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CPEC in the Second Phase and its implications on business practices in Pakistan

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ABSTRACT

Nearing the completion of various 'early harvest' projects of first phase, such as power generation, motorways, infrastructure projects, fiber optics and technological advancements, the CPEC is about to enter into its second phase. At this level, Pakistan eyes for economic stability and development, through innovative business practices, agricultural developments, trade expansion, and human resource development. This paper highlights various developments related to the second phase of CPEC, and highlights how Pakistan can take advantage of available energy and infrastructure to set directions for a next level economy. Components related to this phase of CPEC and their impact on the fields of business management, IT advancement, future SEZs and their implications for business organizations, broadening of agricultural and food industry for local and Chinese food demand, advancement in science and technology, social sector development programs focusing on human resource development, and enhancement of exports to China through innovative business practices, have been discussed in detail. Finally, it has been concluded that CPEC can be a harbinger of prosperity for Pakistan in all of the mentioned areas subject to condition that Government of Pakistan and business community adopt innovative business practices using sustainable technologies to take Pakistan further on the path of development.

JEL Classification: D02, E61, F13, L22, O1, O3,
Key Words: Pakistan, China, CPEC, Business Development, Innovation, Policy.

INTRODUCTION

Pakistan and China are two countries neighbored geographically – and two nations connected cordially. In the year 2015, Pakistan and China entered into CPEC Agreement (China Pakistan Economic Corridor), valuing US$ 62.0 bn, being one of the greatest pact in the history of Pakistan. CPEC is an integral part of OBOR (One Belt One Road) initiative of China, which aims at extending China's regional integration with other countries spread across continents. CPEC gives an opportunity to Pakistan to transform from a less developed agricultural country to a developed industrial country. It is an opportunity to learn from China, the way of doing business – as China strives to become the world's biggest trading economy.

This papers highlights the progress on CPEC. A discussion will be made on the milestones achieved during the first phase of CPEC, various components of the second phase recurring in current times, and finally the implications of this phasing on the business practices in Pakistan.

Pakistan's large scale manufacturing witnessed record growth of 10% in the year 2018 from 2013. This expansion in manufacturing can be linked, if not totally attributed, to CPEC, due to better power supply and improved infrastructure which are the milestones achieved during the first phase of CPEC. In fact, businesses, in all scales, have been affected by CPEC, in terms of output, innovation, efficiency, ethics, and competition. This paper will highlight such impacts of CPEC at micro and macro level of business practices in Pakistan.

LITERATURE REVIEW

Bussière & Schnatz (2006) describe various countries having trade integration with China in the form of free trade agreemnts (such as CPFTA). The authors argue that China's steady shift from agricultural country towards industrial powerhouse consequent with robust economic growth brought challenging implicatios for trading countries. Gravity model has been used to analyze the trade performance of selected countries. The results show a strong growth in bilateral trade between China and its partner

countries. The results further show that China is already well integrated in the world markets. While China appears to be highly integreated to Canada, United States, and Australia, however, this integration is still lower as compared with other countries in the Asian region.

Mainzer (2011) argues that in the current age of globalization, innovation is the foundation on which economic development of nations depends. However, many real world problems that we face today, such as enivronmental degradation, material technology, health science and technology, agriculture, etc., they require interdisciplinary integration amongst various disciplines such as engineering, medicine, food technology, agricutlure studies, etc. It is because of the fact that the problems faced today are much more complex and leave wide implications in corporate affairs, as well as human life. Today is a problem oriented business environment where interdisciplinary problems arise and cannot be solved with technical specialization in one subject only. Organizations, with multidisciplinary experts are ready to face such challenges and hence innovate their product or services successfully.

Schniederjans & Schniederjans (2015) state that increased competition and globalization have lead the producers for increased process innovation which is explicitly based on quality. In current world scenarios, social quality management leads to technical quality management and vice versa. This means that the two approaches go hand in hand. The authors prove that size or organization and managerial ethics have positive moderation on the relationship between techinal quality management and innovation. The results also build a foundation of relationshipd between social quality managnement and innovation. Finally, the authors state that technical quality management is not significantly related to innovation. Rather, technical quality management is related to social quality management which in turn is related to innovation. This, however, should not lead to the importance of technical quality management. Rather, emphasis should be made to bring in social quality management to strengthen the quality policy for innovative business practices.

