistan's energy production industry. Because to CPEC, Pakistan will serve as a major transportation hub in the region of South Asia (Rizvi (2014). In addition, the CPEC's infrastructure development would help address Pakistan's energy crisis, poverty, economic growth, and security concerns throughout the country. Improvements in the country's healthcare system, schooling, and workforce will be made possible in large part by money invested by China as part of the CPEC project (Tiezzi, 2015). (2016). There are several ways in which the CPEC would help the country of Pakistan. There is a significant energy deficit in Pakistan at the moment, along with an uncertain economy and a rising unemployment rate. For manufacturing to function, energy is a must. The CPEC is a driving force that will assist strengthen and stabilise Pakistan's economy. Moreover, foreign direct investment will expand under the CPEC. Once CPEC energy projects are finished, Pakistan will no longer have energy shortages and will be self-sufficient in this area. Millions of Pakistani youngsters who are now without work may thank the CPEC for that.

Natural beauty abounds in the provinces of Khyber Pakhtunkhwa and Gilgit Baltistan. With the CPEC now finished, the country hopes to see a rise in tourism. Chinese investment in the CPEC will also serve as a magnet for visitors from all over the globe (Nilofar, Jiang, and Ishtiaque) (2014).

Construction of infrastructure, transportation, industrial, and energy projects under the CPEC would be good for socioeconomic growth throughout Pakistan in all provinces, according to SunWeidong, the ambassador of China in Pakistan. The goal of the CPEC plan is to create a comprehensive system of transportation corridors that links cities, towns, and major economic centres. Figure 3 explains how Pakistan might achieve sustained growth via multidimensional infrastructure development.





#### 1.6. Theoretical Framework

The growth of the region's megaproject may be described using development theory, which is relevant to this investigation. More importantly, in the social sphere and worldwide economics, modernization and globalisation are the two dominant ideologies. The term "globalisation" refers to the prescription of increased worldwide communication, production, and cultural interaction among all peoples. The CPEC projects in Pakistan that are part of OBOR will have a significant impact on the country's economy,

society, and culture, as well as the quality of life for ordinary Pakistanis. The possible effects of OBOR on various Pakistani social institutions may be understood via the lens of development theories.

#### 1.6.1. Growth Theories

Between 1950 and 1960, researchers (including Shaikh and Fan) created both growth theories and some of the first growth models (2016). The following are the three pillars upon which growth theories rest;

#### I. Accumulation of Human Capital

Human capital accumulation is crucial to economic growth, and knowledge and technology play a key part in this process (Bano, Khayyam, & Alam, 2004). (2019). Under OBOR, China is providing Pakistan with access to cutting-edge technology and expertise, which will be important in the country's ability to transform and build up its human capital.

#### II. Accumulation of Physical Capital

Special economic zones (SEZs), energy production units, and free trade agreements (FATs) between Pakistan and China are only a few of the economic efforts under OBOR that will help develop and stabilise Pakistan's economy as part of the China-Pakistan economic corridor.

#### III. Institution formation and Evolution

Sustainable progress relies heavily on the building of effective institutions. The CPEC will have a profound impact on Pakistan's economy and society. The energy crisis is having a devastating effect on Pakistan's economy. In an effort to enhance the economy and attract investors, many changes have been implemented.

#### 1.6.2. Theory of Globalization

Different socioeconomic factors have contributed to the development of the globalisation thesis. The globalisation paradigm here is analogous to the study of word systems. One of globalisation theory's primary tenets is an emphasis on cross-cultural exchange and integration. Globalization academics say that the social relationship is the most significant component in progress across countries. Furthermore, cultural diffusion is expanding technology's pliability and suppleness to link people everywhere (Robertson (2003).

The core concepts of globalisation theory include:

I. The theory predicts that state-to-state and individual-to-individual global communication networks will continue to expand in the coming years. Easy methods for all nations to communicate with one another are being made available and improved via the global communication system.

Global communication networks are established in advanced nations and are rapidly expanding into those with weaker economies. In this setting, advanced and developing countries may connect and collaborate thanks to advances in global technology.

Third, the cultural interchange aspect of globalisation is crucial to the economic and social fabric of any nation (Kaplan, 1993; Isuani, Vuolo, & Fanfani, 2003). (1991) From a cultural standpoint, the CPEC has less influence on Pakistani culture than that of British culture since the CPEC is commerce and economically focused.

When Pakistani and Chinese construction workers connect and exchange cultural beliefs, it may spread across the workplace.

#### 1.6.3. Infrastructure-Led Development Theory

The critical features of Gaullist and Neo-Colbertist centralised economic planning in France, Neo-Keynesian economics in the United States, Singaporean and Chinese state capitalism, and Scandinavian

social democracy inform the theory of infrastructure-led development, also known as infrastructuredriven development (Firzli & Bazi, 2011; Rephann & Isserman, 2011). (1994). I. Long-term assets like social infrastructure (schools and hospitals) and energy and transportation systems are prioritised when allocating national resources.

Those places that are falling behind from a societal and economic standpoint are the ones that benefit the most from technical advancements in order to jumpstart their growth.

Equal access to healthcare, education, and employment is a major step in achieving social justice.

Investing in new infrastructure helps economies expand all across the world, as stated in point four.

Under the auspices of the CPEC, the Chinese government is funding a wide variety of infrastructure development projects throughout Pakistan, including new railways, roads, ports, telecommunications networks, industrial parks, schools, hospitals, and medical clinics. The successful completion of these projects will aid in the long-term improvement of Pakistan's economy and society.

#### 1.7. Statement of the Problem

The economic corridor strategy is used to bolster transportation and communication networks in order to spur more economic activity. In addition, the economic corridor facilitates public and private sector investment and trade, both of which enhance the standard of living for local residents (De, & Iyengar, 2013). (2014). As a developing nation, Pakistan has a lot of issues to work out before it can achieve sustainable growth. The Human Development Report found that out of 188 nations, Pakistan ranked 147 with the lowest human development. In addition, Pakistan has energy issues and is unable to meet the demands of its manufacturing and consumer sectors. Unemployment is a problem in Pakistan, as it is in many other developing nations. All the socio-economic difficulties of Pakistan have a significant influence on its living level.

