

## CPEC COROLLARY ON ECONOMIC GROWTH OF PAKISTAN

<sup>1</sup>Dr. Salman Masood Sheikh, <sup>2</sup>Dr. Muhammad Khyzer Bin Dost

<sup>1</sup>Associate Professor, Faculty of Business and Management Sciences, The Superior College, Lahore. [salmanmasoodsheikh75@gmail.com](mailto:salmanmasoodsheikh75@gmail.com)  
Associate Professor, Lahore Business School, University of Lahore, Pakistan. Email: [Khyzer\\_bin\\_dost@yahoo.com](mailto:Khyzer_bin_dost@yahoo.com)

ARTICLE INFO	ABSTRACT
<p><i>Article History:</i> Received: 11 Dec 2019 Revised: 23 May 2020 Accepted: 20 Aug 2020 Available Online: 15 Sep 2020</p> <hr/> <p><i>Keywords:</i> CPEC, Economic Growth, Pakistan</p> <hr/> <p><i>JEL Classification:</i> O15, E12</p>	<p>China-Pakistan Economic Corridor (CPEC) is being considered a 'game changer' for the current sluggish economy of Pakistan. CPEC is a combination of infrastructure and energy relate projects, which aim at connecting China to the port of Gwadar. Available research on CPEC and its implications is descriptive at best, and more studies focus on the infrastructural and geopolitical aspect of CPEC and less empirical forecasting has been done to estimate the impact of CPEC on economy of Pakistan. Literature also lacks sector specific implication of CPEC; thus it could be concluded that CPEC although have good prospects for the economy of Pakistan, its impact to the grass root level of the economy will be a bit delayed. There is a need to conduct sector specific studies to lay out policies and framework of action to capitalize on the opportunities provided by CPEC.</p>

© 2020 The authors, under a Creative Commons Attribution-Non-Commercial 4.0

### 1. INTRODUCTION

Pakistan has long been under the curse of the socio-economic problems, whereby war on terrorism along with energy outrage are cited as the main issues, due to which economic growth of the country is hindered. It has been noted by the economic survey of Pakistan that the growth potential of Pakistani economy is around 6.5%, but energy problems have yielded a sluggish growth of around 2% only (GoP, 2013). Subsequently, reported GDP growth of the country increased to 4.71% in FY 2016 but it was short of targeted growth of 5.5% (GoP, 2016). It was further noted that Pakistan is facing tough competition on attracting Foreign Direct Investments, and the country is still short of its potential on attraction of FDI due to certain internal or external factors (GoP, 2016). Certain sectors of Pakistani economy have progressed in the last decade, but overall economic growth remained suppressed. Under such circumstances, fate indeed smiled upon the nation and China proposed its One Belt One Road (OBOR) initiative in 2013, whereby it proposes to revive ancient silk road and link China with rest of the world, specifically rest of Asia, Africa and Europe (Hali, Sukuki & Iqbal, 2015). This new silk road initiative has direct implications for Pakistan and its economy through China-Pakistan Economic Corridor (CPEC).

### 2. ECONOMIC CORRIDORS AND SPECIAL ECONOMIC ZONES

Trade has been the oldest form of business. In the old times, most of the trade of the world was done through sea. Economic corridors in this context of trade are treaties, agreements, legislatives or customs, which guide the trade and respective relations between trading nations. Silk route from China to Africa is a manifestation of such economic corridors from ancient times (Hussain, 2016). Wolf (2016) explained the concept of economic corridor in functional context and provided that the basic purpose of economic corridors is to facilitate linkage of two economic agents within a predefined geographical entity and ensure connectivity of economic hubs or nodes to facilitate trade. Thus, economic corridors interlink infrastructure, trade and production through specific geographical arrangements, which are transformed into center of economic activities and benefits of such arrangements are channelised in the whole economy. An economic corridor is established to create domestic, regional and global value chain and its scope is beyond a mere transit route as it must be supported and sustained by a strong industrial base of export capability, in order to facilitate happening of bilateral trade. Thus, establishment of special economic zones or industrial parks are recommended to reap full potential of an economic corridor.