Thompson (2015) highlights the importance of productiviety and states that in literature, the regional trade depends upon various forms of imperfect competition. However, trade may be dependent upon the productivity and size of each country. In the trade model, every country attempts to maximize utility through an identical Cobb-Douglas function subject to constant cost production and balanced trade. Each country faces a cost to adjust to specilization along its production frontier. Hence gains from

trade are necessary for the country to engage in trade. In a three country model, if one country is unproductive, it is not able to offer gains from trade to the other two countries. Regional trade occurs when countries with similar productivities happen to be located closer together. In such a case, productivity and country size have empirical implications on regional trade.

Pech (2016) argues that entreprises may face complications on the path of innovation. It is because of the fact that business and technology affect each other bilaterally and that both are closely related to globalization and international competition. The author highlights that during the 1980s, secrecy was considered essential for research and development. This is called 'closed innovation'. This approached focused on protectionism, comprised of in-house experts, researchers, and developers having unshakeable loyalty to the organization. However, such systems were passive, costly and required extensive secrecy. Products once developed, faced problems of intellectual property rights, and trade marks etc. However, with the passage of time, businesses have focused on following a new approach called the open-source innovation. In this approache, innovative ideas and practices are shared between companies and expertise are shared. Specialized companies sell their innovative designs and patents, and manufacturers invest on them. This approach has brought forward innentors, specialists, and quality managers in a global market which is without borders and boundaries. Best practices are sold to the highest bidders, and the outcome is a boom product with global profitability

Kamal & Malik (2017) argue that CPFTA has been aimed to benefit either of the countries in bilateral trade, however, the trade balance remained in favor of China since the signing of CPFTA in 2007. The authors encouraged Pakistan's local manufactuerers to innovate their production techniques and modernize their business strategy by acquiring greater quality and international certifications, which would not only improve their way of doing business but also pave the way for better exports, especially towards China, with the advnatage of CPFTA and CPEC. The authors, however, highlighted the discrimation in Chinese market regarding the tariff. It has been narrated that various ASEAN countries face lower tariffs than Pakistan, making its exports

incompetitive, which is a major reason of decline. Need is felt to revisit the CPFTA terms and conditions to bring Pakistan's tariff at par with ASEAN competitors.

Khursheed, et al (2019) analyze various aspects of CPEC stating that many neighbouring countries, such as Turkey Afghanistan and Iran intend to join this project. This could lead to greater economic integration amongst Asian economies. CPEC is deemed as a fruit of all weather friendhsip between China and Pakistan. However, the authors argue that in order to harvest the full potential benefits of this project, Pakistan should proritize the development of infrastructure, economic zones and business hubs in the less privaleged and less developed areas of the country. CPEC should be managed to increase regional harmony and integration. The authors finally recommend that both the host nations, i.e. China and Pakistan should not only focus on their own benefit but bring CPEC into international level so that it becomes a stake of all neighboring nations and hence various security issues and geopolitical threates would be eliminated.

METHODOLOGY

The study uses secondary data on CPEC from web portals, journal articles, newspapers, periodicals, and other media, highlighting various qualitative effects of CPEC on the business practices in Pakistan. The objective of the study is to enhance the understanding of various stages of CPEC and to highlight managerial issues related to business innovation as Pakistan looks forward to the second phase of CPEC.