The major causes for the improvement of national infrastructure are the results of economic crises. Building up infrastructure aids in economic growth, which helps reduce poverty and raises people's quality of life. Additionally, it helps close the development gap between various areas. Reference: Bhattacharyay, Kawai, & Nag (2012). Only a comprehensive development effort will get us closer to the objective of sustainable growth. The economic and social spheres are both involved in a comprehensive initiative. In this context, the CPEC is helping to advance Pakistan's social progress in addition to its economic growth and development. While military and security cooperation between Pakistan and China existed before to the CPEC, the project is expected to make China the biggest foreign investor in Pakistan's economy. The expansion of the port at Gwadar is a crucial part of the CPEC initiative.

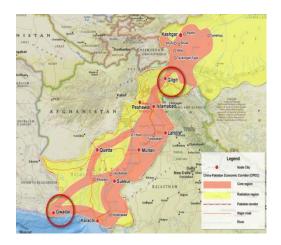
Building the Gwadar port is critical to Pakistan's economic and social growth. The province of Balochistan, where Gwadar port is located, is not a highly developed one; in terms of production, Balochistan ranks fourth. The Gwadar port is crucial to the growth of Balochistan and to ending the plight of the impoverished Baloch people. The purpose of this research was to inquire about public opinion concerning the sustainability of CPEC-funded infrastructure projects in Pakistan. The purpose of this research was to learn how locals feel about CPEC, how it would affect the economy and culture of Pakistan, and how it will aid in the country's overall quest for sustainable development.

The CPEC-funded infrastructure expansion would also alter Pakistan's traditional environment and way of life.

#### 2. Materials and Methods

This study focused its attention on two cities in Pakistan. Both participants were chosen using a random selection process. These cities serve as hubs and may be found along the CPEC route in both northern and southern Pakistan. Through a multi-stage selection process, 500 respondents were selected from both locations. In the initial phase, cities with two nodes were chosen at random. The second phase included selecting two tehsils from each node city at random, and the third involved selecting 500

respondents from the eight households in the four tehsils across the two cities using a simple random sampling approach. Cities serving as hubs along the CPEC corridor in northern and southern Pakistan are shown in Figure 4.



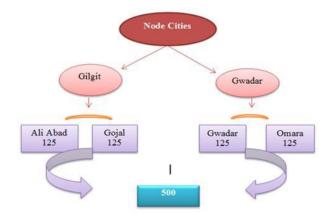


Figure 4. The node cities and situated on the CPEC route in northern and southern Pakistan.

#### 2.1. Data Collection Tool

The basic data for this research came from a well crafted questionnaire. A survey, as defined by (Babbie, (2020), is a data gathering tool tailored to the specifics of the research at hand. In addition, proper statistical methods were used to assess the data acquired. The questions in our survey were both openended and closed-ended. Our survey was broken up into parts according to the factors we were interested in.

#### 2.2. Data Analysis

SPSS was used to analyse the data from the current investigation (Statistical Package for Social Sciences). The data was analysed using binary and univariate logistic regression. Binary Equation for Logistic Regression

 $ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$ 

 $X_1 + X_2 \dots \dots \dots X_4$  (Predictor Variables)

#### 3. Results

#### 3.1. Univariate Analysis

Table 2 shows that 14% of respondents knew that CPEC was an economic project, 22% knew that CPEC was an energy project, 26% knew that CPEC was an infrastructure development project, and 20% knew that CPEC was a social development project. Overall, 16.8% of respondents believed that CPEC encompassed all of these facets. The CPEC is a multifaceted initiative in Pakistan that will aid in urban and rural development, according to a reference (Menhas, Mahmood, Tanchangya, Safdar, & Hussain, 2019). Fifty-four percent of those surveyed thought that the CPEC was a transportation link between Pakistan and China. In addition, the vast majority of respondents learned about the CPEC via the internet, friends, and political groups. Furthermore, reference (Khan, & Khan, (2016). estimated that the CPEC would boost the social development of Pakistan via the execution of several projects including the production of energy, the development of infrastructure, and the construction of new enterprises. Employment prospects for young Pakistanis will increase thanks to CPEC projects, which will also assist

reduce poverty. The gap between rural and urban regions will be closed. Training in the cutting-edge technologies that are being transferred to Pakistan as part of the CPEC will also help enhance the socioeconomic conditions of Pakistani society. Construction of a high-speed train between Peshawar and Karachi, as well as a network of highways, airports, an optical fibre network, energy production units, and other infrastructure, are all part of the CPEC project, as stated by (Khan, & Khan, (2016). These CPEC features are crucial to Pakistan's urbanisation and will radically alter city life. Table 2 shows that 14% of respondents knew that CPEC was an economic project, 22% knew that CPEC was an energy project, 26% knew that CPEC was an infrastructure development project, and 20% knew that CPEC was a social development project. Overall, 16.8% of respondents believed that CPEC encompassed all of these facets. The CPEC is a multifaceted initiative in Pakistan that will aid in urban and rural development, according to a reference (Menhas, Mahmood, Tanchangya, Safdar, & Hussain, 2019). Fifty-four percent of those surveyed thought that the CPEC was a transportation link between Pakistan and China. In addition, the vast majority of respondents learned about the CPEC via the internet, friends, and political groups. Furthermore, reference (Khan, & Khan, (2016). estimated that the CPEC would boost the social development of Pakistan via the execution of several projects including the production of energy, the development of infrastructure, and the construction of new enterprises. Employment prospects for young Pakistanis will increase thanks to CPEC projects, which will also assist reduce poverty. The gap between rural and urban regions will be closed. Training in the cutting-edge technologies that are being transferred to Pakistan as part of the CPEC will also help enhance the socioeconomic conditions of Pakistani society. Construction of a high-speed train between Peshawar and Karachi, as well as a network of highways, airports, an optical fibre network, energy production units, and other infrastructure, are all part of the CPEC project, as stated by (Khan, & Khan, (2016). These CPEC features are crucial to Pakistan's urbanisation and will radically alter city life.

| Type of Projects                    | Frequency | Percentage |
|-------------------------------------|-----------|------------|
| Economic Projects                   | 70        | 14.0       |
| Energy Projects                     | 111       | 22.2       |
| Infrastructure Development Projects | 131       | 26.2       |
| Social Development Projects         | 104       | 20.8       |
| All project                         | 84        | 16.8       |
| Total                               | 500       | 100.0      |

**Table 2.** Respondents' knowledge about which kind of projects are included in the China-Pakistan Economic Corridor (CPEC).