China has been pursuing its agenda of trade liberalisation and cross border trade and building economic corridors in all over Asia in order to enhance its regional influence and have a greater access to markets of other countries (Holslag, 2010). Three economic corridors in Greater Mekong Subregion are manifestation of China's strategy. These corridors are called North-South Economic Corridor, East-West Economic Corridor and Southern Economic Corridor. Southern Economic Corridor covers Cambodia and connects it with Vietnam, Laos and Thailand, whereby 90% of the population of Cambodia lives along the Southern Economic Corridor. Sisovanna (2012) explained that Cambodia

although has various infrastructural and energy related issues, it has started capitalising on the strengths provided by economic corridor. It has made 8 of its 22 approved special economic zones operational, further the country could also utilize its strengths relating to agricultural land, fishery & forestry, mineral resources and tourism attractions to enhance the magnitude of its economic corridor. Sisovanna (2012) elaborated that Cambodia has stated realising the fruits of its economic corridor in shape of improving economic growth, living standard and reduction of poverty. Zaw and Kudo (2011) related to the economic corridor experience of Myanmar in the same region, which shares borders with China, Thailand, Laos, Bangladesh and India. It is related that the country is rich in mineral resources, agriculture and fisheries. The country is connected to Greater Mekong Subregion through East-West Economic Corridor. The study reviews prospects of the major cities of the Myanmar and explain that infrastructural capabilities along with better administration of the economic zone could attract international investment in the country. Sroosh and Sabir (2013) presented the case of Afghanistan, which used to be a major transport hub during the era of ancient silk road. The new silk road initiative could enable Afghanistan to link South Asia to the Central Asia and further to Europe. Further, Afghanistan would be in better position to market its mineral resources to Europe and rest of the world. The study projected that regional cooperation could push GDP of central Asia at least 50% higher as of now. The paper suggests to work on building a facilitating role of Afghanistan in legitimate trade and power supply between South and Central Asia, which could be key to infrastructural development and subsequent economic growth of Afghanistan.

Overall, as put forward by Holslag (2010), China is aggressively building its trade network within the region in order to establish its influence and economic agenda of bilateral trade. Pakistan in this context has a strategic position due to its access to Arabia Sea and Gwader port is quite a lucrative option for China to access the sea. In order to promote the one belt one road agenda and also to reap access and efficiency benefits, China is depending on Pakistan a lot. This situation is materialised through China-Pakistan Economic Corridor (CPEC), which is being considered a game changer for Pakistan, considering its weakening economic position and declining foreign direct investment potential. Subsequent sections provide a detailed description of the CPEC and its implications for Pakistan.

### 3. CHINA-PAKISTAN ECONOMIC CORRIDOR (CPEC)

China Pakistan Economic Corridor (CPEC) is an regional integration initiative taken under the umbrella of One Belt – One Road (OBOR) ideology of China, which in the long run seeks to integrate and connect 60 countries of Asia, Europe and Africa to enhance economic co-operation and trade (Ali & Faisal, 2016). Dr. Ishart Hussain – Ex. Governor State Bank of Pakistan provide initial details on the CPEC, whereby the initiative is a combination of infrastructural and energy related projects. Pakistan has long been on down side of the energy generation and infrastructure. Energy projects initially will add around 10,000 MW of power generation capacity in the national grid and this power generation will be supported by various projects running on coal, solar, wind and hydropower.

### 4. STRATEGIC SIGNIFICANCE OF CPEC

China and Pakistan has always been considered close friends and strategic partners in the region. Karakorum highway was built as main exchange corridor between Pakistan and China, but merely served as a trade and access route between the countries (Kreutzmann et al., 2009). CPEC, on the other hand is an advanced form to economic and bilateral cooperation, whereby China is willing to invest heavy sum of money in energy related and infrastructural capabilities of the Pakistan, in exchange of access to the port of Gwadar. The idea of CPEC was initially floated in Musharraf Regime, which later on witnessed a boost in 2013, when President Zardari handed over development and operation of Gwader port to China. Since 2013, various visits, meetings and affirmations materialised the project and Chinese President Xi Jinping visited Pakistan in April 2015 to formally inaugurate this project. The corridor will initiate from Kashgar, Chinese North Western Region of province Xinjiang and will terminate at Gwader port, located at the southern region of Pakistan in Baluchistan province. CPEC is composition myriad small and large projects relating to road & rail networks, energy infrastructure & pipelines, airport & seaport and relative infrastructure for trade and tourism, which is expected to complete by 2030 (Butt & Butt, 2015).