RESULTS AND DISCUSSION

The total cost of CPEC Project is approx. US$ 62 bn, with 75% Chinese investment amounting to US$ 46 bn and 25% Pakistan's share amounting to US$ 16 bn. The component-wise breakup of CPEC project's Chinese share is given in Table 1. As detailed in Table 1, approximately 54% component of the CPEC targets power generation. A total of 16,800 MW power generation has been planned under CPEC out of which 11,000 MW has already been added into National Grid as of 2018. So it can be deduced that power generation relating to the first phase has been completed. Compared to 2013, when the total power shortfall was approx. 8000 MW, the maximum shortfall as of 2018 is approx. 3000 MW at peak summer season with maximum grid load, and it usually does not stay longer than a month, when weather conditions improve. The power generation has majorly balanced the demand, rather

surplus in winter season. Work on the second phase power generation projects is continued. After completion of power projects in the second phase, Pakistan's total power generation would stand at approx. 24000 MW which would be sufficient enough for the demand in the medium run.

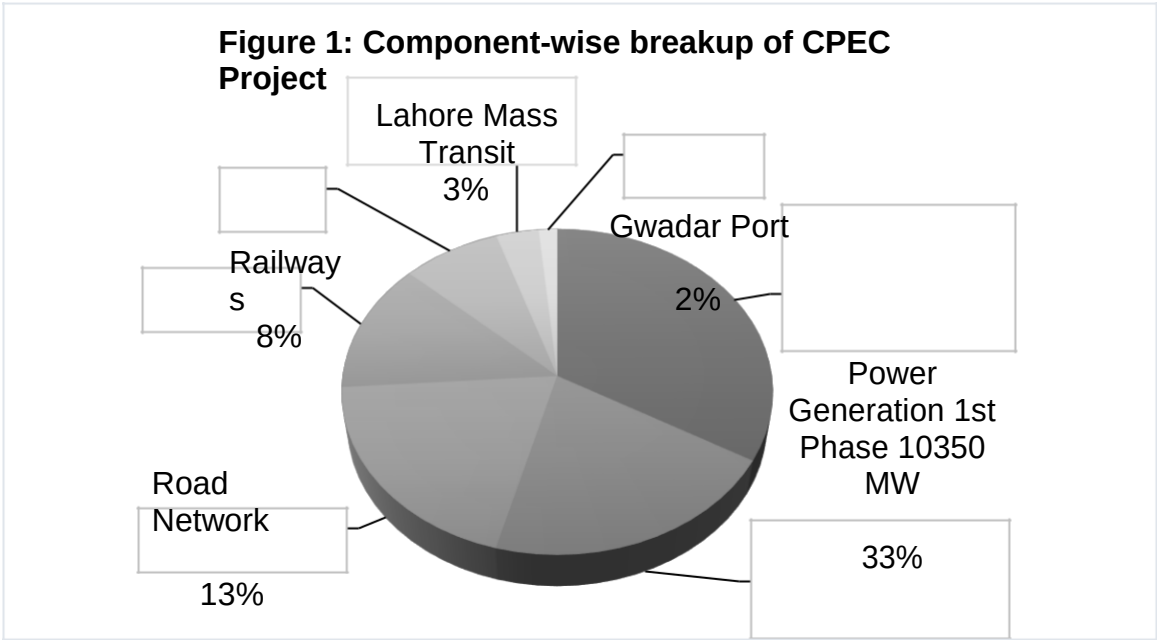
The improved power supply in the country has created a conducive environment for the businesses. Expenditures on account of alternative power arrangements such as UPS, generators, gas kits, etc. have been reduced drastically. Now it is on part of the government to cut down electricity prices to flourish businesses further.

Table 1: Component-wise breakup of CPEC Project (Chinese share)

Component	Value (US$ bn)
Power Generation 1st Phase 10350 MW	15.20
Coal 7560 MW	8.80
Wind 200 MW	0.50
Hydel 1590 MW	4.20
Solar 1000 MW	1.70
Power Generation 2nd Phase 6445 MW	9.50
Mining Exploration	9.00
Road Network	5.90
Railways	3.70
Lahore Mass Transit	1.60
Gwadar Port	0.70
TOTAL:	**45.70**

Source: Ramay (2017)

Figure 1: Component-wise breakup of CPEC Project



Likewise, development of other components such as Gwadar port, road network and mass transit schemes in major cities have either been completed, or near completion. So it can be said that the first phase of CPEC has almost reached near completion. Compared to pre-CPEC era, the business environment is much better at this stage, with sufficient power supply and road network. Supply chain managers need to implement innovative strategies in the current scenario to take full advantage of available facilities.

