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China-Pakistan Economic Corridor

CPEC

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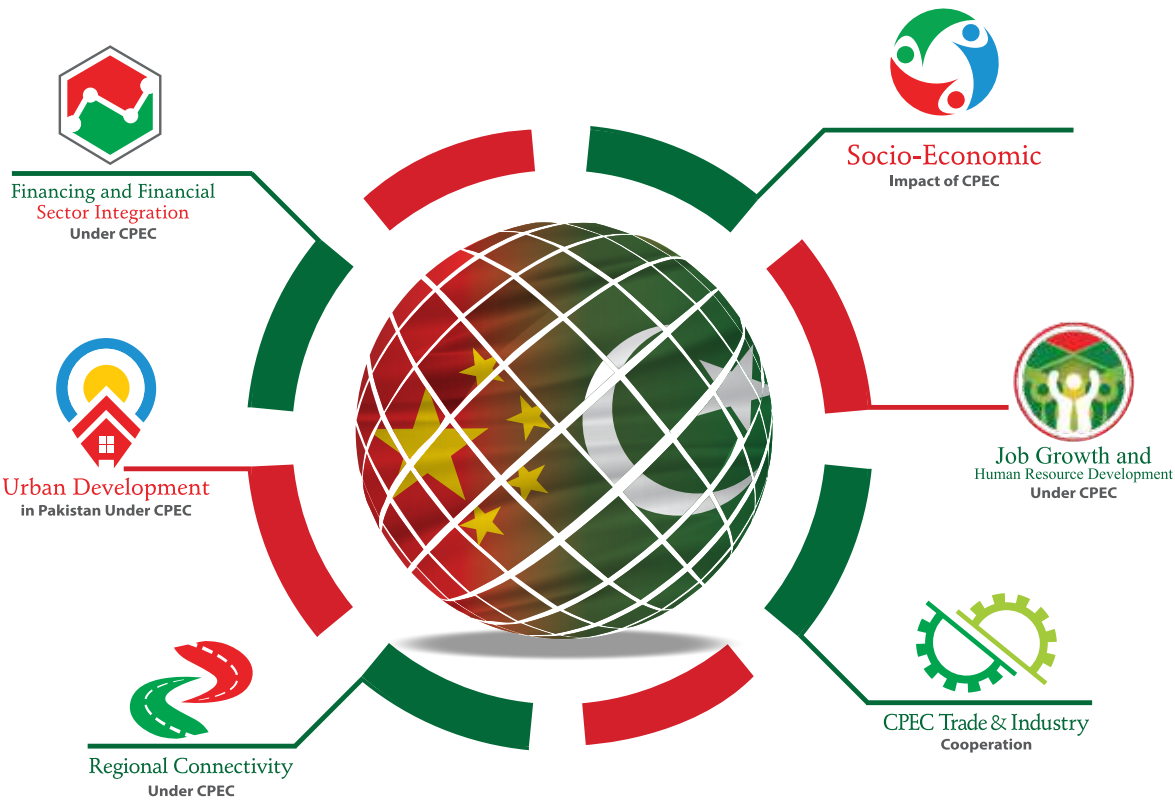
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CPEC
A GATEWAY
TO PROSPERITY

Volume: 03



CENTRE OF EXCELLENCE
China-Pakistan Economic Corridor



Makhdoom Khusro Bakhtiar

Minister of Planning, Development and Reform, Pakistan

The China-Pakistan Economic Corridor (CPEC) is undoubtedly a "gateway to prosperity", therefore, the current government is keen on taking CPEC to its new heights. Thus, six major areas are to be concentrated for the expansion of CPEC which are: Trade & Market Access; Industrial Development & Global Value Chains; Socioeconomic Development & Poverty Alleviation; Agriculture Modernization & Marketing; Gwadar Oil City & Blue Economy; Regional Connectivity & Third Country Participation along with the ongoing projects/ areas.

The wide-range projects in the areas of trade and market access under CPEC will open the many avenues in every walk of life. In this regard, collaborations with China will be the key interventions in promoting trade, increasing market access, raising the standards of living and achieving sustainable inclusive growth in Pakistan.

Under the fold of Industrial development and global value chains, the government is keen on Industrial cooperation and Import substitution with China in light engineering sector up to around $5 Bn/year through relocation of Chinese industries. The relocation of Chinese export-focused light manufacturing and labour-intensive industries will help to add substantial share in exports. Moreover, expansion of the IT sector through joint ventures along with the upgradation of technology and capacity enhancement will increase productivity.

For the socio-economic development and poverty reduction, Chinese experiences will help a great deal, for instance, it has been able to graduate around 700 million out of poverty. Through CPEC more than a million direct jobs and manifold indirect and induced ones will be created to tackle unemployment and poverty reduction. Besides, capacity development of skills via technical and vocational centres across the country along with the community-based projects in underdeveloped areas will also be established.

Under the realm of agricultural modernization and marketing, the government has prioritised value addition and co-branding of dairy, livestock and poultry sectors to uplift these sectors by leaps and bounds. Productivity enhancement of fruits and high-value crops through the transfer of technology in precision agriculture (drip Irrigation, sprinklers etc.) will be focused along with the modified and high yield variety seeds for crops diversification to substitute edible oil/pulses imports.

The government is also raising the prospects of Gwadar through the concept of the "blue economy". The establishment of Oil City Gwadar to substitute refined oil imports with crude oil are also the positive steps taken in the right direction. Furthermore, the development of aquaculture for fisheries and seafood along the coastal area would also be tapped. Coastal Tourism will also further the prospects of Balochistan in particular.

Also, the focus will be on CPEC infrastructure towards connectivity improvement while analysing the alternative optimal routes to connect Gwadar Port, and exploring the feasible connections among Central Asia, Middle East, Africa and Europe. Importance of regional connectivity through the construction of rail/road infrastructure, energy projects and Gwadar port development is well understood mutually by China and Pakistan.

The Centre of Excellence-CPEC must be complimented for its concerted efforts to disseminate the research through its valuable publications, RTCs and seminars etc. The better policy analysis and input would help to expand the scope of CPEC in the just and right direction.



H.E. Yao Jing

Ambassador of People's Republic of China to Pakistan

China-Pakistan relations exemplify how optimal bilateral relationships are conducted. As President Xi Jinping stated, such a relationship should showcase regional friendship, peace, and stability - while also providing a benchmark for cooperation on the Belt and Road Initiatives (BRI). No matter how international and regional dynamics may change, the China-Pakistan relationship remains uncompromised. Successive Pakistani governments have considered bilateralism with China as the cornerstone of their foreign policies. Such support is manifested in the collaboration undertaken by the China-Pakistan Economic Corridor (CPEC), which enjoys an intersectional consensus in Pakistan across all regions and concerned parties.

CPEC is the pilot project of the Belt & Road Initative (BRI), with over 11 projects deemed complete with another 11 currently under construction, all of which revolve around the niche of the road and maritime transportation infrastructure as well as energy and industrial cooperation. Estimated seventy-thousand domestic careers have been generated. Energy infrastructure has been earmarked for a capacity of 11,110 MW, of which 10,000 MW has been achieved. Chinese and Pakistani engineers work side-by-side, day and night, for the sake of the reduction of load-shedding and alleviating Pakistan's energy deficit. Meanwhile, the Gwadar Free Zone has been opened to official investment, as shipping operations increase continually from the port.

Prime Minister Imran Khan stated that he attaches great importance to China-Pakistan relations and that CPEC is an important opportunity for Pakistan's development. I appreciate his vision and believe that the government shall bring new opportunities. China looks forward to strengthening cooperation with the government and transporting the benefits of CPEC to the citizens of Pakistan.

China will actively promote cooperation between universities in the two countries, establish more vocational and technical training centres in Pakistan while aiding in the reinforcement of existing primary schools. The purpose is to help Pakistan improve its human resources, especially of the youth. China will consider setting up an agricultural technology demonstration centre in Pakistan to improve local agricultural technology, while also establishing a China-Pakistan Joint Research Center on Earth Science for the sake of assessing the environmental challenges that arise as trade between the two states blossoms.

Finally, the CPEC Centre of Excellence represents an intensive research effort on behalf of the Pakistani Ministry of Planning, as a joint effort between the Pakistan Institute of Development Economics in order to better understand the needs and ramifications for an investment as large and as broad as CPEC.

Chief Editor's Note:



Dr. Liaqat Ali Shah
Executive Director

CPEC has a set of inclusive and diverse projects that cut across different sectors of economy and society. Keeping in view the long-term prospects under CPEC, we have divided our research into five thematic areas related to CPEC. These areas are socio-economic impact, trade and industrial cooperation, regional connectivity, financial sector integration, and urban development. It took a while before we reached optimal strength. However, at present, each of the thematic areas are headed by a foreign qualified PhD scholar having suitable expertise and exposure. Each team has a senior research fellow, a research associate and research intern. The team work place are configured in a shape of thematic cluster to boost harmony and efficiency. Besides the research thematic teams, the strategic communication team devise and rigorously manage to disseminate our research work to the relevant stakeholders and quarters. Moreover, the Centre of Excellence-CPEC has adopted a "Triple Helix Model" of collaboration and innovation to collect national and international much wider view point to support the inclusive development for which the first phase of our "CPEC Competitive Research Grants" has been initiated in Sept 2017 which is almost concluded with generation of 81 studies on CPEC so far which are contributed by scholars and practitioners from across the country.

Our target audience is both the government and the public at large and for each of those we have developed specific products. For instance, "CPEC Policy Paper Series" has been developed and published to recommend policy makers, the needed policy interventions to sustainably build the economic corridor in orderly, inclusive and viable way. The "CPEC Working Paper Series" provide the foundation to develop the policy recommendations through the evidence based in depth research focused on key areas and prevailing issues of CPEC. The core readership of the working papers are universities, research institutions and think tanks working on CPEC both at national and international level to seek their feedback for improvement. Development of true narrative is vital for CPEC for which a case study series has been launched namely "CPEC Insight" to correct the myths by informing the interested parties with facts and figures.

Last but not the least, "CPEC Quarterly Magazine" is one of the leading publications which is a multi-perspective product including; Reader's Corner, CPEC Project Updates, CPEC Opportunities and COE Events & Activities; to inform a diverse group of audience about CPEC like that of business community and diaspora, state departments and law makers, civil society and diplomatic community across the country and abroad.



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Reader's Corner

This section will serve the most to the intellectuals & diplomatic community, academicians, researchers, entrepreneurs, and students to enhance their horizon about CPEC including contemporary and further trends.

07

CPEC: A GATEWAY TO PROSPERITY

Yasir Masood is a Deputy Director Media and Publications, CoE-CPEC and the Lead Editor of this magazine. He is also an academic, journalist and International Relations Analyst with a focus on BRI/CPEC and China affairs. His articles get published in National and International English Dailies and he appears regularly on English and Urdu TV Channels as an Analyst.

It is an irrefutable reality that the relations between China and Pakistan are historic and time-tested, and the continuation of the projects under the China Pakistan Economic Corridor (CPEC), as part of the Belt and Road Initiative (BRI), is a testament to an all-weather friendship. Our bilateral ties remain strong and backed by the principles of cooperation and incentives for the administrations and citizens of both countries.

Hence, the intention behind writing this article is to bring awareness to the masses on those areas of CPEC which the government has signified for its extension. Since the CPEC has now entered into the next phase of development to cultivate the socio-economic dividends of the country. Therefore, a thoughtful effort has been made under the chairmanship of the Minister for Planning, Development and Reform to make CPEC a "Gateway to Prosperity". Accordingly, in the next phase of development six major "Doors of prosperity" would be focused which are: Trade & Market Access; Industrial Development & Global Value Chains; Socioeconomic Development & Poverty Alleviation; Agriculture Modernization & Marketing; Gwadar Oil City & Blue Economy and; Regional Connectivity & Third Party Participation. The rest of the study will look upon these six doors of prosperity with a critical insight and recommendations.

1. Trade and Market Access

The variety of projects in the areas of trade and market access under CPEC will originate a plethora of opportunities in different spheres of life. In this connection, collaborative bond with China will be the rich source of promoting trade, facilitating market access, elevating the standard of living and achieving sustainable inclusive growth in Pakistan. In addition, through CPEC, Pakistan will be able to open its doors to the world by expanding its trade and transport links, as well as boosting economic influence across Central Asia, South Asia, Middle East, Africa and Europe. In the past few years, the major chunk of the trade deficit of Pakistan developed from trade with China. Therefore, Special Economic Zones (SEZs)/Export Processing Zones (EPZs) under CPEC need to be developed keeping in view the objectives of fast-track industrial growth and export promotion through diversified products. Furthermore, while developing SEZs/EPZs, due consideration may also be given to the fact that the exports could be boosted by ensuring value addition in existing exports through manufacturing processes. China is the second largest economy in the world and is the leading exporter of the world with $2.2 trillion and the second largest importer worth $1.8 trillion. Pakistan is currently exporting goods and services worth $1.5 billion to China which could be enhanced manifolds through cooperation between both the countries and an increased market access to the Chinese markets. In this regard, the China Pakistan Joint Chamber of Commerce and Industry could be instrumental.

2. Industrial Development and Global Value Chains

Under the fold of Industrial development and global value chains, the centre has proposed industrial cooperation and import substitution with China in various sections including food packaging and processing, agriculture, technology, iron and steel, marble and granite, textile and petrochemicals and light engineering sector supported by industrial relocation and investment of the Chinese industries and other investors (locals and diaspora). The process is expected to increase export and create import substitution. Repositioning expansion of the IT sector through joint ventures along with the transfer of technology and capacity building will certainly drive up productivity graph. In a nutshell, under the industrial development and global value chains category, the next phase of CPEC will focus on the development, population and operations of CPEC's SEZs/EPZs. To better populate and then run the SEZs/EPZs, right investment strategies in addition to right industrial mix in the zones will be ensured. Furthermore, process-specific incentives in each sector will be offered to improve the overall competitiveness of the industrial sectors. Finally, backward and forward linkages through urbanization, better management and incentives framework will be encouraged to expedite industrialization in the country.

3. Socio-economic Development and Poverty Alleviation

The socio-economic development and poverty alleviation are on the top of the agenda of the CPEC projects in the next phase of development. Pakistan highly acknowledges the importance of social sector development for the prosperity of the country. In this regard, a Joint Working Group is established under CPEC for socio-economic development and poverty alleviation, addressing issues such as housing, relocation of labour-intensive industries, skill training, off-grid solar household solutions, job creation, clean drinking water, education, healthcare, forestry, technology transfer etc. It will further consolidate the bilateral relationship between the two countries under CPEC and enhance cooperation in socio-economic development and poverty alleviation in less developed areas of Pakistan (given below), as well as establish a mechanism of knowledge sharing and experience exchange through friendly cooperation between both the countries. During the next five years, CPEC will focus on improving the basic public services for people of Pakistan, all-round cooperation through different CPEC projects would show a preference for local residents in employment, and the exchange and cooperation in different areas concerning people's livelihood would lead to the socio-economic development and poverty alleviation in Pakistan.

4. Agriculture Modernisation and Marketing

Agriculture is one of the key labour-intensive sectors of the economy. More than half of the population particularly the rural population depending upon the agriculture for livelihood thus contributing towards poverty alleviation. The sector contributes 19% to GDP and expected to double by 2030. Over the last years, a noticeable growth of 3.81% has been witnessed that surpassed the targeted growth of 3.55%. It shares 20% in total exports and target is set to increase its share in total exports by 2.5% in the next five years. The sector absorbs 43% of labour force and providing livelihood to 64% of the rural population. Livestock is the dominant sector as it contributes 59% in agriculture and shares 11.11% to GDP, whereas, crops, forestry and fishing performed well and witnessed a significant growth of 3.81%, 7.17% and 1.63% respectively. Availability of water resources, technologies, research and development, skills and access to national

and international markets are the key determinants of its success.

China and Pakistan, during the next phase, will give full play to their own comparative advantages to strengthen agricultural activities within the CPEC portfolio and would play their active roles in agricultural exchanges and cooperation to promote the systematic, large-scale, standardized and intensified the development of the agricultural sector.

Some of the recommendations in this regard include:

- Sharing of Remote Sensing Technologies for Land Fragmentation, Land Consolidation and Land Zoning
- Joint research on Conventional and Genetically modified seed varieties
- Collaborative Development of Agro-Ecological Zones
- Jointly establish laboratories for testing, monitoring and management of crops, horticulture, livestock, aquaculture and poultry
- Encourage the Mutual Recognition Agreement (MRA) to boost trade
- Jointly establish Vocational Training Institutions to uplift Agriculture Sector Productivity
- Mutual Development of a Platform to conduct Trade dialogues on Agriculture Sector
- Co-Branding the Agro products and boosting the multi-lateral trade
- Establishment of Agriculture Machinery Production and Demonstration zones in the BRI countries

In addition, both China and Pakistan would promote the transition from traditional agriculture to modern agriculture in the areas along the CPEC to effectively boost the development of the local agricultural economy.

5. Gwadar Oil City and Blue Economy

Under the CPEC portfolio, Gwadar holds the key importance. The strategic focus on simultaneous development of Gwadar port and city — in the form of a new smart port city master plan — is primarily due to the natural and symbiotic relationship that exists between a port and the city that surrounds it; one cannot be developed without the other. Gwadar's planning is underway in order to lay the foundation for a sustainable regional and blue economy, drive local businesses, and increase port throughout. Gwadar has the potential to attract domestic and foreign investments in the region and develop it in an integrated regional manufacturing and energy hub/oil city. The strategies for Blue Economy in the context of Gwadar will be adopted during the next five years to promote activities in coastal areas of Gwadar. Efforts would be made for sustainable fisheries initiatives and to harness ocean and coastal-related resources like building fish stocks, enhancing fishing capacities, and implementing the controlled harvest mechanisms. Innovative methodologies would be used for expansion in eco-friendly services in Gwadar and at other coastal areas of Pakistan. The next phase of development under CPEC will address the potentials and key issues related to the energy potential, blue economy and to maximize the gains. In addition, during the next phase, the blue economy concepts would be governed by processes that are based on: mutual trust and respect, inclusiveness, allows equitable sharing of mutual benefits, marked by stakeholder participation; scientifically sound information; accountable and transparent; holistic and cross-sectoral; and innovative and proactive. Active cooperation and partnerships would be ensured within and amongst public and private sectors to steer the concept of blue economy in Gwadar with special recognition of the needs of the local people, and in line with existing international, regional and national commitments. One-third of the petroleum imports of Pakistan are in the form of refined oil, which is substituted with the crude oil could save around $3-3.5 billion a year for which a couple of oil refineries would be required to be established in Gwadar.