Apart from economic significance, CPEC also has geo-political implications for both China and Pakistan. Gwader has a strategic location, whereby it is close to Strait of Hormuz, through which all of the oil exports of middle east pass. The location of Gwader would also enable China to save billions in freight cost of oil imports and its import time would also reduce significantly. Further, existing sea route of China passes from South China Sea, which is a disputed territory and USA has a growing naval presence in that region. Using Gwader port will enable China to bypass this USA influence, while naval activities of both USA and India could be monitored through Gwader (Alam, 2015). Thus, Chinese influence in Indian Sea would increase, which a potential threat for India and development of Gwader is an economic threat for Iran and UAE as Iran is building its port Chahbahar near Gwader and Gwader would have potential to attract 70% of business of Dubai port (Butt & Butt, 2015). Further, landlocked regions like states of

Central Asia would have opportunity to seek trade route from Pakistan to access sea through Gwader. Butt and Butt (2015) quoted the statement of Tajikistani Ambassador, declared support for CPEC and iterated that, “the Central Asian States fully support CPEC project... It will narrow down the distance among the regional countries through road and rail links for their socio-economic uplift. This project is of our common benefit.” CPEC and Gwader will also allow connectively of Afghanistan and thus, peace prospects of the Afghanistan and bilateral trade between Pakistan and Afghanistan will increase. So, overall CPEC along with the port of Gwader has geopolitical implications for almost every country in the region. Pakistan and China being main stakeholders would have an enhanced geopolitical influence in the region and an uplift in their economic growth, while other associated countries could also reap benefit by mutual economic cooperation and bilateral trade prospects.

Infrastructural improvements including roads, railway lines, establishment of economic zones & dry ports and transportation facility improvements constitute a major part of CPEC. The project include the construction of Metro train in Lahore, Lahore-Karachi Motorway, construction of Kara Karam Highway, Hazara Motorway, Havelian Dry Port, construction of Gwader Airport and various other projects of roads and railway (Yaseen, Butt and Riaz, 2016). Rafi and Khan (2016) elaborated the road routes of the CPEC, whereby a controversy on the decision of routes was said to prevailing between provinces and federal government, which according to Hussain (2015) was resolved. At present there are three routes, which are named eastern route, central route and western route. All of these routes will be connected to western route, which is a direct route from Kasghar to Gwader. Pakistan and China have decided to build eastern corridor first, which has raised controversies, but other parts of the corridor would also be build late on. Further, part of renovations of existing railway tracks, a new track of 1,200 km will also be built under CPEC (Rafi & Khan, 2016). Thus, a huge infrastructural and energy sector development awaits Pakistan in next 10 to 15 years and huge FDI is expected to come into Pakistan from China and subsequently from other countries as well. This indicates towards an economic uplift and better living standards for the people of Pakistan.

## **5. ECONOMIC IMPLICATION OF CPEC FOR PAKISTAN**

CPEC is being considered a game changer for Pakistan, whereby a total of \$46 billion investments will be made in energy and infrastructure sector of Pakistan and put of this huge sum \$34 billion will be direct investment of Chinese companies in Pakistan and remaining \$12 billion will be in the shape of government to government loans (Hussain, 2015). FDI of this magnitude can exponentially improve the economic prospects of any country, as FDI has always been considered critical to the economic development of a country (Borensztein, Gregorio & Lee, 1998; Razafimahefa & Hamori, 2007) and same is true for Pakistan considering the empirical evidence (Falki, 2009). Further, considering the investments in establishments of the economic corridors is an add on, as economic corridors uplift the economy of a country in a sustainable manner for the long run. At present, growth rates of China are impressive, which are credited to the bilateral trade and supporting economic corridors in different regions. Considering Pakistan, huge economic impact of CPEC investments are anticipated, but it is too early to actualize or estimate such benefits as of now. Certain studies have embarked on the economic significance of the CPEC, but such studies provide generalised statements on the economic prospects of CPEC for Pakistan (Butt & Butt, 2015; Hali, Shukui & Iqbal, 2015; Rafi, Khan & Aslam, 2016; Sheikh, Ji & Fan, 2016; Irshad, Xin & Arshad, 2015). In economic context, CPEC would have significant implications for FDI & trade, employment and revival of energy sector.

### **5.1 FDI & Trade**

A larger relevant and contextual impact of CPEC will be on the FDI inflows and bilateral trade and revenues from trade facilitation and tariffs. Further, CPEC is also associated with the development of economic zones in the country. Rafi, Khan and Aslam (2016) provided that a total of 27 economic zones will be setup under CPEC and these would be distributed among all provinces of Pakistan. First economic zone in this regard will be established in Gwader. The case of FDI in this regard is very strong, whereby the magnitude investment being made under CPEC is unmatched as far as its precedents are considered. Even aid packages of USA do not match to this magnitude. Hali, Shukui and Iqbal (2015) quoted that impact of this FDI will equate to effects of cumulative inflows in Pakistan since 1970. BMA (2015) estimated an additional immediate economic growth of 2.1% due to CPEC investments for the years 2017-18. CPEC and Gwader provide a strategic opportunity to not only Pakistan but also other regional players like India, Afghanistan, Iran and other land lock countries of Central Asia. Thus, Gwader may transform to an oil hub in the world. There are also plans to build oil refinery in Gwader (Anwar, 2011) and build an oil pipeline from Gwader to Western China. A transit fee of about \$6 billion is expected to be earned from this pipeline project. The prospects of the port generally are equitable to Dubai, Hong Kong & Singapore (Sheikh, Ji & Fan, 2016). Anwar (2011) iterated on the strategic importance of the Gwader, which is located near Persian Gulf and Strait of Hormuz, which handles 43% of Chinese oil trade and 35% of the world sea trade. Further, China's freight volume is increased at 10.8% in 2013 (Sheikh, Ji & Fan, 2016). Muhammad and Qi (2015) also indicated an increasing volume of trade between China