Flux of Chinese machinery and components is often considered as a side effect of CPEC. However, this can be taken favorably as Chinese machinery is cheaper compared to European or US made machinery. The issue of quality can be negotiated with Chinese manufacturers. On the whole, flux of Chinese machinery needs not be considered a threat to local industry, rather, it may be considered as an opportunity to develop indigenous capability to manufacture identical components locally. Reverse engineering and technical trainings should be aimed to replace the Chinese goods with locally assembled goods in the future, but ensuring the same quality standards. Technical experts, scientists and engineers, need to learn and implement innovative Chinese manufacturing techniques locally.

With sufficient power supply and improved infrastructure (i.e. motorways, bridges, tunnels, mass transit projects, etc) Pakistan also needs to emerge as a tourist attraction. Tourism is one of the world's most profitable industry. Many economies like Thailand and Italy, have tourism as a major industry. Pakistan has a huge potential in tourism industry. From the snowcapped mountains in the north, to the desserts of Indus basin, forests, safari parks, and 1000 km long coastal line, Pakistan can attract a huge flux of tourists from world over. Need is required to improve security perceptions about Pakistan and promote its cultural heritage to the world.

1) Development of Special Economic Zones

Much anticipated and looked forward by Pakistan is the development of special economic zones (SEZs) during the second phase of CPEC. A total of nine SEZs have been planned under the project, as per the information available on CPEC web portal. These economic zones are listed in Table 2.

Table 2: Special Economic Zones (Under Second Phase of CPEC)

Sr. No.	Zone	Region
1.	Rashakai Economic Zone	KPK
2.	China Special Economic Zone, Dhabeji	Sindh
3.	Bostan Industrial Zone	Baluchistan
4.	Allama Iqbal Industrial City, Faislabad	Punjab
5.	ICT Model Industrial Zone, Islamabad	Islamabad
6.	Dev. of Industrial Park on Pakistan Steel Mills Land at Port Qasim	Sindh
7.	Special Economic Zone, Mirpur	AJ&K
8.	Mohmand Marble City	KPK
9.	Moqpondass Special Economic Zone, Gilgit	Gilgit Baltistan

Source: CPEC Web Portal

As evident, almost all regions of Pakistan will have a SEZ. This would open unlimited opportunities of employment, business, and encourage production and trade of local goods.

2) Establishment of Business Council

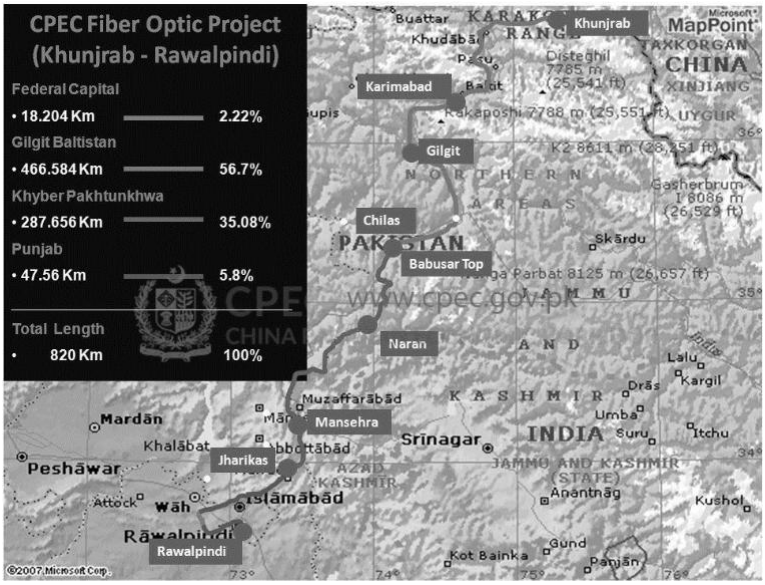
Entering into the second phase of CPEC, Government of Pakistan has established Business Council under the Ministry of Industries and Production. However, to take full advantage of available opportunities, the business council should be a true representative of the business community. As the second phase of CPEC targets development of special economic zones, industrial collaboration, transfer of technology, trade expansion and agriculture, therefore, the TORs of business council should focus on all these subjects and should be aimed to eliminate hurdles.