#### 3.1.1. CPEC Project and Socio-Economic Development

The social and economic progress of every civilization will be profoundly affected by infrastructure initiatives. Multifunctional in nature, the China-Pakistan Economic Corridor will alter the economic and social landscape of Pakistan. It is expected that with the CPEC, Pakistan would be able to construct high-tech infrastructure that will aid in the country's economic and social growth. The Gwadar port plays a crucial role in the CPEC initiative. Additionally, the growth of Gwadar would result in the growth of Balochistan. The CPEC will improve the standard of living for a large portion of Balochistan's population by creating new job and business possibilities.

Table 3 displays that 13% of respondents believed the CPEC would help the economy of Pakistan, 11% believed it would help meet the country's energy needs, 22% believed it would help with rural and urban development, 19% believed it would help with the social development of Pakistan, and 19% believed it would help with all aspects of development in the country. According to a recent study (Ali, Shah, Shah,

& BiBi, 2017), the CPEC is predicated on the construction of a train, a road (2,700 km in length), and an oil and gas pipeline between China and Pakistan. Connecting Pakistan and China would reduce shipping costs and offer a safe passage to China for international commerce and business.

When it comes to energy, it has been stated (Khurshid, Rashid, & Zahid, 2018) that the CPEC energy projects would assist alleviate Pakistan's energy shortages and stimulate the country's economy. Furthermore, the CPEC will play an important role in the socio-economic uplift of Pakistan by creating jobs for locals, solving the country's energy shortage issue, establishing brand-new industrial sectors, combating poverty, and raising overall living standards. People's standard of living will improve as a result of the CPEC's business potential. All of the aforementioned effects of CPEC on Pakistani society will contribute to the country's long-term development. Furthermore, (Wang, L. (2017) noted that the BRI's CPEC would provide Pakistan a wide range of chances and advantages, from societal and economic growth to heightened national security. To sum up, the CPEC will boost Pakistan's governance, aid in the fight against poverty, and entice investors from across the world.

**Table 3.** Distribution of the respondents according to their opinion about which kind of role the CPEC plays in the socio-economic development of Pakistan.

| Response                    | Frequency | Percentage |
|-----------------------------|-----------|------------|
| Improve Pakistan's Economy  | 66        | 13.2       |
| Fulfill Energy Needs        | 59        | 11.8       |
| Rural and Urban Development | 110       | 22.0       |
| Social Development          | 126       | 25.2       |
| All                         | 98        | 19.6       |
| NA                          | 41        | 8.2        |
| Total                       | 500       | 100.0      |

Table 4 shows that nearly one-third (34.6%) of respondents believed that CPEC would lead to infrastructure construction in their area for rural development; 36.4% believed that CPEC would lead to rural electrification in their area; 10.6% and 12.8% believed that CPEC would lead to improvements in the agricultural sector and increased and improved irrigation systems, respectively. According to (Jamil, A. (2015), the CPEC would improve and expedite the transport of cargo containers between Pakistan and China. Problems that arise for farmers after harvest may also be avoided with better and more accessible transportation. Farmers in rural Pakistan will benefit from the CPEC's upgrades to the region's transportation networks and infrastructure as well as increased agricultural prices. More over half of Pakistan's population resides in rural regions, with 42.3% working in agriculture, according to a 2015 study by Xie, Li, and Ma. The CPEC project will become a source of competitiveness among Pakistani farmers, which would further push towards new advance technology and innovation.

**Table 4.** Distribution of respondents based on their expectations for the rural development initiatives that would be implemented in their region as part of the CPEC.

| Response                                  | Frequency | Percentage |
|---|-----------|------------|
| Construction of Infrastructure            | 173       | 34.6       |
| Rural Electrification                     | 182       | 36.4       |
| Improving agricultural sector             | 53        | 10.6       |
| Increasing and improved irrigation system | 64        | 12.8       |
| NA  | 28        | 5.6        |
| Total                                     | 500       | 100.0      |

In addition, the CPEC project facilitates collaboration between China and Pakistan in a variety of agricultural spheres, including the demonstration of mechanisation, livestock, the processing of agricultural products, the improvement of production technology, and poultry breeding (Menhas,

Mahmood, Tanchangya, Safdar, & Hussain, 2019). In addition, the distribution of agricultural goods to markets relies heavily on the improvement of rural infrastructure. The CPEC will also increase regional connectivity, which will lower transportation costs, according to the cited source. High-quality fruits and vegetables are grown in Pakistan's northern regions, but cannot be sent out owing to a lack of infrastructure. Since the CPEC would facilitate travel between northern regions and airports, it will also aid in the export of food and agricultural goods.

Five point two percent, twenty one point zero percent, sixteen point two percent, and twenty one point four percent of respondents, respectively, believed that the CPEC project will bring gender equality, gender equity, social justice, and poverty reduction, as shown in Table 5. It was suggested in the cited article that the CPEC project would aid in Pakistan's economic growth. Furthermore, the CPEC will help alleviate Pakistan's growing unemployment problem. The CPEC would also affect regular people by raising the quality of basic services and helping to reduce poverty.

**Table 5.** Responses are broken down according to how respondents feel the CPEC project would affect their community.

| Response          | Frequency | Percentage |
|-------------------|-----------|------------|
| Gender Equality   | 26        | 5.2        |
| Gender Equity     | 105       | 21.0       |
| Social Justice    | 81        | 16.2       |
| Poverty Reduction | 107       | 21.4       |
| All               | 70        | 14.0       |
| NA                | 111       | 22.2       |
| Total             | 500       | 100.0      |

Table 6 shows that among the respondents who were asked about the social benefits of CPEC projects, 21.4% said that the CPEC would lead to better primary education, 19.8% said that it would lead to better health facilities, and 31.6% said that it would lead to the installation of water purification plants. Among the respondents who were asked about the status of these projects, 20.4% said that they had already begun under CPEC. Foreign investment in the nation would increase thanks to the CPEC, as stated by Reference (Aftab, M. (2016). It will have a big influence on the lives of the average man, and, according to the Chinese Ambassador Sun Weidong, the successful completion of the CPEC would be useful in the supply of improved education, health, and work facilities. It has been reported (Menhas, Mahmood, Tanchangya, Safdar, & Hussain, 2019) that the educational facilities of Gwadar, including universities, would be improved. The Gwadar city development project would also entail the modernization of hospitals and the distribution of clean water. Gwadar will grow in significance as a port city after the current construction project is finished.