6. Regional Connectivity and Third Party Participation

During the next phase, the focus will also be on CPEC infrastructure towards connectivity improvement, analysis of the alternative optimal routes for the entire region through Gwadar port, and exploring the feasible connections among Central Asia, Middle East, Africa and Europe. Importance of regional connectivity through the construction of rail/road infrastructure together with energy projects are well understood.

Moreover, the optimum benefits from the CPEC projects could be attained by ensuring the third-party participation in these projects, particularly of those countries/parties who could possibly be potential beneficiaries of the BRI. Such an initiative will not only increase the acceptability of the CPEC as an integral part of BRI but would also hinder possible attempts of cracks in future. The probable modes of third-country involvement may include, (i) consortium countries, (ii) firms, (iii) international financial institutions, and (iv) international development banks participating in specialized funds generated for infrastructure development and development of Special SEZs/ EPZs.

Conclusion

Trade and Marketing Access, Industrial development and Global Value Chains, Socio-economic Development & Poverty Alleviation, Agriculture Modernization & marketing, Gwadar Oil City & Blue Economy, Regional Connectivity and Third Country Participation are key areas of mutual cooperation and would help to expand CPEC in the right direction during the next phase. Increased level of all these outcomes will converge to higher development, the accelerated growth rate in economies of both the countries coupled with contributions to the development of the region and contiguous states. This will result in thousands of new ventures and millions of jobs in every part of the country. Through CPEC, Pakistan will be able to open its doors to the world by expanding its trade and transport links, as well as boosting economic influence across Central Asia, South Asia, Middle East, Africa and Europe.

CPEC IS THE PERFECT OPPORTUNITY FOR PAKISTAN TO PIVOT TO AFRICA

Andrew Korybko is an American-Moscow based political analyst specializing in the relationship between the US strategy in Afro-Eurasia, China's One Belt One Road global vision of New Silk Road connectivity, and Hybrid Warfare.

All Great Powers, including most recently even Russia and India, are increasingly expanding their influence in Africa as they seek to take part in the continent's expected growth across this century, and CPEC provides the perfect opportunity for Pakistan to pivot there too so long as the country's decision makers are aware of its many opportunities and successfully craft a comprehensive strategy for building mutually beneficial partnerships with those states.

Conceptual Basis

African countries don't normally come to mind when discussing Pakistan's Sudan, Djibouti, or Somalia as a stepping stone for eventually linking up with regional giant Ethiopia, which is the continent's second- most- populous state and its fastest- growing economy. Moreover, the fast-moving political changes there under its new Prime Minister make it a promising country for any Great Power to deepen its engagement with, which might even be slightly easier for Pakistan than others because of Addis Ababa's very close working relations with their mutual partners in Beijing. Moving southward, other potential countries that Pakistan should endeavor to form strategic partnerships with are Kenya and South Africa, which are the best-performing ones in their given regions and also on excellent terms with China.

Economic Opportunities

Signing deals and announcing partnerships are only symbolic actions unless they're backed up by substance, which is why Pakistan should promote its domestic agricultural (including fertilizer) and textile products, among others, as suitable for the growing African marketplaces. The whole point of pivoting to Africa through CPEC isn't just for the sake of Great Power prestige, but to deliver something tangible to Pakistanis at home by showing them that CPEC is more than just a "highway" across their country for China's international trade with West Asian, European, and African countries. The rapidly growing economies in Africa provide limitless opportunities for commercial engagement with Pakistan so long as decision makers, entrepreneurs, and thought leaders are motivated to pursue them, which is why a change in thinking is urgently needed.

Military Dimensions

Expanding upon the concept of CPEC facilitating Pakistan's "Pivot to Africa", the military component of its partnership "scouting" via the Regional Maritime Security Patrols could also spread to the realm of bilateral training deals such as the sort that Russia and Pakistan recently reached with one another, albeit with Pakistan providing the training to its African partners under this arrangement. The Pakistani Armed Forces have proven their world-class capabilities in defeating terrorism, and sharing their experiences with African colleagues could be very useful to many of them as they try to thwart the threat that terrorists in their own countries pose. In addition, Pakistan-

is have decades of experience participating in African peacekeeping missions, which can help them create custom security solutions for the African partners that they train.

Cross-Continental Engageme

Atlantic coast such as its most populous country of Nigeria. Even with the Silk Roads not yet linking them together, Pakistan could pioneer partnerships with Nigeria and the other Muslim-majority countries of the West Africa region by approaching them first and foremost from the security perspective and then eventually developing those incipient ties into an economic relationship. In other words, Pakistan's strategy towards West Africa is the reverse of what it should attempt in East Africa, where economic relations are prioritized and military ones follow.

Integrational Trends

Pakistan should also bear in mind that Africa is increasingly integrating its economic and security potential, the first-mentioned through the African Continental Free Trade Area (AfCTFA) and the latter via the African Union's peacekeeping missions, but that some individual countries will still fulfill leading functions in each of these two categories. That's why Islamabad needs to plan its strategy in advance as opposed to "winging it" in order to make the best of its efforts. As a suggestion, the economic-military model that was previously described could be applied to several pairs of regional leaders and their neighbors in order to lay the basis for a comprehensive continental policy that eventually encompasses most of Africa and opens up a multitude of opportunities.

The Paired Approach

In any given order and in the framework of the regional leaders that should be focused on followed by their most attractive neighbors for Pakistan, these African countries are:

Ethiopia	///	**Djibouti, Eritrea, Sudan**
Kenya	///	**Tanzania, Uganda, Somalia**
South Africa	///	**Mozambique, Madagascar, Botswana, Zimbabwe**
Angola	///	**Congo (Kinshasa), Namibia, Congo (Brazzaville), Zambia**
Nigeria	///	**Cameroon, Chad, Niger**
Algeria	///	**Morocco, Mauritania, Mali, Tunisia**
Egypt	///	**Libya**

As can be seen from the above, Pakistan's "Pivot to Africa" truly has the potential build a multitude of partnerships all across the continent, each of which could be facilitated in their own way by CPEC.

DISCLAIMER: The author writes for this publication in a private capacity which is unrepresentative of anyone or any organization except for his own personal views. Nothing written by the author should ever be conflated with the editorial views or official positions of any other media outlet or institution.

GWADAR AND CHABAHAR PORTS: A CRITICAL ANALYSIS

Cdr. Rizwan Riaz (PN), Mr. Yasir Arrfat (Research Associate), Mr. Husnain Saeed (SRF) and Dr. Fahd Amjad (Policy Head), Regional Connectivity, CoE-CPEC

The trade and regionalism in the shape of blocks and free trade areas is the hallmark of present times which have facilitated the rapid progress and the rise of global value chains. The globalization has been firmly entrenched into regional blocks like The North American Free Trade Agreement (NAFTA), Association of South East Asian Nations (ASEAN), European Union (EU) etc. Barring a few examples, ships and sea routes have always been more expedient and forerunners for new trading opportunities, even more than the ships, the major ports have made it possible for cities / regions to prosper at their own. Nation states have evolved around sea trade, and the maritime transportation is still the most economic form of large-scale freight transport. The ports have an economy of their own, which is governed by its hinterland connectivity characteristics.

From an infrastructure perspective, once a port is built, it has a few alternatives uses if any, i.e. its investments are largely sunk .The port operations and efficiency have many dimensions and pricing or cost of doing business is one major determinant in enticing customers for the long haul. The ports operate in an Oligopolistic industry where pricing refers to strategic pricing, the ability to set prices for certain objectives. The objectives vary for each port and here lies our question. Some ports are conceived on a vision to transform the area, some to develop economy around transit and transhipment operations and some to establish connectivity for harnessing future businesses. The strategic location when combined with apt management of associated and ancillary businesses is what gives some ports strategic advantage over others.

Iran's development of Chabahar port for International North South Transport Corridor (INSTC), its planned linkages with Afghanistan and Central Asian Regional Economic cooperation corridors (CAREC) and context of China Pakistan Economic Corridor (CPEC) with Gwadar perspective will be examined in this article. The Iranian coastal city of Chabahar is located at the mouth of Gulf of Oman and is less than 150 miles from Pakistan's port city of Gwadar. Chabahar is one of the major cities of Sistan-va-Balochistan province with the mainly Baloch population of over 200,000. Being a coastal town, Chabahar has a busy coastline with a large bay where, in addition to commercial port activities, also has an active fishing industry. There are two ports in Chabahar city; Shahid Kalantari & Shahid Beheshti Ports. Shahid Beheshti port; commonly known as Chabahar port, started its operations in 1983 with four minor jetties. During the Iran-Iraq war, the Iranian government realized the importance of having a port outside the Persian Gulf. Chabahar port is thus being extended and developed keeping its strategic significance to Iran and potential to dominate trade flow to land- locked Central Asian Republic (CAR) and Afghanistan.

Linked to the Chabahar port, there are some interesting facets of planned regional networking in rail, road and sea domains. Iran, India, Afghanistan, Russia and the Central Asian States are the stakeholders in these efforts . Chabahar-Zahedan-Mashhad Railways, Afghanistan's Zaranj

- Delaram road and rail network originating at Chabahar, Trilateral Transit Trade Route (Iran's Eastern Corridor), International North-South Transport Corridor etc, are some of the ambitious projects which have been planned to run a regional transhipment and transit trade

route from India (Mumbai) through Iran (Chahbahr/Bandar-e-abbas) into Azerbaijan, Commonwealth of independent states (CIS), Russia culminating finally at St Petersburg (Baltic Sea). This is a broader understanding of chiefly between Russia and India, however, neither Russia nor India has committed the requisite resources for the initiative, and the investment pales against BRI commitments.

Chabahar is the closest access point of Iran to the Indian Ocean. A number of road network initiatives are underway to connect Chabahar with Afghanistan and CARs. India is helping Iran to develop the Chabahar port to gain access to mineral resources in Afghanistan and to market goods in CAR and Afghanistan while squeezing Pakistani market in the region. Iran provides a conduit to connect India with Central Asia bypassing Pakistan and China. India, Iran and Russia have signed an inter-governmental agreement named INSTC. The INSTC is a multi-modal transportation connectivity established on 12 September 2000 in St Petersburg by Iran, Russia and India for the purpose of promoting transportation cooperation am- ong the member states. India as the prime mover had initiated this corridor project with a view to capture Central Asian markets and boost bilateral trade. The corridor will have its starting point from JNPT Port in Mumbai and via transhipment, the goods will reach Chabahar port in Iran. Then a railway link will be established between Iran, Turkmenistan, Kazakhstan and it will finally reach Russia (St Petersburg on the Baltic Sea). In end December 2014, India has announced to use existing road link between Iran and Azerbaijan to get easier access to the lucrative markets of Russia and other nations of Commonwealth of Independent States (CIS). India and Azerbaijan conducted a dry run on the INSTC to ship goods through Nhava Sheva (Mumbai), Bandar Abbas (Iran), Tehran, Bandar Anzali (Iran) and Astrakhan (Russia). The dry run was conducted by the Freight Forwarders' Association of India (FFAI). India is also trying to persuade Iran to build the 165 km missing rail link between Rasht in Iran and Astara in Azerbaijan.

However, contrary to general perception, Chabahar in no way, can compete with Gwadar Port due to the slow speed of implementation and operationalization of the Gwadar port. The Chabahar port has been plagued with the delay of port and corresponding infrastructure construction delay. The original 2011 timeline of port infrastructure development is still not met in 2018. On the contrary, the Gwadar and the corresponding hinterland conn- ectivity with Afghanistan are in its final stages of implementation. The Gwadar port is operational with the weekly arrival of the COSCO containers. Pakistan currently has the time advantage and we need to spearhead out industrialization process under CPEC to consolidate our position in the international trade. Once the trade flows through the Gwadar port are established we will have first mover advantage in the regional trade flows.

We must learn to make superior strategies to benefit from the situation. Chabahar port's development may be taken as a friend and neighbours' endeavour to improve chances of economic prosperity. We should also become part of this effort to promote regional integration between Iran and Russia. We should also facilitate rail and sea connectivity with Chabahar and Bandar Abbas so that Pakistan exports easier access to the prospective markets. We on our part must set clear objectives for Central Asia capitalizing on CAREC and assign the political and diplomatic resources to back up those objectives. We may renew our efforts to better our relations with Iran from the present tactical nature to the strategic milieu by aligning CPEC and Iranian initiatives under the following recommendations;

a. To retain significance in the backdrop of Indo-Afghan-Iran transit trade and provide a route to all the regional countries to CARs markets, it has become important to expeditiously complete operationalization, expansion and rail/ road connectivity of Gwadar port with Afghanistan followed by shifting total or part of Afghan transit trade to

Gwadar port.

b. Concurrently CAREC and CPEC routes are to be materialized in the immediate time frame so that trade binds Pakistan with Western and Central Asia, and we become the link between South and West Asia regions on one hand and between China and Iran, Afghanistan on the other.

c. We may renew our efforts to better our relations with Iran from the present tactical nature to the strategic level, either by incentivizing it through trade conduits or by offering linkages and ensuring developments through CPEC. To achieve progress and development, we need to consider warming up our relations in the immediate neighbourhood, it is the right opportunity to explore Iranian markets and encourage both private and public sectors to invest in mutually beneficial sectors including natural resources, automobile, and food commodities.

d. We need to be proactive in CARs and our, as well as reli- gious linkages, place us on a more advantageous position than any other regional state to set our objectives and achieve those successfully. This will ensure our presence at all levels in the region.

e. To retain significance in Indo-Afghan transit trade and provide a route to countries like China etc to CARs markets, it has become important to complete operationalization, expansion and road connectivity of Gwadar port with Chaman for Afghanistan followed by shifting total or part of NATO and Afghan transit trade to Gwadar port. The CAREC and Western route of CPEC is to be linked and accessed into Iran through multiple entry points.

f. Efficient and effective connectivity between Chabahar and Gwadar through railway link can be developed for cargo movement. And with this small intervention, Gwadar / CPEC / BRI can be linked with INSTC. This initiative will also be giving fast access to eleven new members (Azerbaijan, Armenia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Ukraine, Belarus, Oman Syria & Bulgaria) of INSTC.

Development of Chabahar port has been accelerated in recent years. Only upon continued/full lifting of majority sanctions by UN and EU, the work is likely to fully accelerate not only on the Chabahar port project but on its regional interconnectivity as well. India is likely to invest hugely, and these investments seem certain and in large volumes not only due to inherent Indian interests but also due to domestic pre- ssure created on the Indian government for Chinese CPEC investments in Pakistan. Afghanistan is also likely to push its efforts to fully materialize the transit trade agreement with India and Iran, in order to leverage its position with Pakistan for the short-term gains. The ambitious INSTC project not only provides an alternate trade route to most of its member countries but equally carries attraction for both businesses and governments in transit trade and transhipment opportunities.

It is not prudent for any good nation or people to evaluate own standing and policy vis a vis one's competitors through a destructive strategy or a negative approach, but by bridging own weaknesses and formulating a superior strategy. In case of implications of a full grown Chabahar port with its regional connectivity on Pakistan, our counterstrategy must be based mainly on expeditious completion of projects to deliver the promise of Gwadar Deep Water Port project. This would offset the strategic, political and economic implications if any, of a full grown Chabahar port while encouraging today's competitors to be tomorrow's partners in regional cooperation.

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INDUSTRIALIZATION THROUGH SPECIAL ECONOMIC ZONES UNDER CPEC: MODEL AND DEVELOPMENTAL STRATEGIES

Dr. Liaqat Ali Shah, Executive Director, CoE-CPEC

Introduction

Industrialization has undoubtedly become a global process, no longer confined to a privileged group of leading countries. It embodies the technology and the organization which have transformed production methods and way of life at an unprecedented rate in the last two centuries, leading to improved living standard across the globe.

The process began some two centuries ago in the British island with what is known as industrial revolution and immediately after, spread to western Europe and North America. Other beneficiaries in the period also include Japan and Tsarist Russia. In western Europe, Belgium was the first country to industrialize after Britain, largely because, iron ores and coals were close to each other. France and Germany followed the suit and become industrialised countries by the turn of the 20th century. The United States although began its Industrialization journey with the help of Britain and gradually surpassed the rest due to its sheer size and plentiful (capital) resources. Japan on the other hand, with emulation, borrowing of technology from the West coupled with human resource development and the desire for change in order to survive in the fast-changing world took the path of industrialization in the last quarter of 19th century. As for the rest of the world, mostly colonies and semi-colonies were at disadvantage and couldn't profit from the industrialization phenomenon during the same period.

The industrialization process spread from region to region through multiple means. Dominant among them is a Foreign Direct Investment (FDI), international labour mobility, trade and licensing and imitation. Labour mobility, trade, licensing and imitation though help develop an industrial base in the host economy but the process is often slow and haphazard. As for the FDI, it is believed to be the catalyst for structural transformation as is the case with East Asian nations . Strong evidence also suggests the link between FDI and industrial development in the host country .

Special Economic Zones (SEZs)

Now the question is on how to attract FDI to boost industrialization. The recent phenomena of China's rise to global nence in terms of industrial development are purely attributed to SEZS-an economic policy tool to experiment with and a boon for foreign investors to invest in.