The business council needs to act as a facilitator amongst the government, business community, Chinese entrepreneurs and market actors. It should act as the major planning body, and regulator, in order to develop a sustainable industrial base for Pakistan. The council needs to collaborate with other ministries for development of effective industrial policies targeting maximum exports, least cost of production, environmental policies, and national development, on the whole.

3) Fiber Optic Network and Technological Advance

CPEC Fiber Optic Project was included in the first phase, and is under construction. With the completion of China-Pakistan Fiber Optic Network, a new information revolution knocks the door of our economy. This network is in addition to under water fiber optic connection of Pakistan which runs through Arabian Sea. As the project is progressing, information technology has improved a lot in terms of connectivity and speed. Far flung northern areas now enjoy 4G networks. Diagram of CPEC Fiber Optic project is linked below:

Figure 2: CPEC Fiber Optic Project



Source: CPEC Web Portal, Government of Pakistan.

This fiber optic network would open new horizons of information revolution in the country. Hence, in second phase of CPEC, the corporate sector is expected to enjoy wider and faster connectivity. Again, innovative business plans are required to take full advantage of such facility. Pakistan's e-business policy may be tailored accordingly, keeping in view the national interests and priorities. Entrepreneurs need to focus on virtual offices located nation-wide, by taking full advantage of networking. Experience and lessons may be learnt from Chinese e-tech giants such as Ali Baba Group, etc.

4) Agriculture and Food Market

The second phase of CPEC focuses on development of agriculture sector in Pakistan. Running dry, Pakistan also faces a threat of water scarcity in the medium to longer run. Pakistan stands seventh most hit country by environmental damages. Pakistan inherited ages old conventional agricultural practices and systems, which are still prevalent. A few decades ago, the water availability was sufficient enough to support the conventional agricultural system. However, with lesser water availability, increased population pressure, and other environmental factors, Pakistan needs to revisit agriculture policy and practices. Chinese support in terms of technology transfer, sustainable agriculture practices, and latest agriculture policy may be utilized for revamping the agriculture sector as per the latest resources and requirements.

Moreover, China is one of the world's biggest importer of food products. China imported agriculture produce such as Oil seed, oleagic fruits, grain, seed, fruit etc. valuing US$ 44 bn and sea food valuing approx. US$ 11 bn in the year 2018. Pakistan has a great potential to produce high quality agriculture products, fruits, oils, etc. Need is felt to establish a demand-supply mechanism to exploit such big opportunities. Pakistan has got a 1000 kilometers long coast line, rich in sea food. This sea food can be an ace export as a majority of countries including China have a big market for sea food. Therefore, with the development of agriculture and food collaboration planned in the second phase, Pakistan needs to emerge as producer and exporter of these products.

5) Social Sector Development under CPEC

Available on the Govt. of Pakistan's CPEC web portal, the following programs have been initiated in the second phase of CPEC:

i. People to People Exchange:

Governments of both the countries plan to intensify connection between people, cultural exchanges, and joint media programs. Efforts have been made to promote Chinese and Pakistani culture in the countries. Heritage is that the two

countries go way back in trading traditional goods and with the up-gradation of centuries old silk route, new horizons of trade and culture exchange will be opened.

ii. Transfer of knowledge in different sectors:

The ultimate benefit of CPEC to Pakistan would be the transfer of technology and knowledge. During first phase, hundreds of Chinese experts from industries visited Pakistan. In fact, China has helped Pakistan in the recent years to create jobs, provide capital, and share business opportunities. Now it's the time for Pakistan to materialize and

capitalize the available opportunities and take full advantage of Chinese transfer of knowledge.