**Table 6.** Distribution of the respondents according to their perspective on which sort of efforts have begun under CPEC projects for the social development of their area.

| Response                                  | Frequency | Percentage |
|---|-----------|------------|
| Improve primary education system          | 107       | 21.4       |
| Improve health facilities                 | 99        | 19.8       |
| Installation of water purification plants | 158       | 31.6       |
| All                                       | 102       | 20.4       |
| No response/No knowledge                  | 34        | 6.8        |
| Total                                     | 500       | 100.0      |

According to Table 7, 8 percent of respondents believe the CPEC will create new industrial and economic zones, 20 percent believe the CPEC will boost electricity production, 14 percent believe the CPEC will facilitate the collection of natural resources for industrial use, 33 percent believe the CPEC will facilitate

an increase in real estate activity, and 18 percent believe the CPEC project will encourage a transition from an agrarian to an industrial society.

The China Pakistan Economic Corridor (CPEC) is a commercially focused initiative by the Chinese government in Pakistan, focusing on the development of new enterprises and special economic zones. This initiative will result in the development of several special economic zones and industrial estates, which will in turn generate a large number of new employment for the local populace. The construction of the Gwadar port, as stated by the head of the Gwadar Port Authority, would create forty thousand new jobs. Reference Kashghar is a gateway between Pakistan and China and has been recognised as an important transit hub due to its position on the ancient silk route (ASR) (Rafi, A. E. 2016). The Special Economic Zones (SEZs) that the Chinese government plans to construct in Kashghar and Gwadar are crucial to the development of the region of Xinjiang. Rail and road networks will link the two SEZs together. Social and economic growth, as well as an enhanced geostrategic position, will result from the SEZs' increased interconnection. Pakistan is experiencing a similar power deficit right now. Reference According to Mughal, K. (2016), the Chinese government said in 2014 that it will grant funding to Chinese firms that build infrastructure and energy production units in Pakistan as part of the CPEC project. About USD 33.8 billion is being invested by several Chinese enterprises in Pakistan's energy industry. After CPEC is finished, Pakistan's national power system will have an additional 10,400 MW of electricity available from wind, solar, hydro, and coal. Pakistan has a lot of minerals, but they aren't being exploited since the country doesn't have the ability to process them. Reference (Abbas, K. (2019) claimed that according to the plan of the Pakistani government, 21 mineral extraction and processing zones would be developed under the CPEC project in all provinces. Khuzdar (antimony, chromite), Qila Saifullah (chromite, antimony), Chaghi (chromite), Reko Diq (gold), and Saindak (chromite) are only a few of the areas in Baluchistan that the government plans to develop as mineral extraction and processing zones (gold, silver) Various Chinese businesses are working on the CPEC project at Lasbela (manganese), Kalat (iron ore), Muslim Bagh (chromite), and Gwadar (oil refinery). Pakistan's building and real estate industry is booming, and it's playing a crucial part in the country's ongoing effort to urbanise formerly undeveloped regions. Reference Khetran (2016) speculated that the CPEC project will boost the real estate industry, leading to higher home prices. The price of real estate in Gwadar has grown by almost 70 percent. Additionally, real estate activity has surged in the Gwadar region since the government of Balochistan has established a housing project with cutting-edge amenities. Balochistan's real estate market has also helped the country's economy grow. Land prices have risen throughout Pakistan as a result of the CPEC's many routes, according to a cited source. In Gwadar, many private real estate developer companies and builders have launched new housing projects along the CPEC route.

**Table 7.** The opinions of the respondents about the CPEC's contribution to economic growth are distributed as follows.

| Response                                       | Frequency | Percentage |
|--|-----------|------------|
| Establish New industries and Economic Zones    | 40        | 8.0        |
| Increase in Electricity Production             | 101       | 20.2       |
| Inventions of Natural Resources for Industries | 72        | 14.4       |
| Rising Estate Activity                         | 166       | 33.2       |
| Shift from agrarian society to logistic hub    | 94        | 18.8       |
| All  | 27        | 5.4        |
| Total  | 500       | 100.0      |

As can be seen in Table 8, 42.6% of respondents anticipate an increase in GDP growth, 16.8% anticipate an increase in GDP, 23.8% anticipate a rise in FDI, and 16.8% anticipate an increase in all of these metrics as a result of CPEC projects in Pakistan. According to the cited source (Ramay,. (2016)), the CPEC would boost Pakistan's GDP by at least 1.5 percent annually for the next three years. Investment had a 2.0 percent effect on Pakistan's economy between 2016 and 2018. Additionally, annual GDP growth of 6.0 percent has been forecasted. In addition, the CPEC would encourage private sector investment in

Pakistan, which is expected to increase GDP by around 0.5%. Furthermore, it is expected that China would be the source of around 50% of Pakistan's overall FDI under the CPEC. Statistics from official Chinese sources confirm this estimate. The FDI received from China in the year of 2015-2016 was roughly 593.9 million USD, which is greater (131.3 percent) than that of the year 2014-2015.