Baissac defines the SEZ "as demarcated geographic areas contained within a country's national boundaries where the rules of business are different from those that prevail in the national territory. These differential rules principally deal with investment conditions, international trade and customs, taxation, and the regulatoryenvironment;whereby the zone is given a business environment that is intended to be more liberal from a policy perspective and more effective from an administrative perspective than that of the national territory".

In plain words, SEZs often are fenced-in areas equipped with world-class infrastructure, and where investors are provided with a conducive business environment in addition to incentives, both financial and non-financial ones. Financial incentives include exemption from taxes, duties on goods imported to and exported from SEZs etc. Non-financial incentives of SEZs are a one-stop shop at each SEZ,

investment approvals and trade facilitation etc. The overall purpose is to attract FDI into the zones to generate employment, boost exports, facilitate knowledge and technology spill over within and across SEZ to the domestic economy.

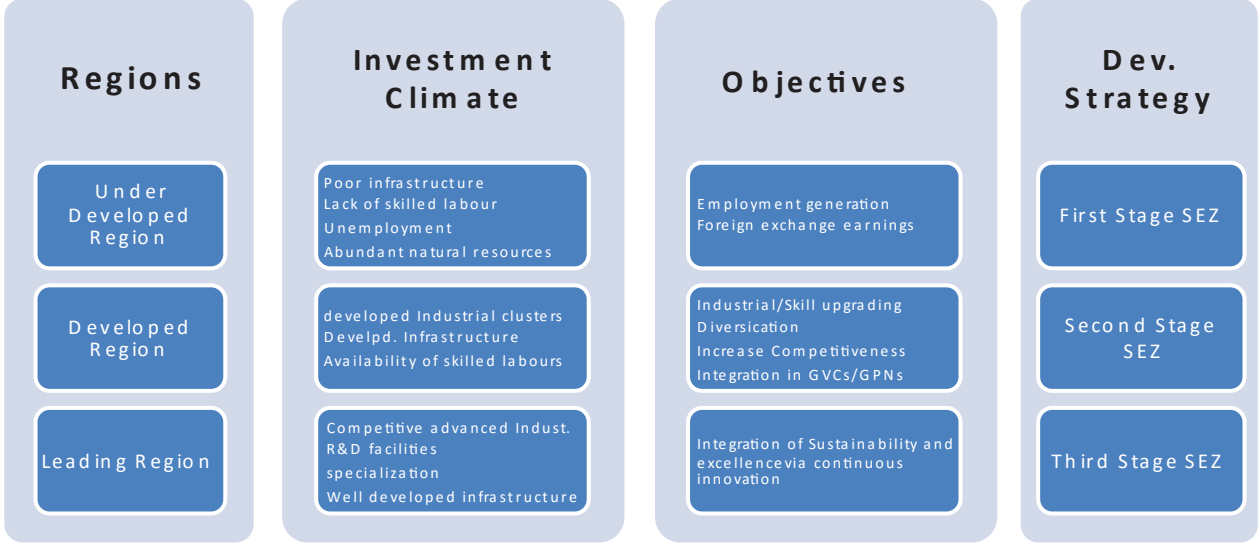
Due to a raft of benefits, SEZs mushroomed from an estimated 176 zones in 1986 to more than 5000 till now and still growing. Major successes have been recorded in China and South Korea followed by Vietnam, Bangladesh, Thailand and to some extent in India. The success of an SEZ depends on multiple factors ranging from location, proximity to urban centres, integration with the global market, appropriate incentive package and effective SEZ management committee. However, the critical determinant is the right model for the SEZ in terms of industrial development that is; the purpose of an SEZ whether it is for employment generation, improving export competitiveness or for innovation. The appropriateness of the model (SEZ industrial development model) relies on the temporal, spatial and economic structure as explained in the following SEZ development model.

SEZ Development Framework

The economic zones were developed using different types of SEZs to cater for different objectives. Some SEZs have been developed primarily to generate employment as is the case of SEZs in Cambodia. Other were developed to diversify economy such as Jebel-Ali special economic zone in UAE, to act as growth strategy as in Malaysia, Indonesia and Philippine and to foster overall development as in India. Where some SEZs have been developed to provide a platform for innovation, as is the case of innovation and technology parks worldwide.

In addition to SEZ development objectives, investment climate especially micro and meso-climate within a region also determines the type of SEZs to be developed . Because micro-climate is applicable at SEZ level where incentive package, zone administration and zone infrastructure are relevant for investors. Whereas, meso-climate characterises regional infrastructure, labour availability and regional governance. Both the climates influence investors' investment decision. As for the macro-climate which is influenced by exchange rate policies, market size, trade policies etc. special and liberalized SEZ laws (or acts) could cover the SEZs enterprises against most stringent rules.

Therefore, regional characteristics including investment climate and the developmental goals of the region determine the type/stage of SEZs to be developed as shown in Figure1.



As evident from the framework, regions are divided into under-developed, developed and leading regions keeping in view their prevailing investment climate that leads to customized objectives and tailored strategies for the regions. The under-developed region with characteristics of poor infrastructure including poor education and health facilities and marred by unemployment should be developed, based on the comparative advantage of the region if any, using First Stage SEZ. Regarding the developed region with good infrastructure and industrial footprints alongside labour, availability requires Second Stage SEZ, whereas the leading region characterised by competitive industry presence, R&D facilities and availability of pre-condition for innovation need to be developed employing Third Stage SEZ. The three Stages of SEZs with their objectives and development strategies are discussed in detail in the following sub-sections.

1.1. First Stage SEZ: Development and Strategies

The first stage SEZs are usually enclave type, primarily developed to generate employment and foreign exchange revenue, setting the stage for further economic development . In its initial phase, the zone focus is on attracting FDI especially to sectors which involve labour-intensive industries and are usually developed to generate employment. Besides the incentive being offered to the investors, low skilled and cheap labour is the dominant factor in addition to the endowments the location provides as a value proposition. For instance, China's SEZ of Shenzhen in the first stage during early 80's offered cheap labour and land to the investors mostly from Hong Kong, while the Shenzhen fell short in the capital, technology and management. So, the labour-intensive industries dominated by processing industry established itself in Shenzhen.

For the first stage SEZ, the following could be the winning strategies;

- Identify and develop location based on comparative advantage i.e. marble in Mohmand tribal district of KPK
- Involve local community in the industrial development to support the process
- Incentivize investors to establish industry as investors because mostly foreigners shy away from investing in remote and economically disadvantaged regions
- Develop zone-specific poli- cies in congruence with a national industrial policy to allure investors
- Provide, period-wise, predictable policy environment for the zone
- Provide land as cheap as po- ssible to investors

1.2. Second Stage SEZ: Development and Strategies

Second stage SEZs aims to help diversify the production base of an economy by strengthening linkages with the domestic economy and international markets. They are more suitable in areas where industrial fabric exists but rather weak; lacking depth, integration and international dimension. Where the industrial environment is characterized usually by small and medium enterprises with a strong specialization in low and medium technological sectors that is, textile, apparel, foot- wear and agro-based. Second stage SEZs there then cultivate the existing growth poles to produce a diffusion effect for boosting regional development. So, for the second stage SEZs to be established, the pre-condition is the presence of a developed economy in the area with a larger pool of skills which allow the adoption of more sophisticated technology.

For the second stage SEZ, following are the proposed developmental strategies;

- Identify growth poles and analyse the existing clusters to search for the prospective investors
- Plan backwards and forward linkages of SEZs enterprises with domestic firms to be operated on the sustainable mode
- Focus more on regulatory,

legal and compliance frameworks than incentive one

- Mentor enterprises through training, workshops, industry-academia liaison to climb up the value ladder.

1.3. Third Stage SEZ: Development and Strategies

Third Stage SEZs, also known as science and technology parks are structured communities or resource centres dedicated to the development and promotion of innovation. They promote local, new technology-based industries both for local and international market and considered powerful tools for regional development and economic transformation wit- hin the region. The technology park of the National High-Tech Industrial Development Zones (HTIDZ) in China under the "Torch Plan" to promote research and development is one such example.

Strategies concerning third stage SEZs are as follows;

- Locate third stage SEZ in an area where trained human resource and intellectual capital in addition to industry exists
- Develop liaison among universities, research institute and industry to develop value added products
- Provide support services like legal, finance, patenting, mar- keting and branding etc.
- Encourage public - private partnership

2. Lessons for SEZs under CPEC

From the review of the literature on the evolution and progressive development of SEZs particularly China developmental path for SEZs, it can be concluded that a single strategy cannot be applied to all the SEZs. Because factor endowments, current industrial footprints and required human resource skill and competence vary across the country. So, in the light of the proposed framework and strategies, the nine SEZs under CPEC can be developed as follows:

Stage	SEZ, Province/Region	Factor endowments /proposed key industrial sectors
First Stage SEZ	Mirpur SEZ, AJK	Agri-business
	Mohmand Marble City, KPK	Marble industry
	Bostan SEZ, Baluchistan	Fruit processing, mining, livestock, ceramics, logistic service providers
	Moqpondas SEZ, GB	Fruit processing, mining, livestock
Second Stage SEZ	Punjab-China Economic Zone, Faisalabad, Punjab	The city has strong industrial footprints in sectors such as textile, apparel, agriculture machinery
	Bin Qasim Industrial Park Sindh	Better connectivity via port and surrounded by industries ranging from auto & allied, food processing, light engineering.
	China Special Economic Zone Dhabeji, Sindh	Ditto
	Rashakai SEZ, KPK	Better connectivity via M1 motorway and surrounded by marble industry footprints, sugarcane
Third Stage SEZ	ICT Model Industrial Zone, Islamabad	Agglomeration of universities, research institutes and industry

Regarding strategies, the first stage SEZs are located in remote areas, for instance, Mohmand district and away from urban centres, therefore, should be provided with sector-specific incentives both financial and non-financial ones to allure investors to invest therein. As for the second, the current industrial footprints in the suggested areas (Rashakai, Faisalabad, Bin Qasim etc) and the business environment is sufficient to attract investors; however, the prospective industry should be brought via targeted marketing and should operate on the downstream of the supply chain in their respective sectors to better develop backward linkages with the existing industries in the vicinity. For third-stage SEZ in Islamabad, technology-specific industry should be established because of university clusters in the city.

In establishing the CPEC SEZs in the defined regions, the government role should be to facilitate their development by adopting right policies and offering suitable incentives to key sectors and clusters for achieving employment, export and innovation objectives.

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GWADAR SMART PORT CITY MASTER PLANNING UNDER CPEC – SETTING THE BASELINE

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INTRODUCTION

Pakistan and China are promoting active development cooperation through the implementation of various projects under CPEC. The announcement of CPEC in 2013 which established as a '1+4' cooperation structure (CPEC + Gwadar port; energy; transport and infrastructure; and industrial cooperation/establishment of special economic zones) has endowed Gwadar with unparalleled opportunities for new growth.



Figure 1-Location

Gwadar, situated on an isthmus, connects the south-western coast of Pakistan with the Persian Gulf and serves as an ideal location to build an international port with its perfect geographical conditions and the adjacency to the primary international energy transport route. There are few key objectives for the development of Gwadar, including: tapping the economic potential of the region; clarifying the future development vision and strategic targets for Gwadar; realizing the route of local and even national social and economic leaping development; guiding the orderly construction and development of Gwadar special economic zone (SEZ) and Gwadar port; and creating Gwadar a

ous and advanced global smart port city. The proposed term of Gwadar's planning and development is from 2017 to 2050, among which the short-term plan lies between 2017 and 2025, the medium-term plan is between 2026 and 2035, and the long-term plan encompasses the time-frame from 2036 to 2050.

Currently, Gwadar's new master plan is being prepared. The question arises that why Gwadar does need a new master plan? The answer is that the Gwadar's existing master plan, last updated in 2005, could not facilitate rapid development and was also not able to mollify and address the new pressing needs under CPEC portfolio. Therefore, the formulation of a new master plan was necessary to ensure that the development of Gwadar city is consistent with the current developmental needs and requirements.

Gwadar Development Authority (GDA) and the Chinese International Economic Cooperation Bureau of Ministry of Commerce are joint proprietors of the new smart port city master plan of Gwadar. The CCCC- FHDI Engineering Co. Ltd (China Communications Con- struction Company- Fourth Habour Design Institute) is the project's implementation body. Memorandum of Understanding (MoU) for carrying out this activity was signed in November 2015. Later, in May 2017, the CCCC-FHDI signed the project contract with GDA regarding the initiation of master plan of Gwadar smart port city. The GDA and CCCC-FHDI formally signed the commencement letter for the subject project in August 2017. To date, the project team for Gwadar master plan has conducted meetings and consultations with the relevant stakeholders and Chinese experts and are in the process of formulation of the master plan, which is expected to be completed in late 2018.

Some of the key features of Gwadar that may serve as a baseline for the new master plan of Gwadar are given below.

SETTING THE BASELINE

Administrative Structure:

Gwadar District is under the Makran division of Balochistan province in Pakistan and its total area is 15,216 sq. km. It has 4 tehsils and 13 union councils which are elaborated in table-01.

District	Tehsils (4)	Union Councils (13)
Gwadar District	Gwadar Tehsil	Pishukan, Surbandar, Gwadar Northern, Gwadar Southern, Central Gwadar
	Pasni Tehsil	Pasni South, Pasni North, Kallag, Nalient
	Jiwani Tehsil	Jiwani, Suntsar
	Omara Tehsil	Omara, Hud

Table 01: Gwadar Administrative Divisions

Like other parts of the country, Gwadar district has a top-down vertical administrative structure. The administrative departments of Gwadar are divided into three categories; departments under the federal government, departments under the provincial government, and the departments under the local governments. Among these departments, the key ones that exert major influence on the development of Gwadar are the district managemeof Gwadar, Gwadar Development Authority (GDA), Gwadar Port Authority (GPA), and law enforcement authorities such as police and Pakistan Coast Guards.

In 1958, Pakistan purchased Gwadar from Oman. Its development since then could be divided into three phases, which are:

1. Natural growth phase (1958-2000): The period was of economic and social backwardness. Fishing was the dominant occupation in Gwadar during this ime-period.

2. Port-driven-development phase (2001-2012): Emerging port pushed the urban construction in the area to some extent; however, the overall development could not catch up with the needs/requirements.

3. Expansion-under- CPEC phase (2013 to present): CPEC was announced in 2013 and the construction of Gwadar Free Zone began with some other urban development activities in Gwadar.

Important milestones in the urban development of Gwadar are explained in figure 02.

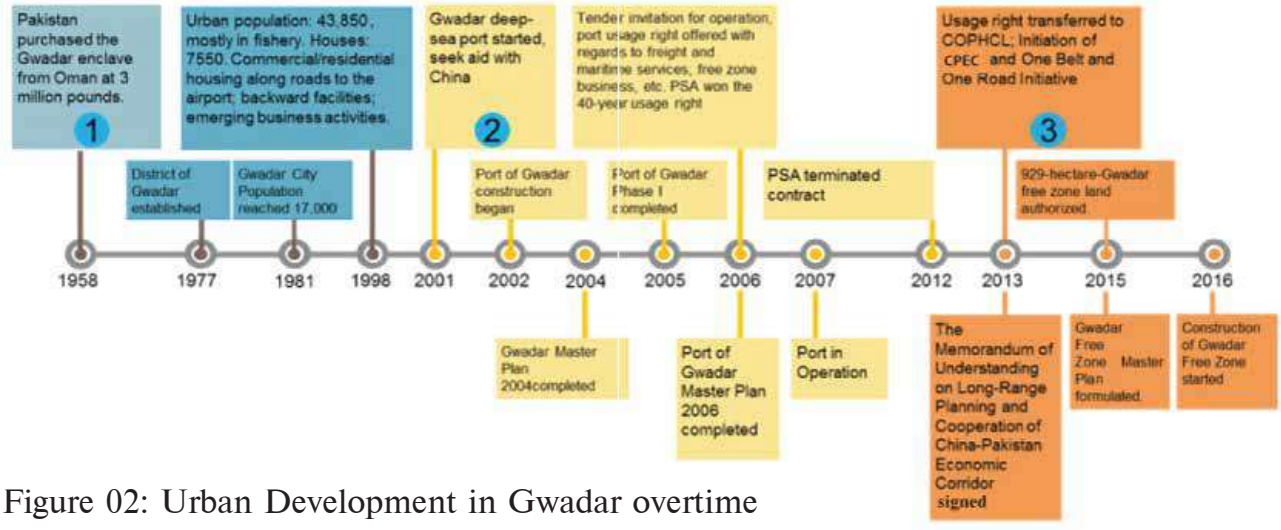


Figure 02: Urban Development in Gwadar overtime

Land Use:

Land is mostly privatized in Gwadar. Approximately 90% of the land in Gwadar is privately owned. The land in the planning area of Gwadar is generally underdeveloped and most of the constructed land is currently for residential and road uses. At present, the residential land use is almost 80%, while the land for commercial and industrial purposes is approximately 20%.

Environment:

Gwadar has a subtropical climate, characterized by little precipitation all year long, hot and humid summer and mild winter. The area experiences low rainfall. Moreover, the landscape of Gwadar is generally flat. Water reserves in the area are low. Akara dam water reservoir in the north is currently the main source of water, but it only provides a limited amount of water to the people of Gwadar. Apart from it, rivers such as Akara Kaur, Faleri Kaur, Shahdad Tributary, Shahdad Kaur, Sur Kaur in the north and Dor Kaur artificial spillway built in the middle are available but these remain dry most of the time. Flora and fauna in the area is also scarce. Gwadar is vulnerable to a wide variety of natural hazards, including cyclones, heavy rains, floods, earthquakes, tsunamis, droughts and so on.

The types of disasters with respect to their priority are shown in table-02.