and Pakistan. These prospects on FDI and trade are massive and indicate towards good prospects of the Pakistani economy.

## 5.2 Employment potential

CPEC is a long term project, which will bring investment into Pakistan and special economic zones would also be established. This will have positive impact on various sectors of Pakistan and new jobs are expected to be created in the market. Xi, Le and Ma (2015) in this regard provided that employment trends in the world are quite depressed, Pakistan at present is pursuing 'Decent Work for All' policy as its employment policy, whereby the key aspect of the policy is to invest in various segments of the economy to create labor demand. The employment trends in Pakistan are not stable and unemployment in the country remains around 50%. Xi, Le and Ma (2015) estimate that there would be an immediate impact of initial projects of CPEC on the employment prospects of Pakistan, whereby job will be created in real estate and construction sectors of the society. Further, second phase of CPEC will invite investments in other segments of the economy, whereby agricultural competitiveness of the country will increase, fisheries segment will also grow and livestock exports of the country will also see a boom. In this second phase, China and Pakistan will also join hands to establish industrial parks across the country and demand for the labor would increase in an exponential manner. Further, cottage industry of Pakistan will also flourish and have improved access to the international market. The status of Pakistan will change to the entry spot of new developed China and multinationals will also enhance their presence in Pakistan. Mujadid and Chaudhry (2016) conducted a capacity analysis of the related industrial segments being used for infrastructural development i.e. steel, cement and stone crushing and found that all of these three sectors are operating less than their potential and rising demands could easily be fulfilled by enhanced capacity utilisation, which would provide employment opportunities to the public. Thus, one way or the other, CPEC will contribute towards economic and employment aspect of the economy. Same notions were provided by Abid and Ashfaq (2015) that CPEC will cause employment opportunities in Pakistan to grow and thus, quality of life of people will increase and poverty situation will also improve, particularly in relatively deprived areas of Pakistan.

## 5.3 Energy

Energy sector of Pakistan has become a long standing problem of Pakistan; whereby Pakistani industry is a major prey to power inefficiencies. Estimates of Rafi, Khan and Aslam (2016) indicate that electricity problems are costing 2% of GDP to the country. Further, empirical studies have estimated that there is a log run equilibrium relationship between electricity consumption and economic growth of Pakistan (Zahra, Razzaq & Nazir, 2016), while Chaudhry, Faridi and Riaz (2015) provided evidence that energy shortfall in Pakistan has a strong positive impact on poverty. Abid and Asfaq (2015) also provided positive notions on the CPEC, as it will solve energy crises of Pakistani and deprived industries like textile will once again grow in the country, and an overall positive impact of this solving of energy issue will channelize towards economic growth of the country, which is expected to have a boost of at least 2%, if energy issue resolves. Thus, brining energy production at par of consumption is a main requirement for Pakistan as of now to provoke economic growth.

## 5.4 Physical infrastructure

The arguments in the favor of physical infrastructure and economic integration and development are numerous, whereby lack of physical infrastructure and being land locked suppress economic growth by levying 40% to 60% extra costs on trading (Limo & Venables, 2001) and this is true for the developed economies like USA, where efficiency port efficiency enables the country to reduce its trading costs by 12% (Clark et al., 2004). Nudlu (2006), made same case for developing region of Africa, whereby improved infrastructure has enhanced regional integration of the area and has uplifted economic prospects of the region. Same notions were provided by Edmonds and Fujimura (2006) for Greater Mekong Sub-region (GMS), whereby transport facilities and related infrastructural development has pushed up FDI and volume of trade. Considering these notions Shoukat, Ahmad and Abdullah (2016), investigated the case of Pakistan for infrastructure development and regional economic integration and found a direct impact of infrastructure development on regional economic integration. Thus, the study related these positive notions to CPEC and assured happening of regional economic integration and relative economic development. Another study conducted by Ahmad and Mustafa (2016) tried to assess impact of infrastructural developments of CPEC on agriculture sector of Pakistan and found that infrastructural improvements are associated with the increased agricultural output in the economy and also helps in poverty reduction. The study concluded on a positive note relating to an expectation of positive impact of CPEC on agriculture sector of Pakistan. Haq and Farooq (2016) in this regard provided district wise analysis of the potential impact of CPEC and its projects on social welfare of the people of Pakistan, considering the indicators of education, health and housing and found that CPEC would considerably impact all of these three aspects of social welfare, whereby a higher impact is anticipated for the Baluchistan and Sindh. Further, an higher impact is