**Table 8.** Distribution of respondents based on their opinions on the extent to which the CPEC would boostPakistan's economy.

| Response           | Frequency | Percentage |
|--------------------|-----------|------------|
| Enhance GDP growth | 213       | 42.6       |
| Improve GNP        | 84        | 16.8       |
| Increase FDI       | 119       | 23.8       |
| All                | 84        | 16.8       |
| Total              | 500       | 100.0      |

In Table 9, we can see that a vast majority of respondents (92.4%) believe that free economic zones and industrial parks would aid in the reduction of absolute poverty, while just 3.4% of respondents responded negatively and 4.2% were unsure. In addition, 60.0% of Pakistan's population is under 30 years old, according to Reference's count. They are jobless and concerned about their future. The initiatives within the CPEC, such as transportation, commerce, and construction, may offer thousands of new work possibilities for the jobless people of Pakistan. When the CPEC is up and running, the industrial and economic zones along its path will also provide new job opportunities. In addition, it was mentioned in a reference that under the CPEC project, special economic zones would be built in rural parts of Pakistan, which will aid in alleviating poverty, creating jobs, and advancing those places now in a state of underdevelopment. Transportation and regional connections will both benefit from special economic zones.

| Table 9. Results from  | a survey asking  | respondents | if they believe | free economic | zones and | industrial |
|------------------------|------------------|-------------|-----------------|---------------|-----------|------------|
| parks would help reduc | ce global povert | у.          |                 |               |           |            |
|                        | Rasponso         | Frogu       | on              | Porcontago    |           |            |

| Response    | Frequency | Percentage |
|-------------|-----------|------------|
| Yes         | 462       | 92.4       |
| No          | 17        | 3.4        |
| Do not know | 21        | 4.2        |
| Total       | 500       | 100.0      |

#### 3.1.2. Influences of CPEC projects on the Culture of Pakistan

Both the cultural and linguistic norms and practises of China and Pakistan are distinct from one another. Learning each other's languages and increasing interpersonal communication between the two nations is crucial. They can better connect and work together if they can communicate in one other's native tongues. Toor (2017) suggests that in order for new shared cultural norms to evolve in both cultures, an assimilation process must be undertaken. Cultural exchange between the two nations will be facilitated via assimilation. Both governments must prioritise the cultural aspect of CPEC if it is to be successfully implemented.

The opinions of the sampled population about the impact of CPEC projects on Pakistani culture are summarised in Table 10. Approximately 2% of respondents strongly agreed that CPEC would alter the way of life in Pakistan, whereas 88% of respondents agreed, 5% did not have an opinion, 2% disagreed, and 1.5% strongly disagreed. While 53.1% of respondents said they agreed and 34.6% said they strongly agreed, 9.2% said they didn't know, 2.3% said they disagreed, and 0.8% said they strongly disagreed that the CPEC project was helping to spread the Chinese language in Pakistan. Additionally, it has been claimed (Niazi, 2017) that English is the language most employers in Pakistan look for when hiring. Urdu, Pakistan's official language, is declining in prominence due to this situation. Urdu's status would fall further as a result of educational institutions in Pakistan introducing the Chinese language. Many Chinese

firms are setting up shop in Pakistan thanks to the CPEC, and if you want to work for one of them, you'd better be able to speak Chinese. Basically, the CPEC will help spread the Chinese language across Pakistan. It has also been suggested that both nations are working to eliminate linguistic barriers between their citizens. In this context, language institutes teaching Chinese and Urdu are being set up. Peshawar University, COMSATS Islamabad, GCU Lahore, and NUML Islamabad all provide Chinese language classes in Pakistan. President Asif Ali Zardari of Pakistan declared in 2012 that Sindh's elementary schools will begin teaching Mandarin Chinese. In addition, many schools that teach Chinese also throw various cultural celebrations each year. In addition, these organisations have brought Chinese-language radio to Lahore (FM 95) and Islamabad (FM 104.6). When asked if they thought the CPEC project will have an impact on changing societal norms and beliefs in Pakistan, just 3.5% of respondents highly agreed, 3.8% agreed, 3.8% did not have an opinion, 63.1% disapproved, and 25.8% severely disagreed. Only 1.7% of respondents highly agreed that CPEC would increase inter-cultural communication in Pakistan, while 54.4% agreed, 11.9% were unsure, 30.6% were against, and 1.5% were extremely opposed. While 93.3% of respondents were adamant that the CPEC project will encourage technical progress and innovation in Pakistan, 2.5% were neutral, 3.8% were unsure, and 0.4% were against. Referencing research on the societal effects of CPEC-related technology progress. The research found that the CPEC is bringing new chances for the local people of Pakistan in the areas of labour utilisation, resource management, and economic activities by building information technology parks and industrial parks. Di erent research institutes like China-Pakistan Joint Cotton Bio-Tech Laboratory, China-Pakistan Joint Marine Research Center, and the Pak-China Science, Technology, Commerce, and Logistic Park are being established under the agreement of Economic and Technical Co-operation between China and Pakistan. Only 0.8% of respondents strongly agreed that CPEC will increase the number of intercultural marriages in Pakistan; 28.8% agreed; 11.5% were unsure; 52.9% were opposed; and 6.0% were very opposed. According to the aforementioned source, arranged weddings are commonplace in Pakistan, a country with a diverse and intricate culture. However, at the current time, a new trend in marriage, online marriage, is predominant in Pakistani culture. Many people of Pakistani and Chinese descent are marrying one other recently. The term "CPEC marriage" describes a union between two people from different cultures that has resulted from the CPEC's influence. A little over a third (31.0%) of those polled strongly agreed that educational exchange programmes will be formed as a result of the CPEC project in Pakistan; 55.8% agreed; 10.6% were unsure; and 2.7% were highly opposed. Of those polled, over 40% agreed that the CPEC project will lead to the introduction of Chinese culture courses in Pakistani institutions via Confucius institutes, while 53.1% agreed, 3.8% were unsure, 2.7% disagreed, and 0.8% were strongly disagreeing. It has been shown via research that the CPEC project would also affect Pakistan's academic community. Different educational and training institutions are expected to be developed in Gwadar under the CPEC initiative. The education sectors of both nations are also seeking to establish new higher education institutions along the CPEC's path. Moreover, the Chinese government has also created a scholarship plan under the CPEC project through which Pakistani students might receive the opportunity to study in various institutions in China. Confucius Institutes have been established in a number of Pakistani universities, where students may take classes in Chinese language and culture. The Yema Group of Companies is planning to construct a cultural park in China to showcase Chinese and American artefacts and ways of life. In addition, they travelled to Gilgit Baltistan to investigate potential commercial and tourist ventures there. In order to recruit young Pakistanis who are otherwise without employment into the many CPEC-related projects, the Pakistan Technical and Vocational Training Authority (TEVTA) is providing a variety of technical education programmes as well as Chinese language classes.