Disaster Priorities	Disaster Type	Vulnerable Tehsils
High Priority	• Flash floods • Heavy rains • Cyclone • Earthquake/Tsunami	• Jiwani (flash floods, heavy rains and earthquake) • Pasni (Flash floods, heavy rains, cyclone and earthquake) • Gwadar (heavy rains, cyclone and earthquake) • Omara (cyclone and heavy rains)
Medium Priority	• Drought • Epidemics	• Jiwani (Drought) • Pasni (Drought) • Omara (Drought) • Epidemics can break out in any tehsil
Low Priority	• Fire incidents • Road accidents • Riots • Oil spills • Pollution	• Pasni (Riots and oil spills) • Gwadar (Riots and oil spills) • Fire incidents, road accidents and pollution are hazards for all tehsils

Table 02: Disaster Vulnerability of Gwadar Tehsils

The environmental advantage that Gwadar enjoys is that it has a rich shoreline suitable for port activities. Shielded by the promontory, the east and west bay in Gwadar both have an average significant wave height of no more than 1 meter, and the flow velocity is between 0.1~0.4 m/s. The coastline is basically stable. Moreover, the lack of external disturbances also makes Gwadar a perfect place to build a port of international standards.

Population:

According to the 2017 census, Gwadar district has a total population of 263,514. The average annual population growth rate of Gwadar from 1998 to 2017 is 1.86%, which is far below the growth rate of Balochistan and the whole country. The population of Gwadar Tehsil (planning area under the new master plan) is 138,438.

Balochistan province is the biggest province in Pakistan. However, its population density is the lowest, which is 35.6 people/km2 - only one seventh of the national average. The population density of Gwadar district is 17.3 people/km2, about half of the Balochistan's population density .

The key statistics are given in table 03.

		Gwadar district	Balochistan	Pakistan
1998-2017 average annual growth rate	All	1.86	3.37	2.4
	Rural	0.94	3.33	2.23
	Urban	2.55	3.49	2.7
Population density (per sq km)	All	17.3	35.6	261

Table 03: Population Growth rate and density of Gwadar

Population:

The major source of employment in the region is 'fishery'. In 2016, the fishing industry in Gwadar district directly employed more than 10,000 people. Balochistan's sparsely populated and poorly economic districts, including Gwadar, have low radiation and driving effects from Pakistan's central economic cities. Due to the region's limited economic development level, Gwadar's pubic fiscal revenue (funds collected by the provincial government and the returns on land taxes) is too limited to finance large-scale urban development projects.

At present, there are only a few small-scaled processing and manufacturing industries in Gwadar. What Gwadar lacks most are strong market needs, adequate infrastructure, and satisfactory environment of business that will in return attract more investments. The service sector is also developing slowly in Gwadar. The construction of the port and the Free Zone would promote the growth of the supporting services to meet the needs of port logistics and construction. As stated earlier, Gwadar's major exports are fishery products, which gain an average of 40-50 tons per day of production and a total of approximately 8,000 to 10,000 tons of annual exports. This can be increased by providing better facilities to fishery sector in Gwadar.

Information & Communications Technology (ICT) Infrastructure:

Development of ICT infrastructure in Gwadar is still in a rudimentary stage - relatively retrograde - compared to other Pakistani cities. At present, most of the residents in Gwadar have access to the telecommunication services in the area; however, due to Gwadar's low economic development level, sparse population and complicated geographical conditions, the quality of communications networks and services are relatively poor. Local governance, service sector, businesses, and people's lives - all are still operating in a traditional style. Government's record and data is mostly entered and handled manually. Education, health, environment and other development sectors are mostly not using the latest digitized applications to ensure quality and high standards of public service.

GWADAR - NEW SMART PORT MASTER PLANNING

The existing master plan of Gwadar, last updated in 2005, has two broader elements: the port, and the city of Gwadar. However, under CPEC, the strategic focus is now on simultaneous development of Gwadar city and port through a new smart port city master plan. The shift in focus is primarily due to the natural and symbiotic relationship that exists between a port and the city that surrounds it; one cannot be developed without the other. In addition, the city around a port must also be planned carefully in order to lay the foundation of a sustainable regional economy, drive local businesses, and increase port throughput. Hence, with the inclusion of Gwadar port in the China-Pakistan Economic Corridor (CPEC) project, the Government of Pakistan along with the provincial government of Balochistan felt an urgent need to update the existing Gwadar master plan to reflect the new strategic direction and maximize the benefits of CPEC activities.

The key objectives of the preparation of new Smart Port City Master Plan of Gwadar are to: create the vision and guiding strategic objectives for Gwadar City; update the existing Master Plan of Gwadar City and its integration with the Master Plan of the Gwadar Port; create an inclusive and sustainable strategic development plan that ensures the socio-economic uplift of the Makran coast in general and the Gwadar region in particular; recommend regulatory interventions and ways

and means to develop Gwadar as a 'Special Economic Zone' and ensure near-term economic growth; identify Gwadar's competitive advantages vis-a-vis regional ports and develop a business case for the port, its contribution to export led growth, market creation, industrialization, tourism and revenue generation; suggest strategies to facilitate trade, tourism, community participation, pub- lic-private partnerships and industrial and economic development on a national and regional levels; cater for climate change adaptation, sustainable development, infrastructure, energy production, security of life & property, disaster risk reduction and mitigation; and transform Gwadar into a port of international standards and a smart, sustainable city that can drive local, national and regional growth in the coming decades.

So far, an "Inception Report" and a "Diagnostic Report" related to the New Smart Port City Master Plan of Gwadar have been prepared. These reports review and analyse the existing documents on the subject matter and map out Gwadar-related institutions and some other related aspects. Specifically, the following have been included in the "Diagnostic Report": review of the existing policies, procedures, plans, studies conducted by different departments/agencies related to the Gwadar; current and future population trends of Gwadar; different proposed land-use options considering the growth potential in Gwadar; review of urban form, urban design and infrastructure plans of Gwadar; the existing development pattern of Gwadar in relation to climate change including disaster risk reduction and urban resilience; and current demographic, and environmental considerations in Gwadar.

Due to the inadequate Information and Communications Technology (ICT) infrastructure and lack of data resources, Gwadar now requires immediate support to turn it into a smart port city. Accordingly, there is a need to increase public financing and adopt more preferential policies to support the construction and development of Gwadar smart port city. For planning purposes, all avenues need to be considered in master planning, with specific focus on updating the current plans to mirror the latest & available options for sustainability, economic clustering, and establishing a regulatory framework that encourages economic growth in the region. Furthermore, the convergence of proposed ICT infrastructure with physical, social and intellectual capabilities of Gwadar need to be realized and incorporated into the new smart port city master plan of Gwadar so that the Gwadar city is transformed into an "integrated Smart port city" for attracting the IT-based options to not only enhance the economic activities but quality of life of the people of Gwadar as well, with less resource utilization and climate-compatible and climate-resilient development.

Gwadar enjoys the locational benefit, suitable port development conditions, and a rich fishery resource. However, Gwadar also faces some challenges as well, include the issue of weak infrastructure, lack of industrial impetus, water crisis, and administrative fragmentation. Therefore, the authorities involved in the preparation of new smart port city master plan of Gwadar are required to be aware of these challenges and opportunities. It is hoped that the new smart port city master plan of Gwadar - considering the baseline scenario of Gwadar and realizing the challenges and opportunities of the region – would serve its purpose in successful completion of the CPEC projects under the overall objective of the sustainable development of the region.

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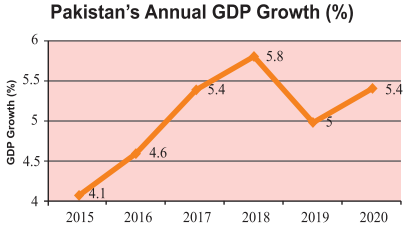
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Can Digital CPEC transform the economy of Pakistan?

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Ultimately the entire CPEC project is aimed towards improving Pakistan's economy; however the digital segment is most likely going to have the biggest and long lasting positive effect.

According to World Bank annual GDP growth rate of Pakistan, increased from 4.7% in 2015 to 5.4% in 2016. According to IMF $ 13 billion will be added to Pakistan GDP by 2025.



With the development of digital corridor Pakistan will have the opportunity to make advancements in all fields. Following are some of the aspects that can help transform Pakistan's economy.

1. Development of Information Technology (IT) has greatly contributed to economy of many of the advanced countries. IT plays important role by modernizing, automating and enhancing productivity in sectors like agriculture, marketing, tourism transportation and so forth. It is reducing the distance which has potential to resolve many problems related to economic productivity, intellectual property rights, privacy, protection, and affordability of and access to information.

2. Currently, we have only twelve IT parks controlled by Pakistan Software Export Board (PSEB) which are not sufficient for the growing IT market all over the world. China is now rating CPEC as one of the most valuable project to itself so we can expect some heavy investments in Pakistan from China. Viewing these investments from China, many countries and their stakeholders would outsource their manufacturing, IT services like software development, helpdesk support, network support etc. to Pakistan. We must have the infrastructure and skilled labour to cater these upcoming demands that can only be fulfilled with careful planning.

3. The markets that Pakistan will have access through CPEC and China's One Road One Belt project are not only limited to Asia but also includes Europe and Africa. This will lead to a two-way corridor of trade and corporation with unlimited opportunities for manufacturing, products, services, and resources.

4. Rapid and broad communication network will enable Pakistan's private technology sector, especially Small to Medium Enterprises (SME's), to develop business relationship with their counterparts in China and other countries.

5. China has developed world class manufacturing platforms and is considered to be one of the largest hardware manufacturers in the world. While Pakistan at the moment lacks hardware manufacturing capability but has gained significant resources and expertise in software development. D-CPEC will give Pakistan's software companies an opportunity to collaborate with Chinese manufacturers which will be beneficial for both.

6. Building dedicated technology cities, like the famous Silicon Valley, is the new growing trend to address the global technology demands and Pakistan has the resources to establish tech cities of its own. With the help of Chinese government, Pakistan has already started to build four top national research centers in its major cities including one provincial and federal capital where research facilities from country's other innovation colleges were brought together to unravel basic issues of four developing regions. These national centers will work through shared assets and ability towards creating

ventures that will have a huge national impact. Artificial Intelligence research center at NUST, Cyber Security research center at Air University, Cloud Computing & Big data research center at LUMS, Robotics and Automation research center at EME college of NUST.

7. Additional purpose specific parallel digital corridors can be developed that will serve as channels for business communities in both countries to trade products and services. Pakistan's growth rate of IT (Information Technology) & ITeS (Information Technology enabled Services) exports has been the highest in South Asia during the last three years. Pakistan's IT & ITeS export grew by 71% from June 2013 to June 2016, whereas India's exports grew at 40.6% and Sri Lanka's at 19.9% during the same period. During the FY (Financial Year) 2016-17, Pakistan's IT & ITeS exports have grown at a faster pace than India and Sri Lanka. Pakistan's growth rate during he FY 2016-17 was 16%, whereas India's growth rate is 8% and Sri Lanka's growth rate is 5%. D-CPEC will also help connecting and competing on trade and commerce in Central Asian.

8. Open source hardware and software development has become a big market thanks to widespread internet and communication access. Currently valued at $14 billion a year, open source services market is expected to reach $33 billion a year by 2022. D-CPEC gives Pakistan the opportunity to benefit from this explosive growth.

9. D-CPEC will provide opportunities to create jobs that do not require advanced degrees, rather short term semi-technical online courses. For a population of 200 million consumers Pakistan needs at least two million semi-technical workforce and the current numbers are way below that. This is an opportunity for the government to create much needed jobs for the available and young population. This may be managed by assigning targets to Universities, Schools and NEVTA to produce a certain number of licensed technicians per semester. The target needs to be in thousands/semester per university. HEC may give special incentives for achieving targets. This workforce shall build the "Cost Effective" manufacturing sector for Digital Corridor and eventually OBOR.

10. The digital corridor has created an ideal platform and opportunity for Pakistan to attract foreign investment. In future, more and more countries from within and outside the region will be eager to invest and do business in Pakistan. International conferences, exhibitions and developers will be on one platform which will help produce innovative products. Pakistan is expected to become a transshipment hub and interconnection center in the region. There is lot of focus on communication industries and mobile phones manufacturing.

11. Digital technologies in the railways industry include improvements in ticketing, reservations, scheduling and customer service. Autonomous cars, and tracks can communicate directly with dispatch centers, terminals ensuring their passengers and cargos are at the right place at exactly the right time greatly reducing delays and downtimes. Freight railways can monitor facilities, assets, systems, and shipments in real time.

12. Gwadar seaport was officially inaugurated and formally started operating in November 2016 but it still does not have optical fiber laid down for optimal network connectivity. As a result, there is still no reliable high speed internet service available in Gwadar. All modern ports nowadays need a highly reliable communication infrastructure in order to accurately trace their operations and increase operational efficiency. Using high speed internet and digital infrastructure, Gwadar can significantly streamline its operations and increase productivity. Digitizing processes in and between seaports leads to a network of seaports that transfers the smart port concept to the entire maritime logistics chain which simplifies this complex operation.

13. CPEC and D-CPEC have huge potential and though a stretch, it is possible to create 7.5 Million new jobs over the next 5 years from the current

economic growth trajectory. It is projected that with proper policies we can aim to produce 5 Million jobs through CPEC Development Projects, more than 1 Million, IT, Freelancing & entrepreneurship, and 1.5 m manufacturing jobs outsourced from China into SEZ as part of China plan to outsource 70 m jobs to countries like Pakistan, Vietnam, Myanmar and Bangladesh. To achieve good outcomes, policy makers and business leaders will need to embrace automation's benefits. Ensuring robust demand growth and economic dynamism is a priority: history shows that economies that are not expanding do not generate job growth. Midcareer job training will be essential, as will enhance labor market dynamism and enabling worker redeployment. These changes will challenge current educational and workforce training models, as well as business approaches to skill-building. Another priority is rethinking and strengthening transition and income support for workers caught in the crosscurrents of automation.

Deduction:

At the moment Pakistan is ranked 110th in the World Economic Forum Networked Readiness Index, which measures a nation's capacity to exploit openings emerging in the Information Technology (IT) part.

Digital Corridor will help Pakistan rank better in the list. However a solid framework for quick, healthy growth in IT related products and services needs to be established. An increased number of internet users will lead to GDP growth. With more people connected, it becomes easier to socialize, share information and innovate. In developed countries internet exerts strong influence on economic development. With internet and telecommunications businesses are more likely to find customers and markets that they currently don't have access to.

SOCIAL INCLUSION FOR EXCLUSIVE GROWTH UNDER CPEC

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SOCIAL INCLUSION

The Process to include the most excluded group of people is termed as "social inclusion". This concept emerged that back in early 19th century but has gained attention in 1970s when Europe took the initiative to include a certain group of people like Roma, which cost them more than 800 million euros of being excluded through offering an equal labour market opportunities. This concept is perceived differently by the philosophers and defined it as context dependence. Amongst them, some focused on the exchange of ideas and property etc. among social networks, some emphasized on the provision of basic human rights like living of minimum standard whereas social bond for collective good was also given considerable attention.

Initially, the social aspects were considered under "social inclusion" later three dimensions were explored to comprehensively define the essence of "social inclusion". According to (Silver 2015) the contextual influence on social inclusion or exclusion is disaggregated in three key dimensions namely political, social and economic. He explained the political dimension as a right of citizens to show their concerns about the matters which may affect their lives. While explaining the economic dimension he mentioned developmental programs executed across the countries to improve the per capita income, employment, taxation reforms, women empowerment, livelihood development and growth strategies whereas social dimension addresses the social equity in terms of equal opportunities regardless the fact of being culturally, spatially and religiously different.

Extending the scope of social inclusion further, EU introduced a policy of cohesion 2020 to reduce the evolving disparities (socially and economically) and listed the five goals to form an inclusive society which includes; i. smarter Europe; linked with economic transformation, ii. Greener Europe; linked with recycling or use of renewable energies, iii. Connected Europe; linking the development of transport infrastructure and digital networks, iv. Social Europe; this objective relates with the provision of equal opportunities through equipping society with quality education and health, v. the last objective is "closer to citizen", which is going to establish through initiating locally led development projects. To analyze the projects through the lens of social inclusion, Toye (2005) conducted a survey to categorize the project's domain to be covered under the social inclusion. He concluded that to apply the framework of "social inclusion" in true spirit, developmental projects must be defined under any of the key identified domains including social, political, structural, economic, cultural, participatory, functional and physical.

These discussions consequently lead to define "social inclusion" as a multifaceted concept and broaden the scope from merely social intervention to political, economic, structural and cultural interventions.