also anticipated for the social dimension of housing. Lastly, it was also anticipated that district situated near or on three routes of CPEC will have a higher positive impact, as compared to other cities.

## 6. CONCLUSION

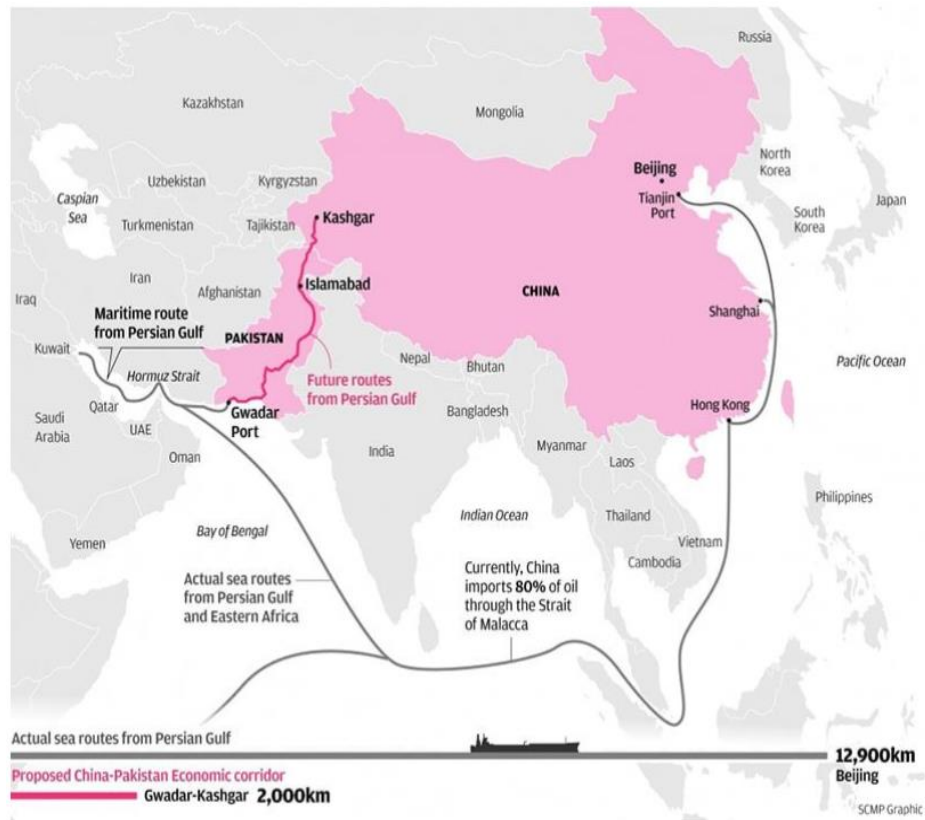
This review provides a synthesis of the available studies on CPEC and its geopolitical and economic implications for Pakistan. As various projects of CPEC have just started and their early harvest projects are due by 2018, it will be premature to estimate exact impact of CPEC and its economic implications for Pakistani economy. Most of the studies found and reviewed are descriptive in nature, while some of the studies tried to project economic implication of CPEC for Pakistan, but these studies are quite few (Shoukat, Ahmad & Abdullah, 2016; Haq & Farooq, 2016) and their focus remained on the infrastructural aspect of CPEC. Most of the studies provided generalised comments on the lucrateness of CPEC, while other discussed geopolitical and strategic implications of CPEC. Lastly, CPEC has implications for almost all of the sector of economy, but not much studies could be found to layout framework of possibilities and prospects for different sectors. To start with, studies related to agriculture sector, construction & housing sector, financial services sector, transportation sector and energy sector could be conducted to better lay a framework of action to capitalize on the opportunities provided by CPEC and its projects. Further, supporting policies relating to economic zones, trade, transportation, taxes and tariffs and energy should be devised in advance to facilitate trickle-down effect of CPEC to grass root level of economy.