Additionally, with assistance from China's Tianjin University of Technology and Education, Pakistan will soon open the country's first University of Technical and Vocational Education (UTVE). Only 0.8% of respondents highly agreed that changes in eating pattern would occur as a result of the CPEC project in Pakistan, while 29.4% agreed, 5.2% had no opinion, 32.1% disagreed, and 32.5% severely disagreed. About

22.5% of respondents highly agreed that CPEC would boost communication between the people of both nations, while 69.8% agreed, 7.3% were unsure, and 0.4% were opposed to the idea. About 22% of respondents strongly agreed that materialistic culture would be transmitted as a result of the CPEC project in Pakistan, while 32% agreed, 11% did not have an opinion, and 32.5 disagreed. and 2.1% of the people disagreed very strongly. The CPEC project in Pakistan is having a significant impact on the country's landscape and culture, with 46.5% of respondents strongly agreeing with this statement and 43.3% agreeing, 9.6% having no opinion, and 0.6% disagreeing. According to the survey, 14.4% of people strongly agreed that TV networks are airing Chinese programming because of the CPEC project in Pakistan, 77% agreed, 5.4% had no view, and 2.5% disagreed.

**Table 10.** Distribution of respondents based on their opinions on how much the CPEC projects would alter Pakistani culture. (\*N-480).

| Statements  | Strongly | Strongly Disagree |     | Disagree N |    | No Opinion |     | Agree |     | Strongly Agree |  |
|---|----------|-------------------|-----|------------|----|------------|-----|-------|-----|----------------|--|
| Statements  | f        | %                 | f   | %          | f  | %          | f   | %     | f   | %              |  |
| It changes life style   | 7        | 1.5               | 14  | 2.9        | 26 | 5.4        | 424 | 88.3  | 9   | 1.9            |  |
| It is promoting Chinese language                                      | 4        | 0.8               | 11  | 2.3        | 44 | 9.2        | 255 | 53.1  | 166 | 34.6           |  |
| Transformation of social customs,<br>norms and beliefs of the society | 124      | 25.8              | 303 | 63.1       | 18 | 3.8        | 18  | 3.8   | 17  | 3.5            |  |
| Inter-culture communication   | 7        | 1.5               | 147 | 30.6       | 57 | 11.9       | 261 | 54.4  | 8   | 1.7            |  |
| Technological growth<br>and innovation                                | 0        | 0.0               | 2   | 0.4        | 18 | 3.8        | 12  | 2.5   | 448 | 93.3           |  |
| Cross cultural marriages  | 29       | 6.0               | 254 | 52.9       | 55 | 11.5       | 138 | 28.8  | 4   | 0.8            |  |
| Exchange education programs<br>Introducing Chinese Cultural           | 0        | 0.0               | 13  | 2.7        | 51 | 10.6       | 268 | 55.8  | 148 | 30.8           |  |
| Courses in the Universities<br>through Confucius Institutes           | 4        | 0.8               | 13  | 2.7        | 18 | 3.8        | 255 | 53.1  | 190 | 39.6           |  |
| Changes in food pattern   | 156      | 32.5              | 154 | 32.1       | 25 | 5.2        | 141 | 29.4  | 4   | 0.8            |  |
| Increase contact between both<br>countries people                     | 0        | 0.0               | 2   | 0.4        | 35 | 7.3        | 335 | 69.8  | 108 | 22.5           |  |
| Transmission of<br>Materialistic Culture                              | 10       | 2.1               | 156 | 32.5       | 53 | 11.0       | 157 | 32.7  | 104 | 21.7           |  |
| Changes in landscape culture  | 0        | 0.0               | 3   | 0.6        | 46 | 9.6        | 208 | 43.3  | 223 | 46.5           |  |
| Broadcasting of Chinese Content<br>on Television Channel              | 0        | 0.0               | 12  | 2.5        | 26 | 5.4        | 373 | 77.7  | 69  | 14.4           |  |

\* 480 respondents thought that CPEC projects had influenced the culture of Pakistan.

#### 3.2. Multivariate Analysis

#### Binary-based logical model

We utilised a logistic regression to examine how the CPEC will affect residents in the research region. The results showed that the Cox and Snell R Square value was 0.401. Cox and Snell's R-squared value indicates that only 40% of the observed variance in a model can be attributed to factors within the model's control. Nagelkerke R Square was worth 0.926%. This result indicates that 93% of the observed changes in the specified model can be attributed to the specified variables, while the remaining 7% may be attributed to other factors. Pseudo R2 measurements are not a reliable indicator of goodness of fit (Hosmer & Lemeshow, 2002). This is because the findings cannot be verified in an inferential context (Hussain, 2017). (2000). However, the H-L test yielded a result that was not statistically significant. In this case, - 2 LL equaled 27.442. These results demonstrate the importance of the proposed model's collection of independent variables in enhancing the estimate fit. Our investigation produced a very significant \_2 of 383.64 (p = 0.000) using the Hosmer and Lemeshow test. The information model hypothesis was supported (Menard (2000).

Table 11 presents the model summary Binary Logistic Model.

Table 11. Model summary.

| –2 Log likelihood      | 27.442 |
|------------------------|--------|
| Cox and Snell R Square | 0.401  |
| Nagelkerke R Square    | 0.926  |

The \_2 value of 256.185 (p = 0.000) from our Hosmer and Lemeshow test indicates extreme statistical significance. Since this model is so crucial, the results of this test imply that it was successful in fitting the data. That is to say, the information-suited kind-model hypothesis was supported (Peng, Stage, & John (2002).

Table 12 shows the Hosmer and Lemeshow test.

| Table 12. Hosmer and Lemeshow Test. | Table 12. | Hosmer | and | Lemeshow | Test. |
|-------------------------------------|-----------|--------|-----|----------|-------|
|-------------------------------------|-----------|--------|-----|----------|-------|

| Chi-square   | 256.185 |
|--------------|---------|
| Df           | 4       |
| Significance | 0.000   |

8.2% (41/500) of respondents said they had not seen or heard of any development in the study region as a result of CPEC, while 91.8% said they had seen or heard of progress as a result of CPEC. Tables 13 and 14 show the observed and anticipated values of the logistical regression to classify and associate the CPEC and its variables.