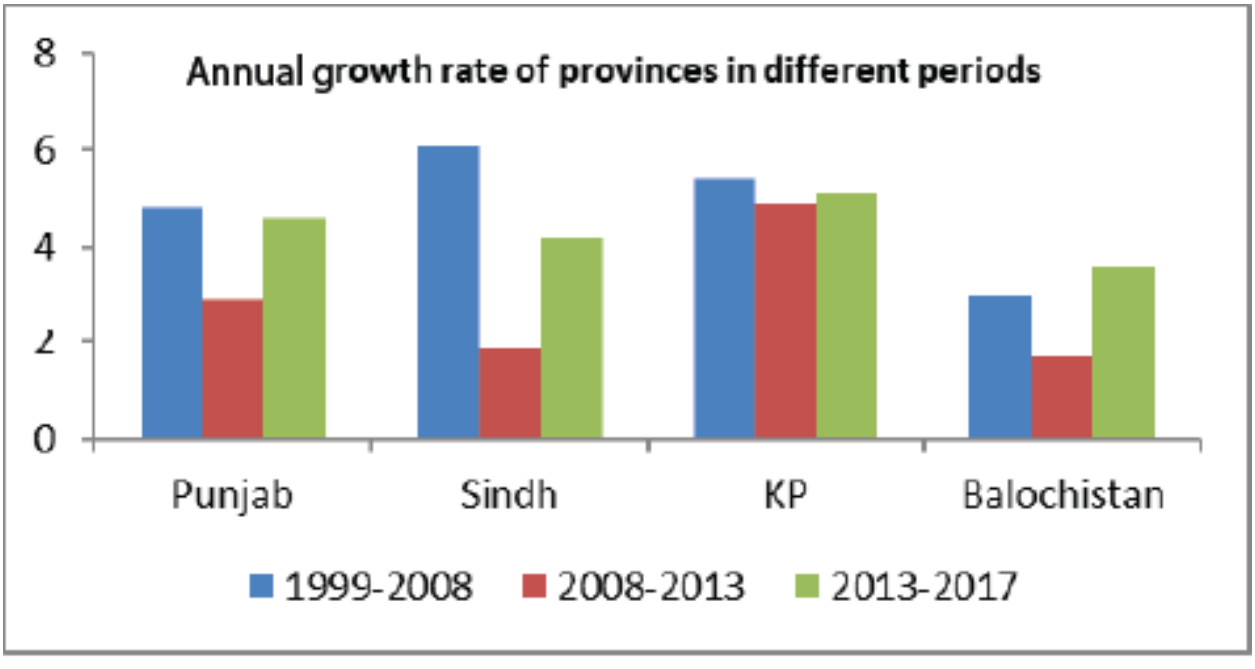
China-Pakistan Economic Corridor (CPEC) is the most pronounced intervention in Pakistan's history. It is not just the investment but considered as the intervention which would affect the economic, political, social, cultural and institutional structure of Pakistan. This study is an attempt to analyze the role of CPEC to make Pakistan a socially inclusive society.

Pakistan is the mixed economy of socio-economically

advantageous and disadvantageous regions including four provinces and federal territories. Amongst them, Punjab's contribution is greater than any other province in national growth whereas Balochistan is the one who contributed the least. Discrepancies amongst different parts of the country are not confined to their contribution in national growth, unfortunately, other socio-economic indicators are also varied greatly including human development, population density, public spending, education etc. Studies empirically proved the positive relationship between investments in human development particularly in education and social inclusion. Good governance is also categorized as a key factor for social inclusion. Equal opportunities in the labour market for employment are also led to inclusiveness. Equal access to health, decent housing and developmental activities are also symptomatic of an inclusive society. Based on this discussion we have made a comparison of some key socio- economic indicators including annual growth rate, unemployment rate, Human development index, per capita income, Physical infrastructure and education spending to know the degree of inclusion.

Annual growth rate of provincial economies

Annual growth rate is the measure of province's overall performance. From fig 1, it can be seen that Punjab shows growth with an average growth rate of 4.2 %, whereas, Sindh experienced considerable fluctuation in the growth rate. Researchers relate this fluctuation to the business' cycle. Over the years, security, electricity shortages and other political unrest particularly in Karachi push several organizations to move out to neighboring countries. KP surprisingly performed well and maintained economic growth rate between 4.9 and 5.2percent. Balochistan could not show a significant change, however; it has been improved from 1.7% in 2008-13 to 3.6% in 2017.



Source: Pasha, H (2018)

Unemployment rate

Unemployment is the key indicator to define a socially inclusive society therefore, studies emphasized the provision of equal labor market opportunities to improve the employment rate, per capita income and poverty. In Pakistan, Punjab has the highest labour participation rate i.e. 70.2%, KP 60.2%, Sindh 45.3% and Balochistan with 42.3% fall below in the rank.

The unemployment rate of Punjab dropped from 8 to 6.38% as shown in fig 2. Sindh being the second largest populated province of Pakistan has the lowest unemployment rate as compared to other provinces. KP has shown a drastic decrease in unemployment over the last10 years and this figure dropped from 13.09% to 8.57% in 2012-13.

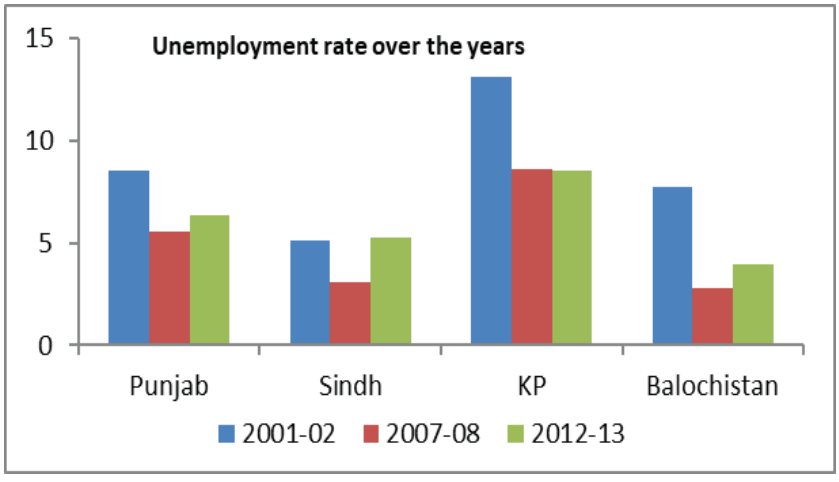


Figure 1, Source: PBS

Education spending

Expenditures on the education play a key role to build required human capital to avail the equally distributed job opportunities. Education spending according to available labor force would help to equip workforce with the required skill set to avail the job opportunities. Fig 3 shows the expenses incurred as % of provincial GDP. It can be seen from fig 3, that Punjab spent less on education whereas KP on average spend more on education and ranked at the top. Sindh also spent less on education. However, Balochistan has realized the strength of spending on education, therefore, a significant increase can be seen over the years from 1.4% of Provincial GDP to 3.1% of PGDP.

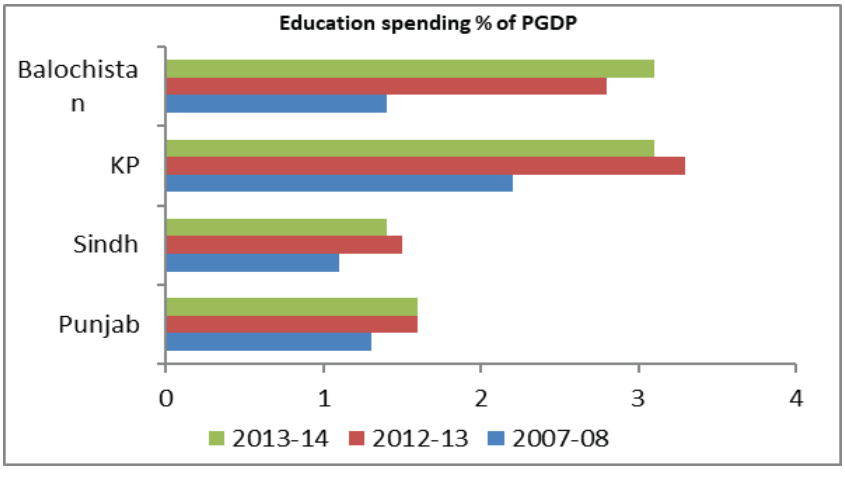


Figure 1: source Pasha, H. (2018)

Development spending

Development expenditures help to uplift the region socio and economically. Development expenditure incurred in Punjab is higher than all provinces and is kept on increasing over the years. An incremental trend can be seen in all provinces, but the expenditure volume varied greatly across them. Development expenditure relate with the socio and economic growth of the region. This could be one of the reasons that put some provinces far behind. Sindh shows a marginal increase in spending made on development whereas development spending in Balochistan has been increased up to Rs.40 billion, which is too less to compare with others.

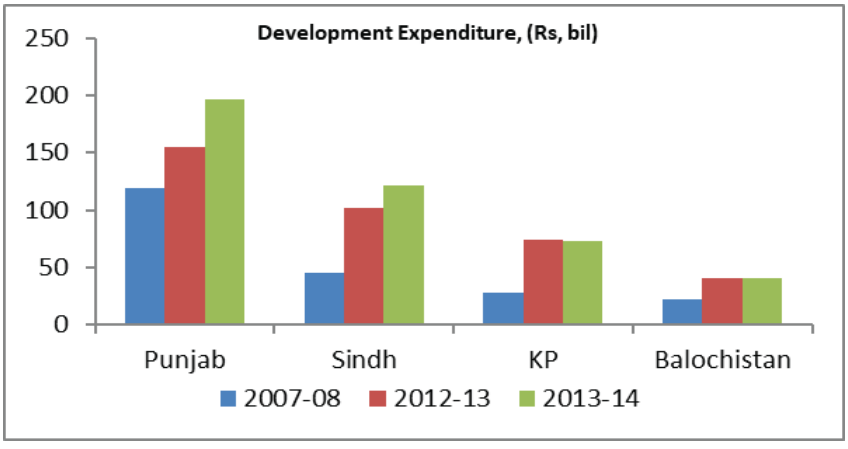


Figure 1: source: Pasha, H. (2018)

Human Development Index

Human development index is the measure of investment made to develop the human resource in health and education etc. Sindh ranked first with HDI 0.56, Punjab on second with HDI 0.54, followed by KP with 0.51 and Balochistan with 0.46.

Districts in each province are also categorized in three levels to identify the need of investment in human development. Fig 5 shows the number of districts in each province with respective HDI level. Punjab and Sindh have few districts categorized as districts with "high HDI" whereas all districts of Balochistan are classified as districts with "low HDI" and districts in KP fall in Medium and low HDI group.

The Graph shows that districts in Punjab fall in all of three categories yet the number of districts with low HDI is greater than the number of districts with high HDI. Sindh has the marginal proportion of districts fall in medium HDI, only 3 three out of total districts fall in the category of high HDI. No district of KP stood for high HDI however 6 districts out of total, numbered under medium HDI. Rest of all districts (20) fall in the category of low HDI. Unfortunately, Balochistan has 32 districts and all of them fall in the category of low HDI. HDI varied greatly across provinces but HDI inequality within the given province is also noticeable.

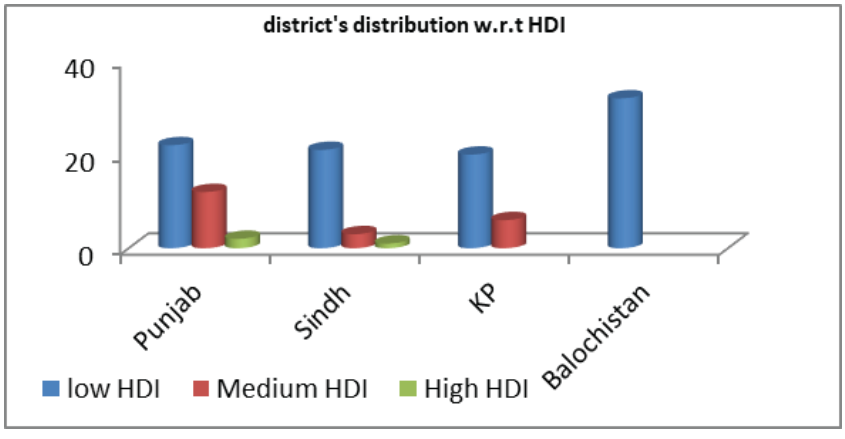


Figure 1: Pasha, H. (2018)

Per-Capita Income

The difference in per capita income amongst the three provinces is marginal, whereas Balochistan lagged in this indicator too (see fig 6).

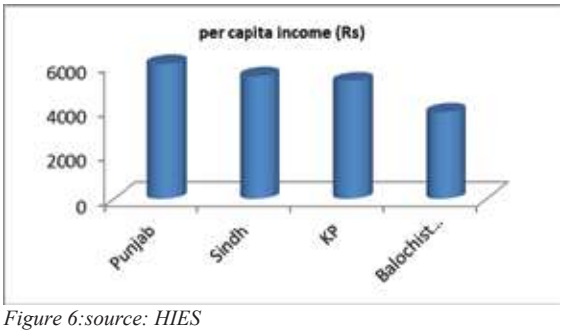


Figure 6:source: HIES

Physical Infrastructure

Availability of physical infrastructure including road and electricity would not only tell about the scope of connectivity but also the seriousness of the provincial government to move along the national agenda of economic growth. One of the major reasons for lagging behind is the poor connectivity with other parts of the country. Power outages push the region into backwardness. Therefore, availability of energy pronounced as fuel for industrialization.

Table I, presenting the total roads present in the provinces in kilometers which includes both high type and low type roads. Imbalance of road infrastructure is prominent from the table I. It is found that Punjab has a much better position than any other province in terms of connectivity, whereas Balochistan being largest province w.r.t. area but has less number of roads hence poorly connected with the rest of the country therefore could not able to attract local and foreign investors.

Table I: Province wise total length of roads in 2015-16 (Total Length of Roads in KM)

Year	Punjab	Sindh	KPK	Balochistan	GB & AJK
2015-16	107,718	81,624	42,945	29,490	1,579

It may infer from the above figures, tables and discussion that Punjab stands at better position in comparison to the rest of three provinces against many socio and economic indicators that is why it shared more than 50% in national GDP. Power shortfall has taken industries away from Sindh and it negatively affected its economy. Peace and security are the key factors deteriorated the socio-economic performance of these two provinces KP and Balochistan.

This socio-economic imbalance has generated a feeling of resentment amongst the deprived regions including KP, Gilgit and Balochistan in particular. This resentment was translated into anti-CPEC sentiments particularly from these regions.

Social Inclusion and role of CPEC

The CPEC will improve the lives of people of Pakistan and China" is the statement narrating the vision and scope of CPEC. This visionary statement is not about the region or a country, but it is about the smallest unit of the society "individuals/citizens" or "building blocks". The vision is the manifesto of motivation to socially include every citizen of Pakistan in growth process through provision of equal opportunities. The role of CPEC is analyzed through the lens of social inclusion and found that CPEC is more than just a route. The scope of its role is discussed from different perspective to form an inclusive society as follows;

Political Intervention: The vision to improve the life of people of both countries needed cooperation at different levels. Collaboration to realize the CPEC dream is already in process at different tiers particularly at government level e.g. "Joint coordination committee" (JCC). To include every part of the region, doubts and concerns were well addressed and they were granted liberty to make decisions for their growth and development. Efforts are also made to ensure the representation of every province in the CPEC focused meetings.

Economical Intervention: CPEC is more than $46 billion investment to support the economy of Pakistan. Priority is given to all those projects which would provide the fundamental pre-requisites to initiate the economic activities like provision of infrastructure to improve the connectivity and energy projects including wind, coal, hydel solar etc. depending upon the available potential of the region to meet the initial energy requirements. Moreover, Special Economic Zones (SEZs) are also notified in each province to support the process of industrialization and to give them equal chance to grow and to attract local and foreign investment. Allocation of projects will bring the deprived and backward areas into limelight particularly "Thar from Sindh", "Gilgit" and "Gwadar" from Balochistan and would minimize their feeling of being excluded.

Cultural Intervention: CPEC would also be a strong cultural intervention. The mode of collaboration under CPEC will move from government level down to people to people exchanges. This would open new vistas of opportunities to share the cultural diversity and to capitalize on rich heritage. Tourism sector which is also given due importance in the CPEC long term plan will provide a platform for possible people and cultural exchanges.

Social Intervention: CPEC is not confined to economic intervention but efforts are also made to equip the labor force with the required skills to avail the job opportunities to socially include in the growth and development. Therefore, different projects under CPEC like scholarships for the students under B&RI and CPEC in China, vocational centers, trainings and short study exchanges have been announced for local residents to acquire immediate needed skills. Moreover, students exchange programs and collaboration among business schools in China and in Pakistan is also in pipeline. These initiatives are designed to address the most echoed concern of the people of Pakistan i.e. would jobs be provided to local residents or not? Such programs would play substantial role to develop human resource with the required skills set so that they can avail the job opportunities. These programs are not confined to any specific province or region.

Conclusion and Recommendations

To form an inclusive society social, political, economic and cultural interventions are discussed as key players. Study analyzed the socio-economic status through key indicators and found that there are noticeable socio-economic discrepancies amongst different parts of the country. Hence, segregated as socio-economically advantageous and disadvantageous region. Study contextualized the role of CPEC through the lens of social inclusion and described its role as political, social, cultural, and economical interventions to address the socio-economic disparities to form an inclusive society. It is concluded that same level of interventions may not necessarily bring the same results from socio-economically improved and backward regions. Therefore, to build the capacity and potential of the regions particularly the deprived areas local government and society may play an active role along the multidimensional intervention of CPEC. Based on the conclusion following recommendations are made;

- Ensure the peace and security situation in the area. It would help to build the confidence of the investors to invest in the region.
- Build a feeling of local ownership by engaging local residents in the project related decisions. Before installing any project, implementers should check the feasibility of the project and take the concerns of local residents before execution of the projects.
- Human resource development should be agenda of social inclusive policy. To ensure the equal labor market opportunities, make investment to develop human resource.
- Policies should be designed to protect the small and medium scale enterprises in the region to mitigate the fear of being ignored from the agenda.
- Special facilitation and incentives should also be given to small businesses in backward areas for further growth like financing and access to national and international markets.
- Development of special economic zones one in each part of the country will provide the chance to attract investment, create jobs and increase export base. Through building backwards and forward linkages with SMEs would enable everyone to participate towards development.