iii. Pakistan Academy of Social Sciences:

In collaboration with renowned Chinese Academy for Social Sciences, the Higher Education Commission of Pakistan has taken the charge to develop Pakistan Academy of Social Sciences. This plan also falls in second stage of CPEC. Establishment of such academies and institutes would certainly benefit Pakistan to produce social scientists and engineers who can collaborate in development of social and ethical business plans.

iv. Consortium of Business Schools:

Finally, it has been planned in second stage of CPEC to transfer knowledge in education sector. In this regard, a consortium of Business Schools of Pakistan and China has already been established by HEC. Such an initiative is likely to produce well versed and qualified manager to lead the business community according to changing environments.

6) Advancement in Science and Technology

Pakistan and China have already signed Economic and Technical Cooperation Agreement. In the second phase of CPEC, transfer of science and technology would be made up to a higher level. The agreement covers development of China-Pakistan Joint Cotton Bio-Tech Laboratory, as well as China Pakistan Join Marine Research Center.

The two countries have also made an agreement for establishing Pak-China Science & Technology, Commerce and Logistics Park at estimated cost of US$ 1.5 bn. This park will be established in a period of 10 years with the help of Xinjiang Production & Construction Corporation, China.

Huawei Group of China has also shown interest to develop Huawei Technical Support Center in Pakistan. Eventually, efforts may be made to establish mobile phone manufacturing facility within Pakistan. It is both on part of government as well as private business bodies to pursue prospective Chinese companies wishing to invest in Pakistan.

7) Export Potential

In the changing scenario when CPEC is about to enter its second phase, Pakistan has a great opportunity to cater for China's major imports. China would definitely prefer imports from Pakistan due to regional integration, while Pakistan has a potential to supply these commodities as mentioned in Table 3. Pakistan has got natural reserves of many organic and inorganic chemicals, in Baluchistan, Sindh and KPK. Government should take bold and logical steps to ensure production and supply of such material to China and rest of the world.

Table 3: China's major imports with potential for Pakistan

China Imports By Category	Value (US$ bn)
Ores slag and ash	135.91
Pearls, precious stones, metals, coins	61.95
Copper	47.65
Oil seed, oleagic fruits, grain, seed, fruits	43.37
Pharmaceutical products	27.90
Miscellaneous chemical products	18.07
Fish, crustaceans, molluscs, aquatics seafood	11.61
Meat and edible meat offal	11.02
Cotton	9.89

Source: Trading Economics Website

CONCLUSIONS

Nearing the completion of first phase, Pakistan is about to enter the second phase of CPEC. Majority of the projects under the first phase, relating to power generation and infrastructure have either been completed, or near completion. Currently, power supply and transportation problems have been resolved to much extent. In addition, information technology has also evolved to next level. Under these circumstances, businesses are having conducive environment to flourish as their basic problems have been addressed. A total of nine SEZs are planned to be developed in second phase of CPEC, which would open unlimited opportunities for business and employment.

As the power supply situation has improved, it is the prime responsibility of government to provide cheaper fuel and energy to local industries. Exorbitant taxes may be reduced to reasonable level to reduce the cost of production. Development of Business Council and other consortia in collaboration with Chinese are a big leap forward. The council needs to act as a facilitator.

As far as business community is concerned, this is high time that managers and entrepreneurs learn from Chinese experience of innovation, diversity, and customer satisfaction. Latest available technologies may be used to increase efficiency and use of recyclable resources.

Finally, coming to Pak-China trade, it is pertinent to know that China imported copper worth US$ 48 bn in the year 2018. Pakistan has one of the world's largest reserves of copper and gold in Baluchistan province. There is a dire need to resolve the political, administrative, technical and legal issues related to mining and supply copper to China. Likewise, China imported cotton worth US$ 10 bn and meat worth US$ 11 bn in the year 2018 which shows a huge potential for Pakistan's business community in collaboration with Chinese industrialists in the second phase of CPEC.

Data Sources

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