|        |            |          |      | Pre | dicted             |  |
|--------|------------|----------|------|-----|--------------------|--|
|        | Obser      | ved      | CPEC |     | Percentage Correct |  |
|        |            |          | 0    | 1   |                    |  |
| Step 1 | CPEC       | 0        | 37   | 4   | 90.2               |  |
|        | crite _    | 1        | 2    | 457 | 99.6               |  |
| -      | Overall Pe | rcentage |      |     | 98.8               |  |

| a | The | cut | value | is | 0.500 |
|---|-----|-----|-------|----|-------|
|---|-----|-----|-------|----|-------|

|                       | Coefficients                | Wald              | P-value            | Odds Ratio |
|-----------------------|-----------------------------|-------------------|--------------------|------------|
| Poverty Alleviation   | 6.415 ** 15.941             |                   | 0.000              | 610.865    |
| Economic development  | 0.202 **                    | 0.202 ** 14.273   |                    | 1.223      |
| Cultural influence    | 1.336 <sup>NS</sup>         | 0.965             | 0.326              | 3.804      |
| Socio-economic impact | 2.938 *                     | 6.373             | 0.012 *            | 0.053      |
| Constant              | -17.534 **                  | 14.528            | 0.000 **           | 0.000      |
|                       | Nagelkerke R                | Square: 0.926     |                    |            |
|                       | -2 Log-likeliho             | od: 27.442        |                    |            |
| Hosmer and Let        | meshow Test: (chi-sq        | uare value = 256. | 185, p-value = 0.0 | 00)        |
|                       | Model of                    | the CPEC:         |                    |            |
| $ln(\frac{p}{1-n}) =$ | -17.534 + 6.415 <b>PA</b> - | + .202 ED + 1.336 | CI + 2.938SEI      |            |
| ( <i>1-p</i> )        |                             | probability       |                    |            |
|                       |                             |                   |                    |            |

Table 14. Association of the CPEC and its predictors using logistics regression.

Note: NS = non-significant, \* = significant (5%), \*\* = highly-significant (1%).

The accompanying table makes it evident that the CPEC is linked to a reduction in poverty in the region under investigation. The p-value indicates that there is a highly significant relationship between poverty alleviation and respondents' thoughts about development through the CPEC project in the study area, and the positive sign shows that if poverty alleviation levels increase, then the respondents' thinking about development through the CPEC project will increase in the study area. ned by the fact that there is a 1.223-fold possibility of an improvement in the respondents' thoughts on development via the CPEC for every one-unit rise in economic growth. A favourable result indicates that the CPEC project has contributed to economic development in the region under examination. The p-value shows that the association between the variables is statistically significant.

Cultural influence: It is obvious from the above table that the CPEC project adds to culture in the studied region. One explanation for the 3.804 odds ratio of cultural influence is that there is a 3.80-times greater possibility of an improvement in the respondents' thoughts on development via the CPEC for every one-

unit rise in the cultural effect. A high p-value suggests that a relationship between the variables is unlikely.

The accompanying data table demonstrates that the CPEC project has aided in the region's economic and social growth. For every unit rise in socioeconomic development, there is a 0.53-times likelihood that an increase in the respondents' thinking about development via the CPEC is enhanced, which explains the odds ratio of 0.53 for socio-economic effect. A favourable result indicates that the CPEC project has contributed to the region's economic and social growth. According to the p-value, there is a statistically significant connection between the variables.

#### 4. Discussions

OBOR is a Chinese government plan that centres on the development of infrastructure such as highways, railways, ports, oil and gas pipelines, free trade zones, and dry ports. China is constructing and fostering socioeconomic growth in the developing nations of the Central Asian Republics (CARs), Asia, and Africa as part of the OBOR initiative, which is itself a linked network. Sustainable development objectives may be aided by infrastructure investment since it leads to growth in a variety of spheres. The China-Pakistan Economic Corridor (CPEC) is a massive initiative to improve Pakistan's infrastructure and boost the country's economy. Figure 5 shows the progression.

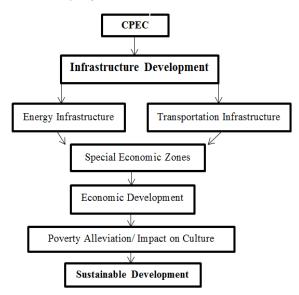


Figure 5. The development process of CPEC.

#### 4.1. Energy Infrastructure Development

An estimated USD\$34 billion would be spent in Pakistan's energy industry as part of the CPEC project, with the majority going toward the construction of coal and gas power plants. In addition, liquefied natural gas (LNG) pipeline development has been budgeted at over \$2.5 billion USD. To meet the energy needs of Balochistan (Gwadar) and Sindh (Nawabshah), LNG will be shipped from Iran to the two provinces (Malik, 2012). (2015). In addition, a planned gas and oil pipeline between Pakistan and Iran would allow both China and Pakistan to meet their energy demands. The proposed CPEC gas and oil pipeline has the potential to evolve into oil and gas pipelines serving China, Pakistan, and Iran. The CPEC energy component projects will have a major effect on the Pakistani economy. As a result of these energy projects, Pakistan's manufacturing industry will have access to the power it needs to expand. Pakistan's GDP growth has been redirected by roughly 2%-2.5% owing to the energy scarcity in the industrial sector. The electric power projects will be implemented in all across Pakistan on a priority basis to meet the

need of energy in Pakistan. When all CPEC power plants are operational, they would have the capacity to generate around 21,000 MGW of electricity (Kugelman (2015).

#### 4.2. Transportation Infrastructure Development

Second, around \$12 billion (from of a total of \$46 billion) of the CPEC investment would go toward improving Pakistan's transportation and infrastructure. Building up one's nation's infrastructure is crucial to its progress. As part of the CPEC initiative, China is enhancing Pakistan's transportation network and building brand-new infrastructure. In transportation and infrastructure development projects, the Industrial Commercial Bank of China (ICBC), China Exim Bank, and China Development Bank (CDB) are the funding institutions (Sial, 2009). (2014). All throughout Pakistan, the CPEC routes would include the building of brand-new railway and highway networks as well as the upgrading of the current ones. There will be significant internal connectivity and economic development thanks to the construction of a highway between Karachi and Lahore, which will be around 1100 kilometres long (Butt, & Butt, 2008). (2015). Further, Karakorum Highway (KKH) would be extended to the other cities in Pakistan. In addition, a rail link between Peshawar and Karachi is in the works.