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CHINA-PAKISTAN BILATERAL CURRENCY SWAP AGREEMENT AND CPEC

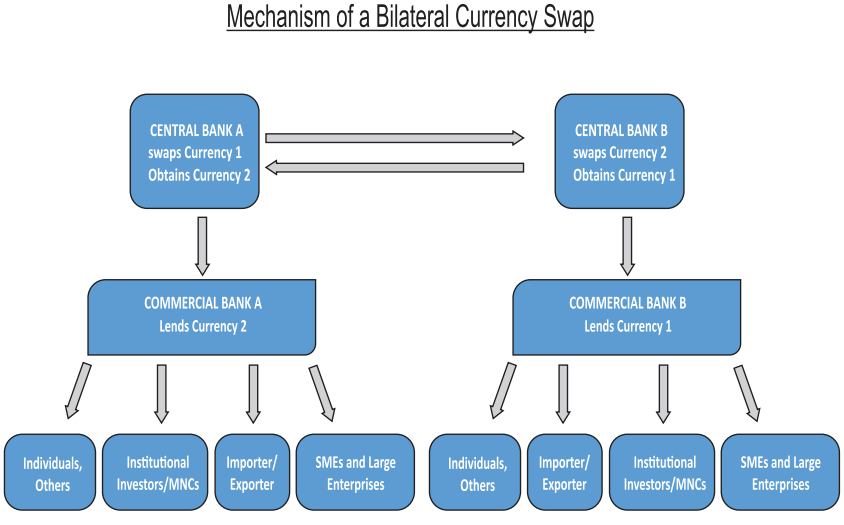
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INTRODUCTION

A bilateral Currency Swap agreement can be defined as an agreement between the two central banks for the exchange of a cash flow in one currency against the cash flow in another currency according to predetermined terms and conditions. Under these agreements, a Central bank can obtain foreign currency from the issuing Central bank – usually for the provision to domestic commercial banks. The maturity period of the Currency swap agreements is negotiable for a short-term (up to one year) to the long-term between 3-10 years by making it a very elastic mode of foreign exchange. The interest rates attached to these agreements can be fixed or floating and are generally expressed as an inter-bank lending rate such as "benchmark rate" plus or minus a certain number of points, based on interest rate curves at the beginning and the credit risk of the two parties.

Figure 1 explains the scenario more clearly, at the beginning of the swap, the Central bank "A" sells a stated volume of currency "1" to the central bank "B" and exchange currency "2" at existing market rate. Central bank "A" promises to purchase back its own currency at the pre-determined rate on an agreed future date. Central bank "A" then utilizes currency "2" which it has attained through currency swap to further lend that to the domestic banks and companies. On pre-decided future agreement date, funds are paid back along with final settlement for interest to formally close the agreement.

Figure: 1: Mechanism of Bilateral Currency Swap



Source: Author's contribution

Benefits of Bilateral Currency Swap Agreement

There are numerous benefits of bilateral currency swap agreement including:

1. Bilateral Swap Agreements provide a feasible mode of hedging against foreign currency fluctuations or the exchange rate risk.
2. It offers the opportunity to acquire foreign currency loans at a competitive and better interest rate as compare to the direct borrowing in a foreign market.
3. Swap lines empower the country to remain comparatively secure at the time of financial distress. Since banks are unable to easily acquire the foreign currencies and face difficulty in funding assets during the time of financial distress. Therefore, the availability of swap lines with foreign Central banks enable the domestic banks to maintain liquidity without affecting the foreign reserves.
4. Bilateral Currency Swap Agreements reduces the dependence on a single currency (e.g. US dollars) and gives the opportunity to have swap loans in the desired currency.
5. It allows the use of local currency in settlement of cross-border transactions to the extent of the swapped amount and reduces the currency transaction costs for traders.
6. China has signed several bilateral currency swap agreements for the facilitation of bilateral trade with different countries that are discussed in the next section.

Bilateral Currency Swap Agreements of China

China has signed around thirty-five bilateral currency swap agreements to facilitate international trade. This has helped renminbi to receive the status of international currency. Bilateral Currency Swap Agreements are used for different purposes including;

1. Trade

The circulation of the renminbi has increased significantly with the rapid development of the international trade of China and Swap agreements allow central banks to limit the domination of any single currency (e.g. USD) for invoicing and settling the trade. The availability of swap lines transmits a positive signal among the traders that the transactions will take place in local currencies between the trading partners, therefore the currency fluctuations can be avoided.

2. Investments

Investors need to incur extra hedging costs for their international transactions. Swap lines are the reciprocal its that are acquired by the partner Central banks, therefore, the availability of the swap lines in the onshore market boosts the investor's confidence and more investments can be attracted.

3. Foreign Exchange Reserves

To avoid financial instability, market tensions and accumulation of excessive foreign reserves with high costs, the bilateral currency swap agreements have proved to be a substantial, effective and less expensive tool. Currency swap agreements protect against currency fluctuations and signify the trust between the signatory governments.

4. LIQUIDITY

Effective use of Swaps can save a country from sanctions in exchange for its bailout plans. For example, Argentina had difficulty in repayment of dollar-based debts, therefore a bilateral currency swap in Yuan with China was signed. Since Yuan is an international currency, therefore the acquired Yuan were converted into US dollars and the bailout through swaps was executed.

Currency swap arrangements are a tool to manage the global financial turbulence e.g. Russia arranged a currency swap line with China shortly before the drop in the value of Russian ruble in 2014. Figure 1 reports the continuous increase in swap agreements of China with its value in billions of RMB.

Figure: 2: Bilateral Currency Swap Agreements of China

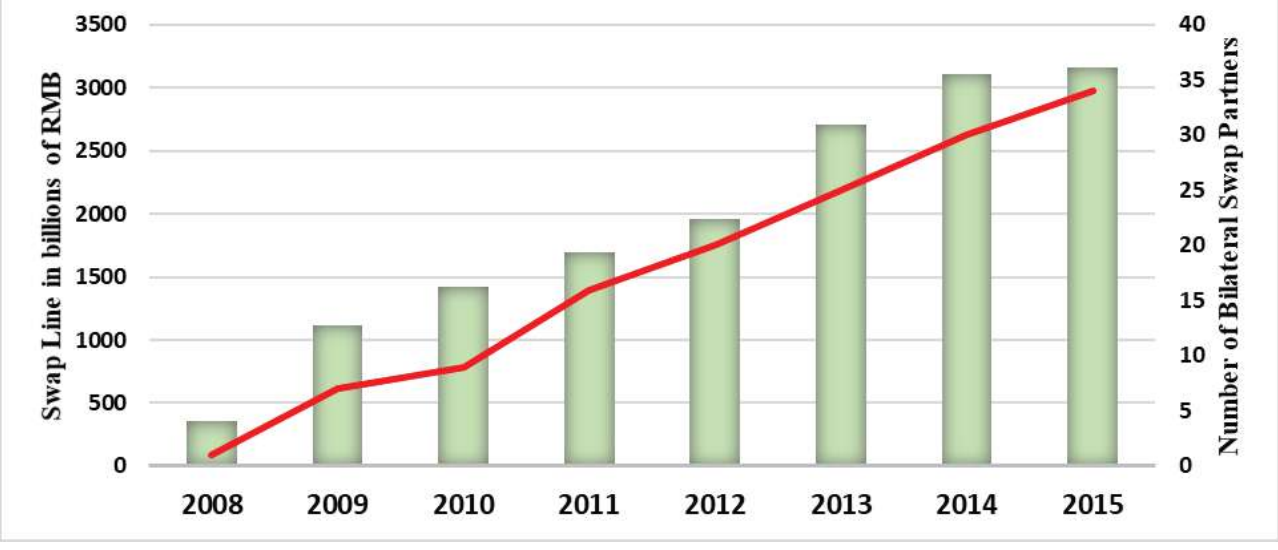


Table 1 lists down Bilateral Currency Swap Agreements of China with different countries along with the date of agreement and the amounts offered by China.

Table 1: Bilateral Currency Swap Agreement of China

No	Date of Agreement	Countries	Value in LCU/USD*	Value in RMB*
1	12 -Dec- 2008	South Korea	KRW 64 trillion	¥360 billion
2	20-Jan-2009	Hong Kong	HKD 490 billion	¥400 billion
3	8-Feb-2009	Malaysia	MYR 90 billion	¥180 billion
4	11-Mar-2009	Belarus	BYR 16 trillion	¥7 billion
5	23-Mar-2009	Indonesia	IDR 175 trillion	¥100 billion

No	Date of Agreement	Countries	Value in LCU/USD*	Value in RMB*
6	29-Mar-2009	Argentina	ARS 38 billion	¥70 billion
7	9-Jun-2010	Iceland	ISK 66 billion	¥3.5 billion
8	23-Jul-2010	Singapore	SGD 60 billion	¥300 billion
9	18-Apr-2011	New Zealand	NZD 5 billion	¥25 billion
10	19-Apr-2011	Uzbekistan	UZS 167 billion	¥ 0.7 billion
11	6-May-2011	Mongolia	MNT 2 trillion	¥15 billion
12	13-Jun-2011	Kazakhstan	KZT 150 billion	¥7 billion
13	23-Jun-2011	Russian Federation	RUB 815 billion	¥150 billion
14	22-Dec-2011	Thailand	THB 320 billion	¥70 billion
15	23-Dec-2011	Pakistan	PKR 351 billion	¥20 billion
16	17-Jan-2012	UAE	AED 20 billion	¥35 billion
17	21-Feb-2012	Turkey	TRY 3 billion	¥10 billion
18	22-Mar-2012	Australia	AUD 30 billion	¥200 billion
19	26-Jun-2012	Ukraine	UAH 19 billion	¥15 billion
20	26-Mar-2013	Brazil	BRL 60 billion	¥190 billion
21	22-Jun-2013	United Kingdom	GBP 21 billion	¥200 billion
22	9-Sep-2013	Hungary	HUF 375 billion	¥10 billion
23	12-Sep-2013	Albania	ALL 35.8 billion	¥2 billion
23	12-Sep-2013	Albania	ALL 35.8 billion	¥2 billion
24	9-Oct-2013	European Union	EUR 45 billion	¥350 billion
25	21-Jul-2014	Switzerland	CHF 21 billion	¥150 billion

26	16-Sep-2014	Sri Lanka	LKR 225 billion	¥10 billion
27	3-Nov-2014	Qatar	QAR 20.8 billion	¥35 billion
28	8-Nov-2014	Canada	CAD 30 billion	¥200 billion
29	18-Mar-2015	Suriname	SRD 520 million	¥ 1 billion
30	Mar-2015	Armenia	AMD 77 billion	¥ 1 billion
31	10-Apr-2015	South Africa	ZAR 54 billion	¥ 30 billion
32	25-May-2015	Chile	CLP 2.2 trillion	¥ 22 billion
33	5-Sep-2015	Tajikistan	TJS 3.2 billion	¥ 3.2 billion
34	11-May.16	Morocco	$1.54 billion	¥10 billion
35	6-Dec-16	Egypt	$2.6 billion	¥18 billion

Source: PBOC and central banks of respective countries
The second column reports the contract's initiation dates while the amounts in last two columns are the extended swap lines (if any) of China with countries.

Bilateral Currency Swap Agreements: China and Pakistan

The Currency Swap Agreement (CSA) was signed between Pakistan and China in 2011 and it allowed both countries to make transactions in either Pak Rupee or Chinese Yuan . The agreement was for three years with an aim to use regional currencies for trade settlements. In 2018, the bilateral swap line has been doubled. The details of both are given below.

Phase 2

- State Bank of Pakistan signed Currency Swap Agreement (CSA) with the Peoples Bank of China (PBOC) on Dec 29, 2011.
- The Currency Swap Agreement has been implemented in respective local currencies i.e. Pakistan Rupee 140 Billion and Chinese Yuan 10 Billion.
- In 2013, State Bank of Pak- istan (SBP) has taken me- asures to use Chinese Yuan (CNY) in transactions with China for expanding local CNY Settlement and Clearing Mechanism in Pakistan.

Phase 2

- With an objective to extend and promote trade and financial cooperation between China and Pakistan; on May 24, 2018, the Central Banks of both tries agreed to extend the swap arrangements for three years.
- The swap line has been extended from 10 billion Yuan to 20 billion Yuan and from 165 billion to 351 billion Pak rupees.
- The current account deficit of Pakistan is surging; therefore, it is vital for Pakistan to widen its bilateral currency swap agreements with China and other trading artners. This study aims to build a foundation for the understanding of currency swap agreement between china and Pakistan and its implications on CPEC.

Bilateral Currency Swap and CPEC

Bilateral currency swap agreement will have a strong positive impact on the economy of Pakistan through the China Pakistan Economic Corridor (CPEC).

1. Chinese companies investing in projects of CPEC can have the profit repatriation in terms of Yuan instead of dollars or other foreign currencies. This makes good economic sense for China and Pakistan for implementing projects under CPEC.

2. Since Pakistan is struggling with its external account imbalance at present, and due to CPEC, investments and imports are growing rapidly. Trade in national currencies will shield both the countries against any influence from externals and will offer support against exchange rates fluctuations.

3. Under the Bilateral Currency Swap Agreement between China and Pakistan, the commercial banks are permissible to arrange swap lines with the State Bank of Pakistan and offer loans. This will not only let the active utilization of bilateral currencies for the bilateral transactions under CPEC but will also steadily decrease the dependence of Pakistan on the US dollar.

4. Since the traders under CPEC in Pakistan would be able to have transactions in Yuan, therefore, it is expected that it will simplify the operations of CPEC projects.

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STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) FOR CPEC: A WAY FORWARD

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One Belt one Road (OBOR) or Belt and Road Initiative (BRI) - initiated by China in 2013 - has the objective to promote the trade between connecting countries in Asia, Europe and Pacific through road and rail networks and the provision of other essential infrastructure like ports, power grids, oil and gas pipelines, etc. It is expected to rejuvenate the ancient trade routes namely Silk Route connecting Asia with Europe, and hence ensure economic strengthening. The initiative has been termed as the 'project of the century' as it connects more than 65 countries of Asia, Europe, Africa with over three billion people of the entire region.

BRI consists of six economic corridors and the China-Pakistan Economic Corridor (CPEC) holds pristine importance within these corridors. CPEC promises various potential benefits to Pakistan in the form of economic and human development, job creation, and trade enhancement. Investments under CPEC in the power generation and distribution sectors will provide a momentous boost to the my as well. Several large-scale investments in infrastructure, energy and industrial growth projects are currently in progress, which is expected to further fasten the targeted economic growth of the country. CPEC portfolio is expected to trigger the GDP growth of Pakistan by 1.5 % from 2016 to 2020 and a further increase of 1 % for the period from 2020 to 2030. However, various pro- jects under CPEC have environmental implications as well, which need to be curbed with the suitable policy measures.

With the new energy projects under CPEC, there is a risk of increased greenhouse gas emissions (GHGs) from the burning of fossil fuels for energy generation that may lead to a failure in compliance with the Paris Agreement on climate change. It can also increase air pollution that may worsen the air quality and impact human health negatively. There is also an increased risk of oil spills in deep-sea Gwadar Port and consequent harm to the marine life. Similarly, the connecting wetlands with the CPEC activities may face destruction and thus the dependent livelihoods, biodiversity, and migratory birds may face the impacts. Also, there may be a possible loss of endangered biodiversity along the CPEC corridor due to habitat fragmentation, deforestation, diversion of rivers in dam construction, groundwater, and soil pollution.

In case of the large-scale infrastructure development under CPEC, displacement of communities may also exacerbate the environmental problems ad- ding pressure on the natural resources, including forest, water, biodiversity and the concerned ecosystems along the CPEC alignments. The sensitive mountainous ecosystems of Pakistan are already under high climatic stress due to climate change; they may be subject to avalanches, glacial melt, soil erosion and landslides. This will result in increased sedimentation from the watersheds that are the source of fresh water. Industrial pollution through the establishment of nine prioritized Special Economic Zones (SEZs) under CPEC may also contribute to air emissions, wastewater, land pollution, coastal and marine pollution, solid waste, and hazardous materials.

As stated above, CPEC projects include power genera-

tion, infrastructure development, and the establishment of SEZs. Keeping in view the CPEC projects and their potential impacts, there is a need to establish the environmental safeguards bas- ed on the assessments. The sc- ope of these environmental safeguards may unanimously be agreed by all stakeholders and implemented as a rule of thumb. Only thr- ough the endurance of these environmental sa- feg- uards, mitigation against the potential impacts of CPEC projects can be ensured. For this purpose, the Strategic Environmental Assessment (SEA) of CPEC be planned and carried out.

Strategic Environmental Assessment (SEA) is an analytical and participatory approach that is used to integrate environmental considerations into policies and plans and to evaluate the inter- linkages between economic and social considerations. Thus, SEA is a tool to structure the public and government debate in the preparation of policies, plans and prog- rammes, feed this debate through a robust assessment of the environmental and, where required, other consequences and ensure that the results of the assessment and the debate are taken into account during decision making and implementation. This means that public participation, transparency and good quality information are key principles. SEA is thus more than the preparation of a report; it is a tool to enhance good environmental governance. A good SEA - preparation and implementation can help identify better opportunities for environmental protection, climate mitigation and adaptation, prevent costly mistakes, build stakeholders' commitment, reduce poverty more effectively, and prevent conflicts.

The key phases of a SEA do resemble with an Environmental Impact Assessment (EIA); however, both can be differentiated, and this difference is explained in the following table 01[3]:

	SEA	EIA
Process	Iterative	Linear
Screening	Mostly decided case by case	Projects requiring EIA are often listed
Scoping	Combination of political agenda, stakeholder discussion and expert judgment	Combination of local issues and technical checklists
Public Participation	Focus on representative bodies	Often include general public
Assessment	More qualitative (expert judgment)	More quantitative
Quality Review	Both quality of information and stakeholder's involvement	Focus on quality of information
Decision making	Comparison of alternatives against the policy objectives	Comparison against norms and/or standards
Monitoring	Focus on plans implementation	Focus on measuring actual impacts

Table 01: Understanding the difference between Eia & Sea

Conclusively, an EIA aims at better projects; however, the SEA aims at better strategies, ranging from legislation and country-wide development pol- icies to more concrete sector and spatial plans. SEA is wid- ely applied in different shapes and forms and has achieved successful results in different countries.

In light of the above-mentioned broader scope of the SEA, it is suggested that the SEA of CPEC projects may be conducted and followed up with the scoping studies for any specific concerns related to the biodiversity and livelihood. SEA of CPEC must include the cost to the environment in case of every project under CPEC and the implementation must be monitored accordingly. While planning the CPEC projects at the cumulative level, the SEA should be conducted where the development, environment and people should be considered in a nexus. This will cover not only the human development but also the natural

resources under the ecosystem-based approach.