## REFERENCES

- Abid, M., & Ashfaq, A. (2015). CPEC: Challenges and Opportunities for Pakistan. *Pakistan Vision*, 16(2).
- Ahmed, R., & Mustafa, U. (2016). Impact of CPEC Projects on Agriculture Sector of Pakistan: Infrastructure and Agricultural Output Linkages. *Paper Presented at 32nd Annual General Meeting and Conference Pakistan Society of Development Economists*, Pakistan Institute of Development Economics.
- Alam, O. (2015). China-Pakistan Economic Corridor: Towards a New 'Heartland'?. *LSE South Asia Centre blog*, 16.
- Ali, M. M., & Faisal, F. (2016). CPEC, SEZ (Special Economic Zones) and Entrepreneurial Development Prospects in Pakistan. *Paper Presented at 32nd Annual General Meeting and Conference*, Pakistan Society of Development Economists, Pakistan Institute of Development Economics.
- Anwar Z. (2011). Development of infrastructural linkages between Pakistan and Central Asia Pakistan-Central Asia linkages. *Research Journal of South Asian Studies*, 26, 103–115.
- BMA (2015). Pakistan Economy: Impact of China Pak Economic Corridor - A Bird's Eye View. BMA Capital Management Limited. <http://investorguide360.com/wp-content/uploads/2015/05/Impact-of-China-Pak-Economic-Corridor-A-Birds-Eye-View.pdf>
- Borensztein, E., De Gregorio, J., & Lee, J. W. (1998). How does foreign direct investment affect economic growth?. *Journal of international Economics*, 45(1), 115-135.
- Butt, K. M., & But, A. A. (2015). Impact of CPEC on regional and extra-regional actors. *Journal of Political Science*, XXXIII, 23-44
- Chaudhry, M.O., Faridi, M.Z. and Riaz, S (2015). Energy Crisis and Macroeconomic Stability in Pakistan. *Pakistan Journal of Social Sciences (PJSS)*, 35(1), 425-436
- Clark, X., Dollar, D. and Micco, A., (2004). Port Efficiency, Maritime Transport Costs and Bilateral Trade, *Journal of Development Economics*, 75 (2004), pp 417 – 450.
- Dana, L.P. & Dumez, H. (2015) 'Qualitative Research Revisited: Epistemology of a Comprehensive Approach,' *International Journal of Entrepreneurship & Small Business* 26 (2), October 2015, pp. 154-170.
- Edmonds, C. and Fujimura, M., (2006). *Impact of Cross-Border Road Infrastructure on Trade and Investment in the Greater Mekong Sub-region*. Third LAEBA Annual Meeting Seoul, South Korea. Latin America Caribbean and Asia Pacific Economics and Business Association.
- Falki, N. (2009). Impact of foreign direct investment on economic growth in Pakistan. *International Review of Business Research Papers*, 5(5), 110-120.
- GoP (2013). Economic Survey 2012–2013, Finance Division. Economic Advisor's Wing, Islamabad: Government of Pakistan. [http://www.finance.gov.pk/survey\\_1213.html](http://www.finance.gov.pk/survey_1213.html)
- GoP (2016). Economic Survey 2015–2016, Finance Division. Economic Advisor's Wing, Islamabad: Government of Pakistan. [http://www.finance.gov.pk/survey\\_1516.html](http://www.finance.gov.pk/survey_1516.html)
- Hali, S. M., Shukui, T., & Iqbal, S. (2015). One Belt and One Road: Impact on China-Pakistan Economic Corridor. Institute of Strategic Studies, Islamabad. [http://www.issi.org.pk/wp-content/uploads/2015/12/Shafei\\_Moiz\\_and\\_Tan\\_and\\_Sumera\\_3435\\_SS\\_41\\_20142015.pdf](http://www.issi.org.pk/wp-content/uploads/2015/12/Shafei_Moiz_and_Tan_and_Sumera_3435_SS_41_20142015.pdf)