#### 4.3. Special Economic Zones

Special Economic Zones (SEZs) and industrial clusters are crucial to the process of development. SEZs have been planned in several cities throughout Pakistan as part of the CPEC project, which is expected to hasten the pace at which Pakistan's manufacturing sector develops (Rakisits, 2015). (2015). The China Pakistan Economic Corridor (CPEC) initiative would lead to the creation of several special economic zones (SEZs) in Pakistan, and the Chinese government has already created one near the ancient city of Kashghar in Xinjiang. Kashghar is situated in a region close to the border between Pakistan and China. The entire implementation of CPEC in Pakistan also depends on Kashghar (Shafique (2017). To boost economic growth and commerce inside a nation, the SEZ method has gained popularity. The International Labor Organization (ILO) reported in 1986 that 176 special economic zones had been created in 47 nations.

In addition, the number of SEZs expanded in 2006, and there are currently 3500 SEZs operational in 130 countries (Haris (2015). About 22 percent of China's imports, 60 percent of its exports, and 46 percent of its foreign direct investment (FDI) come from the country's 750 special economic zones (SEZs) designated at the province level (Farole, 2016). (2010). Pakistan tried to boost economic development by establishing industrial estates prior to adopting the SEZ model, however they failed to meet expectations (Zeng, 2007). (2015).

The Gwadar Special Economic Zone (SEZ) that China plans to create is anticipated to greatly reduce transportation costs (Nawaz, Azam, & Noor, 2013). (2015). . SEZs in Balochistan and Punjab are being financed by Habib Bank Limited of Pakistan (HBL) and the Industrial and Commercial Bank of China (ICBC). The government of Pakistan has announced that the SEZs would be granted tax exemptions for a period of 10 years (Nawaz, Azam, & Noor, 2015). To improve the local economy and commerce, the Ministry of Planning, Development, and Reforms has reportedly planned 27 SEZs under the CPEC's banner. The proposed SEZs would generate roughly 1 trillion Rs in revenue and create 2,000,000 new jobs.

#### 4.4. Economic Development

It was said in the cited article that both Pakistan and China have high hopes for the CPEC initiative. The China-Pakistan Economic Corridor (CPEC) will play a crucial role in boosting Pakistan's economy and, further, will boost infrastructural and social development. However, the CPEC would also expand the commerce of China with Pakistan and the other countries of the globe since the CPEC will give a secure and cost-saving cargo route to China. Reference Pakistan and China have a stronger connection as a result of China's rise as an economic power, according to an assessment. The two nations' economies are maturing, and the CPEC will enhance their socioeconomic ties and encourage collaboration in a number

of areas, including the creation of infrastructure, power plants, and energy production facilities (both strategic and digital). Reference According to Khan, Ahmed, and Malik (2013), Pakistan will gain a wide range of possibilities and advantages from the BRI's CPEC, including but not limited to increased economic growth and national security. To sum up, the CPEC will boost Pakistan's governance, aid in the fight against poverty, and entice investors from across the world.

#### 4.5. Poverty Alleviation and Social Development

According to the cited source (Haider & Haider, 2015), the CPEC would provide locals along its various routes with many new business and job options, hence raising their standard of living. Moreover, in rural parts of Pakistan, the CPEC would generate significant changes and provide infrastructure development and wealth. Reference estimated that the CPEC's many initiatives, including energy generation, infrastructure building, and the launch of new businesses, would improve Pakistan's socioeconomic development. The CPEC projects would help reduce poverty and provide new employment possibilities for young Pakistanis. Connections will be made between rural and urban regions. New contemporary technology will be transferred to Pakistan via the CPEC, and training at technical and vocational institutes would enhance the socioeconomic situation of the country's population.

#### 4.6. Sustainable Development

The positive effects of the Sustainable Development Goals (SDGs) on health, the environment, sustainability, quality of life, and economic growth have made them a topic of intense interest across the globe (Saad, Xinping, & Ijaz, 2016). (2019). Through the CPEC, even those living in Pakistan's most outlying regions would have easy access to medical care, schools, markets, and financial institutions. Health and education are crucial to long-term prosperity, and as they improve, so does the quality of life for everyone. Since socioeconomic growth is a stepping stone to sustained development in Pakistan, the findings of the binary logistic regression indicated that CPEC will benefit socioeconomic development in the studied region. Globalization theory predicts that the BRI will improve the region's cultural interchange and communication, technological transfer, and interconnection. Human capital knowledge and technology transformation will play an important role in Pakistan's growth under the CPEC. By increasing industry in metropolitan areas, physical capital is predicted to help Pakistan's economy. The building of essential infrastructure is the cornerstone of societal and economic progress. The CPEC intends to make efficient use of existing natural resources and social infrastructure. Theories of growth, globalisation, and infrastructure-led development all corroborate the findings of this research. In an effort to boost domestic economic development, Pakistan has implemented many institutional changes in the industrial sector. The CPEC has also become a conduit for foreign direct investment (FDI), which will act as a catalyst in calming Pakistan's shaky economy. The BRI, which is the primary development process in Pakistan for sustainable development, is the overarching framework for the CPEC, which is a multifaceted enterprise. Building up infrastructure aids in economic growth, which in turn helps reduce poverty and raises people's quality of life. Additionally, it will aid in closing the development gap between economically distinct areas. Only a comprehensive development effort will get us closer to the objective of sustainable growth.

#### 5. Conclusions

Construction of infrastructure, energy generation, and social improvement make up the bulk of China's CPEC investment. The GDP, employment, and societal progress are all positively impacted by these industries. The effects of CPEC investment on Pakistan's GDP, energy output, infrastructure development, and job creation have been detailed in this report. Total Chinese investment in CPEC projects is estimated at \$62 billion, with over \$20 billion already invested. About eight percent of Pakistan's gross domestic product may be attributed to this investment. The GDP growth in Pakistan has been boosted by these

investments. Transportation, commerce, and building projects under CPEC have the potential to employ tens of thousands of Pakistanis who are now out of work. As soon as the CPEC is operational, industrial, and economic zones on the route of the corridor will also offer new job prospects. The CPEC will boost economic growth by providing locals with new employment and entrepreneurial possibilities. Cultural transfer is also occurring under the CPEC via linguistic and educational exchange programmes. Once rural infrastructure has been built, rural regions may begin communicating with urban centres. In order to achieve long-term sustainability, rural development must be prioritised. The CPEC is now a tool for longterm development in Pakistan.

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