Given the scale of CPEC unrolling and its potential adverse effects on the natural environment, Strategic Environmental Assessment is crucial to ensure that the impacts are minimal, ensuring sustainable development in the area while the community awareness, capacity, resilience and livelihoods get a boost without compromising on the fragile ecosystems and ensuring sustainable development.

For successfully conducting SEA for CPEC, the Centre of Excellence for CPEC (COE-CPEC), International Union for the Conservation of Nature, IUCN-Pakistan and IUCN-China can collaborate to enhance better understanding of the key concerns on both sides. This may involve engaging high-level sustainable development experts from Pakistan and China and formulation of necessary advice and recommendations for focal ministries in both Pakistan and China. The recommendations to the respective representatives of the Government of Pakistan and the National Development Reform Commission (NDRC) of China would be provided so that the safeguard measures are adopted for conserving natural resources, biodiversity and safeguarding the livelihoods of local communities in particular. This may further strengthen the CPEC portfolio and ensure environmental sustainability.

Besides SEA for CPEC, some of the strategies/measures that should also be adopted to ensure environmental sustainability under CPEC portfolio are as follows:

- Under the Pakistan Environmental Protection Act, 1997 / provincial environmental pro- tection acts, it is mandatory to conduct EIAs of the development projects. The same legislative requirement should also be followed for all CPEC projects with diligence (and in true letter and spirit) both at federal and the provincial levels;

- China has established power plants that are based on ultra-supercritical technology in their country. Pakistan may also commission such technologies for power generation through future agreements under CPEC. The usage of coal as a source of power generation is the need of time; however, the usage of latest technologies such as ultra-supercritical technology can further significantly reduce emissions from the power plants being commissioned under CPEC;

- Pakistan can take advantage of bringing cost-effective and climate-compatible investments in the country through CPEC new projects. Ministry of Climate Change, along with the federal and provincial environmental protection agencies (EPAs), should prepare plans to seek support from China for Pakistan-focus carbon trading that may finance several new climate-compatible and climate-resilient projects in the country under the overall umbrella of CPEC in the future;

- Biodiversity assessments along CPEC alignments need to be initiated in coordination with the relevant institutions. Biodiversity concerns may also be addressed by establishing the 'CPEC biological corridors' across the highways for facilitation of the animal movement across and to maintain the threatened biodiversity, to mitigate the impact of habitat fragmentation. Ecotourism may be considered as a livelihood option promoting biodiversity conservation.

- Area-specific local action plans may be developed to address CPEC specific issues related to pollution, environmental degradation, climate change and biodiversity loss.

- Consultative sessions with local authorities and key stakeholders from research, academia, policymakers, civil society, the private sector and media and awareness raising through dialogues and seminars about the climate change and environment-related issues along CPEC alignments should be planned and conducted.

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EXPORT COMPETITIVENESS: ISSUES AND REMEDIAL MEASURES

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INTRODUCTION

Trade has tremendously changed the World dynamics strategically and geographically for being essentially important to accelerate economic growth and to earn foreign exchange. In Pakistan, the focus has remained mainly on import substitution than equal consideration of export orientation. Due to rising imports and declining exports, the trade deficit has remained the critical economic issue that Pakistan has been facing for decades. One most promising way to overcome trade deficit and to boost the economy is through export promotion which requires policies to attain export-led growth that revolves around finding the framework of approaches to increase the capacity to sell domestically produced goods and services in global markets. This ability to export is often referred to and understood as "export competitiveness".

A definition of national competitiveness according to the National Competitiveness Council stated “Competitiveness is the ability to achieve success in markets leading to better standards of living for all. It is based on several factors, notably firm level competitiveness and a supportive business environment that encourages innovation and investment, which collectively lead to strong productivity growth, real income gains and sustainable development”.

The concept of competitiveness applies most appropriately to both firms and products. Theorists identify the national competitiveness as an important determinant of a firm’s overall performance and sometimes analyse it from the sectoral perspective. Studies also highlight that economies have the potential to drive economic growth and enhance national competitiveness. Therefore, competitiveness is also linked with the notion of competition, which depicts the overall capacity of persons, companies, economies or regions to maintain themselves in the local or international competition and to benefit from it. Export competitiveness can help an economy to increase its export volume and to overcome trade deficit.

ISSUES IN EXPORT COMPETITIVENESS

Both demand and supply side factors are important for export performance. Building a competitive supply capacity can help to effectively exploit exports opportunities. Strong linkages with international markets, physical and investment environment, quality standards, institutional structure (protection of property rights), and intra-regional market access play an important role in the exchange of goods.

Moreover, Foreign Direct Investment (FDI) is likely to affect export performance positively. FDI strongly contributes to the transformation of the composition of exports. For instance, in Singapore and China, it increased significantly the technological content of exports. These countries exemplified on how to increase export capacity with help of knowledge-based industries. The government can help by bringing parties together.

Faruqee (1995) suggests that trade policy in Pakistan should be based on comparative advantage according to the World Trade Organization (WTO)’s standards, the member countries are required to utilize the benefits

of comparative and competitive advantage in the international economy, increasing competition and forcing resources to be allocated more efficiently. Azhar (1995) points out that exploiting Pakistan's export potential of non-traditional commodities will require considerable streamlining in the areas of storage, transportation, and packaging.

The issues faced by Pakistan and respective remedeial measures are summarized below.

Table 1. Issues and Possible Remedial Measures for Export Competitiveness

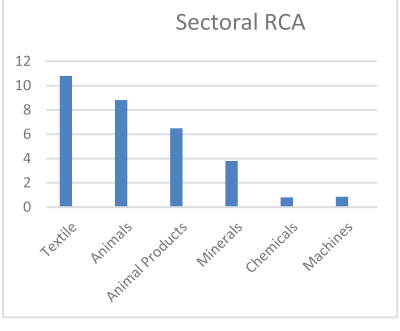
Sr.	Issues/Challenges	Possible Remedial Measures to these Challenges
	1. High Input Costs:	
	Exporting bodies pay high costs of input e.g. Energy which they use in production. Such costs adversely affect export performance in form of reduction of available funds and lack of improvement in competitiveness.	There should be an arrangement of low-cost energy production through alternate sources. The energy mix will result in relief to producers in form of reduced per unit cost. Transmission and distribution of energy should be effectively monitored and managed.
	2. Tariff Variations and Tax Regimes:	
	Variations in tariffs and regulatory duties increase the cost to exporters for importing the raw materials and capital inputs. SMEs cannot comply with such tax regimes and eventually cannot grow with healthy profits.	FBR can play its role in order to support exporters. An increase in production with exportable surplus and expansion is possible through rationalize tariffs and taxation. Institutional reforms in FBR policies are critical for export performance.
	3. Financial Institutions & Intermediaries:	
	The banking industry is not sufficiently competitive and interactive for foreign transactions and facilitating of exporters.	The banking system should be more efficient, automated and should be linked with the international banking system.
	4. Exchange Rate Variation:	
	Overvalued and misaligned exchange rate harms the trade transactions in long-run and makes exports less competitive.	Exchange rate should effectively be managed and properly controlled by monetary authorities.
	5. Exports Oriented Infrastructure:	
	There exists a lack of involvement and unity among trade associations and chambers of commerce and industries in developing the capacity of industrialists and producers.	Institutional framework should be aligned to achieve export targets and goals. Trade promotion can be brought up by focusing on the export-oriented infrastructure and capacity building.
	6. Transport Policy:	
	High transportation costs are borne by the exporters and cause an increase in overall cost. The reason is many ports and transportation modes are still dysfunctional in our country.	Policy reforms are required in transit fees and duties that exporters have to pay should be discounted to boost exports of some certain products. Activation of such nodes will lower the movement cost of shipments.

7. Fiscal Arrangements:		
	There is a need of fiscal support, subsidies and special packages for exporting bodies other than the textile sector.	Fiscal incentives should be given for endowments-based products as well as fiscal support should be given to. In past subsidies are given to the textile sector only.
8. FTA Negotiations:		
	FTAs need to be better negotiated based on more rational assessments in favour of our economy. Lack of focus exists on tariff and non-tariff barriers.	FTA settlements should be in such a way that foster FDI attractiveness and interest of local industry should not be affected.
9. Skilled Labour Shortage:		
	Shortage of skilled labour exists in the market, which hinders productivity and efficiency.	Technical and Vocational training programs based on industrial requirement should be initiated.
10. Integration with Global Value Chain		
	Pakistani economy is not integrated with global value chains. As Pakistan's export contribution in global trade is merely 0.13 per cent.	Pakistan commercial councillors and diplomats should participate to brand the local products and facilitate arranging relevant export by playing moderator role.
11. Other Issues		
	Some other issues that influence export competitiveness are, for example, non-tariff barriers, certifications, regulatory issues, and technological issues.	Measures should be adopted to resolve all these issues. Strategies and policy reforms are also required to tackle the hurdles.

Above described issues cause low competitiveness of exports as evidenced by The Global Competitiveness Report (2017-18), where Pakistan is ranked 115 on competitiveness index. The reason being is less diversified exportable products and target markets that cause low export competitiveness. Moreover, one indicator to measure competitiveness is economic complexity, which measures the extent of product, firm and market diversification of any economy. Pakistan is ranked 98th out of 126 countries on economic complexity index (OEC, 2017). According to Erkan and Yildirimici (2015) machinery, metals, and chemicals products are the most complex products, which implies that these product categories can be diversified in order to accelerate competitiveness.

Pakistan's revealed comparative advantage (RCA) as mentioned in Figure 1, mainly lies in textile (10.8), animals (8.81), animal products (6.49), minerals (3.81), and vegetable products (3.85). Moreover, the RCA values of cotton fabric (82.1), house linen (93.8), cotton yarn (73.2), leather (41.4), and rice (49.9). However, the RCA of most complex products in the case of Pakistan is 0.80 for chemicals, 0.12 for machines, and 0.86 for metal products. This implies that Pakistan possesses comparative advantage and more diversification potential in textile, animals, and agricultural products.

Figure 1. Sectoral revealed comparative advantage



CONCLUSION

A Number of strategies can be adopted in to boost up exports competitiveness in Pakistan and to create international demand for local products. For example, exports packaging should be improved according to the international market standards. Secondly, to attain efficiency and productivity, more attention should be paid to physical capital in industrial manufacturing setups. Thirdly, it is obvious that well-developed infrastructure is an important element to enhance various economic activities including export-oriented production, supply chain mechanism and market systems. Fourthly, research and development (R&D) are essential to cope up the challenges and to meet dynamic demands worldwide.

Policy Implications for Boosting Export Competitiveness in Pakistan

Pakistan's exports basket is concentrated on limited products and markets. There is dire need to diversify exports. Higher scaling helps to diversify exports i.e. moving from primary exports to manufactured goods and highly valued services. Strategic measures, as well as trade policies, are of great importance. There is a need to customize trade policy. Following are the brief policy guidelines to enhance export competitiveness in Pakistan.

- There is a need to focus on human capital development, efficient governance mechanisms, and other similar aspects. Industrial clusters though exist in developing countries and they appear to be significant contributors to employment, industrial output and overall output of the country. The effective input of semi-skilled and skilled labour, use of modern technology and managerial expertise enable the clusters to innovate, export and expand.
- Encouraging SMEs to export is essentially important to increase export volume.
- The strategy should suggest increasing the volume of exports as well as to widen the range of products by selecting highly value-added products and discovering new markets and strategies for competing in existing markets.
- Moreover, once the components of the export basket are determined and target markets are selected, the focus should be on risk factors and critical issues (e.g. energy, tax regimes, skilled labour etc.) in order attain and maintain competitiveness.
- Trade should be enhanced among Pakistan and major trading groups like BRICS, ASEAN and European countries so that sharing of high-tech exports might take place. This will also provide the channel for inflows of FDI which is positively associated with export performance and eventually leads toward competitiveness.
- Finally, economic diplomacy is necessary to broaden the trading hub and to increase trading partners. As Pakistan has limited number of trading partners, through strategic and economic diplomacy the trade base can be widened, and eventually huge diversified markets will provide opportunities for producing and exporting various kinds of products to various markets globally.

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ECOTOURISM: AN OPPORTUNITY FOR SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT OF GILGIT-BALTISTAN (GB) - PAKISTAN UNDER CPEC

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ECOTOURISM

The increased focus on industrialization, technological advancement and economic development has raised the concerns for sustainable economic development. The spectrum for sustainable development caters three important components i.e. economic, social and environmental and it aimed to develop an economic system which runs with little or no consumption of natural resources. Ecotourism is one of the key areas of sustainable development. It primarily focused on nature experiences. This concept integrates the economic development with social as well as environmental concerns. It was first defined in 1990 by "The International Ecotourism Society TIES)" as "Responsible travel to natural areas that conserves the environment and improves the well-being of local people".

With the growing performance of the tourism sector and flow of tourists has increased the risk of natural destruction. Therefore, the concept of ecotourism is more than just "to travel and enjoy the nature". It also addresses the strategies to minimize the environmental and cultural consequences as well as to contribute to nature conservation and related investment. Demand for ecotourism has been raised with the inception of China Pakistan Economic Corridor (CPEC) specifically in northern areas of Pakistan. One of the key areas is Gilgit Baltistan and focused area of this study.

Gilgit, Islamabad, Peshawar, Dera Ismail Khan, Lahore, Multan, Quetta, Sukkur, Hyderabad, Karachi and Gwadar would be the primary hubs of economic activities. This radiating effect will gradually lift the under-developed regions out of poverty and put the populace on the path to progress. Whether CPEC will benefit the local population of Pakistan is a hotly debated topic, causing much consternation amongst the Pakistani public.[1,2] Additionally, development comes with a price like the problem of climate change, global warming, water shortage, extreme weather events such as floods, droughts and changing temperatures, Pakistan will have to take measures to combat and adopt low carbon development[3]. With the construction of the CPEC, the remote region of GB will become accessible. This will open the doors of economic opportunities for GB. Hence, this study seeks to evaluate and highlight the potential of ecotourism as economic activities that would bring prosperity to the region with the least possible impact on the environment. The aim is also to understand what measures the Government of Pakistan can take to facilitate and promote ecotourism.

Ecotourism is an important component of the CPEC Long Term Plan in the mountainous part of Pakistan particularly in Gilgit Baltistan (GB), Khyber Pakhtoon Khwa (KPK) and Azad Jammu Kashmir (AJK). This would be given a high priority in the Spatial Development Plans of the respective provinces, deserving policy support and incentives in the Trade and Industry Plan of CPEC LTP which will have direct impacts on the livelihood of the poorest of the poor by providing job opportunities.

In Pakistan, the tourism industry has developed rather slowly. Tourism companies first appeared in 1970s. After over 30 years of development, Pakistan can now meet the demands for specialized tourism activities, resulting in more and more foreigners' arrival, particularly in the northern areas of Pakistan. Tourism resources of northern Pakistan include landscapes, highest mountain ranges – the Karakoram, the Himalayas. the Hindu Kush, beautiful scenery, lakes, meadows of flowers, forest, veritable treasures in biodiversity, lush green fields, waterfalls, glittering glaciers, rich natural and cultural resources including Gandhara civilization and the cradle of polo. The Karakorum Highway (KKH), built on the remains of the ancient Silk Route; is the home to some of the rarest endangered species of animals; yet untouched by the 21st century. Also, GB is renowned for its excellent sites for paragliding, whitewater-rafting, mountain-climbing, etc. In fact, tourism promises to become a key contributor to the economy of GB[4].

Lack of supporting facilities and service items at many scenic spots and scarce leisure activities have led to slow development. However, in recent years, the tourism authorities of Pakistan have taken many measures, such as 50% decrease in the fees for climbing mountains over 6,500 meters and shortened the time for granting tourist visas.

Inbound tourism has also become an increasingly important part of the Pakistani economic activities with huge numbers going particularly to the mountainous and coastal areas. With the continuous improvement in the infrastructure of Pakistan, numbers of foreign tourists have been growing steadily. The number of inbound tourists from Europe is the largest (over 40%), followed closely by the tourists from the United States and Canada.

There is a traditionally amicable relationship between China and Pakistan. In recent years, China-Pakistan economic and trading cooperation has developed rapidly, and new progress has been made in China-Pakistan tourism cooperation. In 2003, Pakistan officially became a destination for Chinese to travel at their own expenses. A significant number of Pakistanis go abroad for tourism every year. They have been traditionally going more towards western countries. Recently more and more Pakistani tourists are going towards, the Far East, the Middle East and China.

Case Study Area

The GB is the focus area of this study. The study highlighted the cultural and environmental aspects.

Physical Environment

Gilgit Baltistan extends from 34° 40/ to 37° North latitude and 72° 30/ to 78° East longitude. For the purpose of administration, the GB province is divided into three division namely Gilgit, Baltistan and Astor. Altogether there are ten districts which are Gilgit, Ghizer, Nagger, Ghanchei, Baltistan, Shigar, Kharmang, Diamir and Astor. It covers an area of 27, 118 square miles with 98% mountainous containing the world greatest mountainous range including Hindu Kush, Himalayas and Karakoram. The area bordered with Afghanistan in the north, China in the northeast, Kashmir in the south and Chitral district of Pakistan in the west. Geographically the GB is well defined. The north and northern boundaries largely coincide with the major watershed parting of the drainage basin of Central Asia and of the Indus. The western boundary is defined by the watershed between Chitral and Gilgit rivers. To the south-west the watershed between Indus and Kishanganga and Kunhar

river in Kaghan valley form the boundary.

Of the highest mountain peaks of the world, GB, Pakistan has the largest share. Seven of the sixteen tallest peaks stand on Pakistan soil. Within 100 km radius of Gilgit, there are more than two dozen peaks ranging between 5490 to 7925 meters. Some of the highest peaks of the GB are given in table 1. The area consists of a steep slope.