- Haq, R., & Farooq, N. (2016). Impact of CPEC on Social Welfare in Pakistan: A District Level Analysis. *Paper Presented at 32nd Annual General Meeting and Conference*, Pakistan Society of Development Economists, Pakistan Institute of Development Economics.
- Holslag, J. (2010). China's roads to influence. *Asian Survey*, 50(4), 641-662.
- Hussain, E. (2016). China–Pakistan Economic Corridor: Will It Sustain Itself?. *Fudan Journal of the Humanities and Social Sciences*, 1-15.
- Irshad, M. S. Xin, Q. & Arshad, H. (2015). One Belt and One Road: Dose China-Pakistan Economic Corridor Benefit for Pakistan's Economy?. *Journal of Economics and Sustainable Development*, 6 (24).
- Kreutzmann, H., Amin Beg, G., Zhaohui, L., & Richter, J. (2009). The Karakoram highway as a prime exchange corridor between Pakistan and China. In *Regional workshop, Integrated tourism concepts to contribute to sustainable development in mountain regions, Gilgit, Pakistan and Kashgar, China, 8-14 Oct, 2008*. (pp. 13-36). InWent-Internationale Weiterbildung und Entwicklung GmbH.
- Limo, N. and A.J. Venables (2001). Infrastructure, Geographical Disadvantage, Transport Costs and Trade. *World Bank Economic Review* 15: 451-479.
- Muhammad, S. I. & Qi, X. (2015). Rising trend in imports and exports of Pakistan's FTA partners in recent years, *Academic Research International*, 6(4).
- Mujaddad, H. G., Chaudhry, M. A., & Director, P. E. R. I. (2016). Sufficiency Analysis of Local Production Capacity in Punjab for the requirement of CPEC. Punjab Economic Research Institute (PERI).
- Ndulu, J. B., (2006). Infrastructure, Regional Integration and Growth in Sub-Saharan Africa: Dealing with the disadvantages of Geography and Sovereign Fragmentation, *Journal of African Economies*, Volume 15, pp. 212-244.
- Rafi, A., Khan, F., & Aslam, S. (2016). CPEC: Pakistan's way to success. IICR Special Report. <http://iicr.org.pk/wp-content/uploads/2016/09/IICR-Special-Report-on-CPEC.pdf>
- Razafimahefa, I. F., & Hamori, S. (2007). FDI and Economic Growth. In *International Competitiveness in Africa* (pp. 17-25). Springer Berlin Heidelberg.
- Shaikh, F., Ji, Q., & Fan, Y. (2016). Prospects of Pakistan–China Energy and Economic Corridor. *Renewable and Sustainable Energy Reviews*, 59, 253-263.
- Shoukat, M. A., Ahmad, K., & Abdullah, M. (2016). Does Infrastructure Development Promote Regional Economic Integration? CPEC's Implications for Pakistan. *Paper Presented at 32nd Annual General Meeting and Conference* Pakistan Society of Development Economists, Pakistan Institute of Development Economics.
- Sisovanna, S. (2012). A study on cross-border trade facilitation and regional development along economic corridors in Cambodia. *Emerging Economic Corridors in the Mekong Region, BRC Research Report*, (8).
- Sroosh, M. N., & Sabir, M. Y. (2013). New Silk Road Initiative: Economic Dividends. *Future of Economic Cooperation in SAARC Countries i*, 119.
- Wolf, S. O. (2016). The China-Pakistan Economic Corridor: An Assessment of its Feasibility and Impact on Regional Cooperation. *South Asia Democratic Forum Working Paper*.
- Xi, X., Li, J. & Ma, C. (2015). Research on Employment Opportunities under the Framework of China-Pakistan Economic Corridor. *Proceedings of International Conference on CPEC Held at GC University, Lahore on December 09–10, 2015*.
- Yaseen, Z., Butt, T. M., & Riaz, M. China-Pakistan Economic Corridor: myth and realities. *Energy*, 33(20), 1-8.
- Zahra, A., Razzaq, S., & Nazir, A. (2016). Impact of Electricity Consumption and Transport Infrastructure on the Economic Growth of Pakistan. *International Journal of Academic Research in Business and Social Sciences*, 6(10), 291-300.
- Zaw, M., & Kudo, T. (2011). A study on economic corridors and industrial zones, ports and metropolitan and alternative roads in Myanmar. *Intra-and inter-city connectivity in the Mekong region. BRC Research Report*, (6).

## APPENDICES

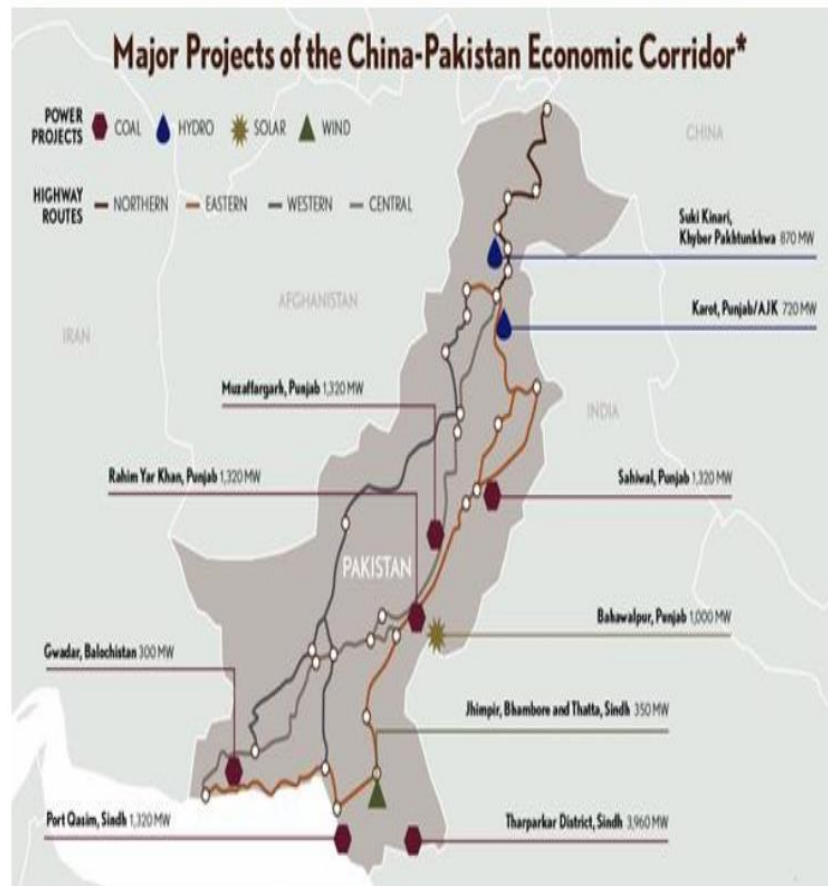


### E: Trade Route Implication of CPEC for Chin

Source: BMA Research (2015)

# F: Regional Distribution of Project of CPEC

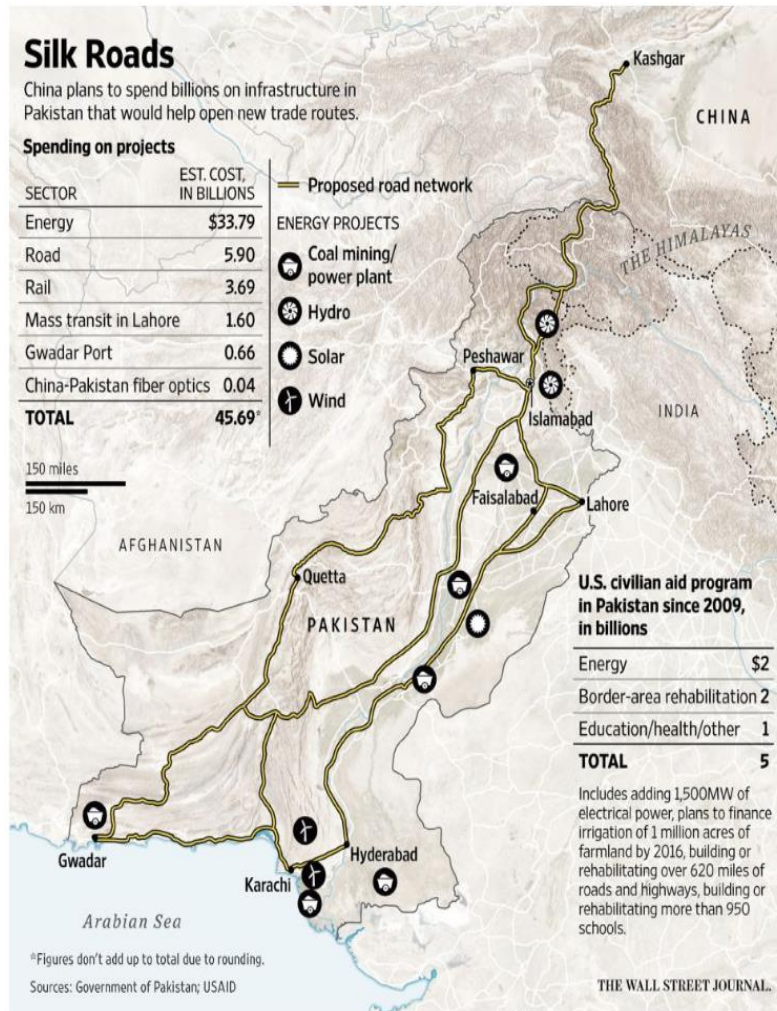
Source: Rafi, Khan and Aslam (2016)





## G: CPEC Road Routes

Source: Published in Wall Street Journal, adopted from Vandewalle (2015)



### H: Railway Routes of CPEC

Source: <http://www.cpec.gov.pk/map-single/2>