The climate of the area is extreme and greatly variable depending upon the elevation, slope, aspect and other physical conditions. Generally, the winter is very cold and summers mild to very hot. The temperature varies between 280F to 950F. Largely it is an arid region out of reach of Monsoon climate with snowfall in winter and light rains starting in late winter and continue throughout the spring season. The average rainfall is 250 millimeters. Astor valley receives 510 Millimeter while Darel and Tangir valleys receive 125 to 250 millimeters of rainfall. However, due to the arid nature of the climate, the rainfall is less otherwise these slopes are very vulnerable to mudflow and landslide. The Indus originates in the northern slopes of the Kailash range in Tibet near Lake Manasarovar. It follows a north-westerly course through Tibet and enters in Jammu and Kashmir. The major tributaries of the Indus are the river Shyok, Gilgit, Hunza, Iskhuman, Yasin, and Shiger. These small rivers join river Indus are nourished by the numerous snowfields and glaciers. Some of the glaciers are the largest outside the polar world. These are listed in table 2. The area is very rich in biodiversity both flora and fauna. Khunjerab leading into Xinjiang China and Deosai are the two very important national parks for the protection of wildlife and plants species. Marco Polo sheep (Ovis ammon poli), snow leopard, ibex, Tibetan wild ass, bharal, wolf, red fox, brown bear, cape hare and alpine weasel, golden marmots, snow trout are important fauna of the GB. Although the trees and shrubs are very less in number, the area offers a variety of biodiversity during spring and early summers. One can view millions of wildflowers in bloom all over the lush green grassland and rolling hills at a scale scene nowhere in the Himalayas.

Table 1: GB-Pakistan: The highest peaks and their location

S.No	Name of Peak.	Height in Metres	Latitude.N	Longitude.E
1	K2	8611	35°53'	76°31'
2	Nanga Parbat	8126	35°14'	74°35'
3	Gasherbrum I	8068	35°43'	76°42'
4	Broad Peak	8047	35°48'	76°34'
5	Gasherbrum II	8035	35°46'	76°39'
6	Gasherbrum III	7952	35°46'	76°39
7	Gasherbrum IV	7925	35°46'	76°37'
8	Distaghil Sar	7885	36°20'	75°11'
9	Kunyang Kish	7852	-	-
10	Masherbrum V	7821	35°39'	76°19'
11	North Peak	7809	35°15'	74°
12	Masherbrum VI	7806	35°38'	76°18'

13	Rakaposhi	7788	36°09'	74°31'
14	Hunza Kunji (Batura-I)	7785	36°31'	74°31'
15	Kanjut Sar	7760	36°13'	75°25'
16	Saltoro Kangri	7742	35°24'	76°51'
17	Trivor	7720	-	-
18	Bride Peak	7654	35°37'	76°34'
19	Hunza Kunji (Shiper)	7611	36°27'	74°41'
20	MasostangKangri	7526	35°19'	77°38'
21	Rakhiot	7510	35°15'	74°37'
22	Pumari Kish	7492	36°12'	75°15'
23	Noshaq	7484	36°25'	71°50'
24	Teram Kangri I	7464	35°34'	77°05'
25	Malubating	7458	36°00'	74°53'
26	Sia Kangri I	7422	35°36'	76°45'
27	Haramosh I	7397	35°50	74°54'
28	Istoro Nal	7389	36°23'	71°54'
29	Momhil Sar	7343	36°20'	75°03'
30	Baintha Brakk	7285	35°57'	75°45'
31	Passu Peak	7284	35°29'	75°37'
32	Diran Minapin	7257	36°07'	74°40'
33	Apsarasa I	7245	35°32'	77°09'
34	Singhi Kangri	7202	35°35'	76°59'
35	Hachindar	7163	35°27'	74°29'
36	Kampire Dior	7143	36°37'	74°19'
37	Ghehishchish Sp.	7027	36°03'	74°58'

Source: (Modified After Shams and Khan 1987).

Cultural Environment

The GB dwell from times immemorial various tribes differing in race, languages and culture. Their origin is from Aryan, Scythian, Mongolian, Tibetan, Turko-Iranian and Caucasian conveniently termed as Dardic group. The earliest form of religion reaching GB seems to be Hinduism supplemented by Buddhism. Buddhist- stupas and rock carvings in some areas witnessed the thriving Buddhist culture. One of the large figures of Buddha carved into the rock side in Kargah "Nullah" at Gilgit. Some archaeological pieces of evidence were also discovered in the village of Naupura near Gilgit. From 9th to 12th Century Islam spread in the region via Badakhshan, Kashmir and Indus valley.

The languages spoken in the region are Shina, mainly spoken in Gilgit and Diamir. Balti- a variant of Tibetan spo- ken in Baltistan. The people of Hunza and Nagar speak Brushaski, while in

Yasin valley Wershikwar-a variant of Brushaski. Other languages spoken in the region are Wakhi, Khawar, Turki, Kashmiri and Gujri. Almost every valley has its own culture with distinct language or dialect. However, due to the high literacy rate Urdu is understood by every individual while English is also understood by educated folks.

Table 2: GB-Pakistan: Some Large Glaciers with length and river drainage.

MOUNTAINS	GLACIER	LENGTH (KM)	RIVER DRAINAGE
Himalaya.	Rupal (S)	18	Astor
	Rupal (N)	16	Indus
	Phungatori	16	Indus
	Rakhict	13	Indus
	Shafut	13	Indus
	Barmal	13	Wardwan
	Diamir	11	lndus
Karakoram.	Siachen	72	Shyok
	Biafo	63	Braldo
	Hispar	61	Hunza
	Batura	59	Hunza
	Baltoro	58	Braldo
	Gasherbrum	39	Shyok
	Chogolungma	39	Shigar
	Malungatti	35	Hunza
	Ghainri	34	Nubra
	Barpu	25	Hunza
	Pasu	24	Hunza
	Remo	24	Shyok
	Daintar	21	Hunza
	Ghulkin	18	Hunza
	Rakaposhi	18	Hunza
	Hasanabad	17	Hunza
	Ghutalgi Yas	15	Hunza
	Pisan	11	Hunza
	Ghulmet	7	Hunza
Hindu Kush.			
	Sakiz Jarab	30	Kunar
	Tirich Mir	22	Kunar
	Rich	16	Kunar
	Wasmu	11	Kunar

Discussion

Field visits, literature review both published and unpublished, internet, observation and discussion with the relevant stakeholder including experienced government professionals, researchers and academicians from the renowned public and academic institutions were the main source to get insights on the subject. Discussions were made that ecotourism products are a special kind of commodity which is developed for tourists and must enter the market to seek economic benefits. To this end, the planning, design and development of tourism products would keep the market as a guide and tourists' needs as a core, to fully explore and advance the existing tourism resources to produce the attractions that interest a tourist.

Public infrastructure development is the key and essential requirement for tourism development for which the governments should give the highest priority in the respective Annual Development Plans as without the necessary infrastructure of tourism, the Chinese and other FDI could not come. Tourism Development Plan for various types of tourism should be centred around certain core attractions and the integration of other resources in order to create marketable products. While developing tourist products, CPEC Plan would focus on exploring the connotations of Pakistan's culture, revitalizing in the process its own historical and cultural sites. Only then can it meet the demand so that the tourists can experience a historical time and space as well as have a foreign cultural experience.

Pakistan's improved security situation and the development of infrastructure has awakened a growing interest in its flagging tourism industry. After the restoration of peace in the country, a remarkable increase in foreign tourists has been recorded. Aware of this emerging trend, the World Bank has pledged its support and sponsorship of development projects led by the Pakistan Tourist Development Corporation (PTDC)6 in tandem with private investors. The year 2016 saw an influx of over a million tourists, which was the highest record in a decade. The PTDC is looking into developing tourist facilities and resorts accessible through the CPEC route7. This has given rise to concern over degradation of the destination's environmental resources - which consist of natural, built, as well as cultural landmarks. Discussions are made to upgrade the environmental protection policy parti- cularly focusing on biodiversity. Biodiversity is the attraction for tourists, therefore, it is suggested to build wildlife parks as build in GB "Yolk Park" and other flora and fauna focused parks is respective rich areas.

Conclusion and recommendations

Against the backdrop of the CPEC, ecotourism can open up the door to opportunities and usher in economic prosperity for the GB region of Pakistan. This land is endowed with great natural beauty and resources in addition to optimal physical conditions. However, climate change and global warming have become a very real threat across the globe. The area is prone to the natural hazards which can be accelerated due to the anthropogenic activities such as deforestation of the forests, a threat to the biodiversity and endangered species by over exploiting, causing land degradation which is some time beyond repair. This has roused the public to call for conservation so that fragile ecosystems can be protected from human impact. Therefore, it seems very timely for the initiative to develop sustainable tourism in GB.

This process would require informed participation of all

the relevant stakeholders, such as the local population - farmers and entrepreneurs, local lea- ders, religious leaders, civil society organizations, trades, unions, teachers, students, women groups, government policymakers as well as committed eco-tourists. Added to this, ecotourism promises to respect and preservation of GB's rich indigenous culture and traditions which is reassuring for the close-knit society. Investment in ecotourism may potentially deliver long-term socio-economic benefits to all the relevant stakeholders and bring development and prosperity to the region with a minimal impact on the environment.

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TRADE FACILITATION THROUGH CPEC: AN APPRAISAL OF SOST DRY PORT

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Sost Port is located in one of the most unique places on this planet. Sost dry port is in Gilgit Baltistan, the only dry port located in Gojal Hunza, it is the highest dry port in the world. Karakoram Highway (KKH) connects Sost port to Gilgit and other major Pakistani cities in the south, and in the north, it connects the Chinese city of Kashgar through the border pass namely Khunjerab. It is also the first formal Pakistani dry port at the China-Pakistan border facilitating trade between the two all-weather friends that are China and Pakistan.

Initially, China needed a con- tainer revolving centre to act as an inventory to regulate the disturbance in the flow of trade arising from blockade of KKH. Later the idea was advanced and the proposal for the dry port was given. In 2002, an agreement to construct Sost dry port at Gojal was made by signing a Joint Venture (JV) between the Sino-Trans Chi- nese Company and the Silk Route Dry Port Trust (SRDPT).

The decision to locate the dry port at Gojal was made due to the availability of suitable geography for the dry port in the region. Construction work started in 2002 and completed in 2005, Pakistan Customs and other functionaries commenced their operations in 2005. Both partners in JV worked from 2005 till 2017. In 2016, National Logistic Corporation (NLC) showed interest and later on took a lease of the port for 20 years. After taking charge of Sost dry port, NLC decided to give 20% gross profit to SRDPT and bear all operational costs exclusively, the local partners of the dry port have shown satisfaction over the current agreement with NLC.



Figure1: Sost Town Aerial View

The dry port provides a critical service for the formal trade flow by offering a processing centre for the transshipment of cargo, cargo inspection, and customs clearance etc. To provide these services, dry ports authority provides specialized infrastructure and services to the shipment companies. One such example is the customs bonded warehouse build for shippers for temporary storage of the goods, especially perishable ones. Dry port efficiency can greatly enhance the competitiveness

of a transportation corridor by reducing the total cost of shipment. The shipment cost is primarily a consequence of distance the shipment has to travel, and the delay it encounters during the transportation. The delay in the shipment can be reduced by swiftly facilitating the customs clearance and other governmental procedures. Another way to reduce delay in shipment is through corridor management systems, which control the flow of traffic within the corridor and mitigate the chances of congestion.

Sost dry port, in the following figure, has the capacity to hold and process containers of varying tonnage, sizes, and configurations. The road network from the Chinese side has the capability to send cont- ainers of different tonnage i.e. twenty and forty equivalent units to the Sost dry port. Currently Sost dry port has approximately 25 acre area, out of which 42 per cent land is in use by the dry port facilities, the remaining land is fenced off for future expansion. NLC has developed the port to process up to 20 standard sized containers at a time, whereas the overall capacity of the port is 500 containers. The energy requirements of Sost dry port are supported by the traditional generators running on fuel, whereas the more environmentally sustainable energy sources are needed, micro hydel and solar are some of those energy alternatives. The local community has been very gracious and contributed land for the use of multiple governmental agencies present at the site i.e. anti-narcotics force and telecommunication, but for more inclusive development of the Sost dry port the local community has to be given a more proactive part in the governmental agencies present at the site.



Figure 2: Sost Dry Port

Through one custom system (the legacy custom clearance system), usually, 4-5 days were required to process a container and also lacked transparency. Whereas WEBOC (Web-based one custom) system need only 1 to 2 days to do the same. Border trade between China and Pakistan was closed due to the trader's strike from April to June 2018. Traders showed their grievances over the introduction of new customs clearance system without proper training and consultation with the local traders, it should be prudent for the governmental agencies to implement any changes with the consultation of the local traders, as the main objective should be the facilitation of cross-border trade. Weboc although a very effective system for transparency of trade, but it needs to facilitate the local small-scale traders. The local small-scale trader of GB usually consolidates their small shipments with other small traders and then imports them in a single container, this arrangement is not handled efficiently in the Weboc system. In addition, the Weboc requires the financial transaction to be carried

out through banks, although for big traders this is not a problem, but for the small local traders, it was a serious concern. In order to make CPEC a success, the trade activities have to be facilitated, and these operational issues must be rectified, in a more inclusive manner keeping the local stakeholders in the loop.

Fully functional Sost port will not only support China-Pakistan trade, but it will also facilitate trade from Pakistan into China, Sost dry port connects directly to Kashgar a logistics hub in the Xinjiang augur autonomous region of China, and a predominate Muslim province. Pakistan's pharma products are in a high demand on the Chinese side. Pakistan should also concentrate on exporting its halal brand in meat to the Chinese Muslim province as well as the Central Asian Republics. For the future operationalization of CPEC north- south trade, it is important that trade consolidation takes place between Xinjiang province, Gilgit-Baltistan, and preferably including Kyrgyzstan and Tajikistan in this regional trade. For this trade consolidation, integration and alignment of customs procedures and standards are required. People to people contact also needs to be facilitated through harmonization of immigration procedures. The Chinese government should also provide trade concession to the GB products and should also facilitate them in customs clearance procedure. This will not only generate goodwill among the locals but will also improve the balance of trade between China and Pakistan. This will make CPEC a more sustainable endeavor for both countries. Although Chinese trucks carrying goods have rolled into the Sost Dry Port, this flow gets disrupted every year between November and March. Trade is halted due to extreme weather conditions. NLC and SRDPT are working to devise a mechanism to make KKH an ''all weather'' road, by bringing in modern snow cutting and road clearing machinery. This will increase the flow of trade in the whole region transforming particularly Pakistan's fate as an economic hub.

The discussion so far emphasized the importance of Sost dry port in CPEC, but for sustainable and inclusive development of CPEC, the local GB business and endowments must be encouraged to become part of the regional as well as the global value chains. The focus of regional policy, therefore, should be on the inclusion of less developed regions through investment in local infrastructure, providing them access to capital services, improvement in communication services and upskilling local human resource capital. Based on the latest ground realities of GB, there is immense potential for small to large scale new business, subject to available optimal infrastructure. No one can deny the exponential rising potential in the tourism business in GB, but the availability of standard connectivity and transport infrastructure are primary pre-requisites. Almost 1.75 million tourists arrived in Pakistan in 2017 .According to Jovago, the prominent hotel reservation and e-commerce platform in Pakistan claimed hotel reservations increased by 80-90 per cent in 2017. Over the past few years, Pakistan has seen a speedy increase in its tourism business. In 2017, World Travel and Tourism Council (WTTC) claimed the collective worth of tourism to Pakistan's economy at 19.4 billion USD's which is 6.9 per cent of gross domestic product (GDP). And, WTTC projects this to increase to 36.1 billion USD's in next decade .GB can benefit through local tourism as well. The service standardization in hospitality services is required in order to attract more international tourist. Again, incorporation of local youth is important. Tourism also benefits from the communication connectivity, currently, only one company Special Communications Organization (SCO) controls the communication business of GB. It makes it very difficult for the tourists coming to GB from the down country to have access to communication. Interconnectivity of communication networks needs to be developed so that Pakistani or Chinese mobile services can automatically utilize the operational communication infrastructure of GB.

Not only the tourism, but GB

also possess multiple natural endowments, namely fruits, minerals and fishery. But unfortunately, these endowments have not been exploited to their fullest potential. The value proposition of the Agri-products of GB is that most of these products are free from pesticide and chemicals. Gilgit Baltistan should make policies to attract companies specializing in fruit preservation and packaging. This will significantly increase Pakistan capability in exporting Agri-products. Under the umbrella of CPEC, one special economic zone (SEZ) is planned in GB namely Moq- pondaas SEZ. All the small to large scale investors can enjoy the structured industrial envi- ronment in the said SEZ. But the sustainable development of any geographical region can't be achieved without incorporating the voice of locals , some key recommendations from the GB Chamber of Commerce are. (a) Exemption of Duties on Import of LPG and Coal from China & Central Asia. (b) Increasing the capacity of the current local grid (c) Opening of KKH whole year. (d) Construction of International Airport in GB. (e) Establishment of Food Processing Zone in GB.

With the completed and ongoing CPEC projects, infrastructural would be improved. Also, there would be dire need of operationalizing this connectivity in an optimum way, which requires efforts from all the stakeholders including government bodies, business community and local residents to come forward and join hands and make GB a 'Northern Trade Hub' of Pakistan.

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CPEC Updates

In this section readers will find many CPEC related projects update at a glance. All readers and in particular the Entrepreneurs will find it the most interesting section for investment purposes in different projects.

Chinese Foreign Minister Visit to Pakistan

China's Foreign Minister Wang Yi arrived in Islamabad on Friday 7th September,2018. Wang Yi met his counterpart Shah Mahmood Qureshi on Saturday, 08th September and at a joint press conference after the meeting he expressed his views as "We have agreed to strengthen international and regional affairs. The two sides will work together to enhance the reconciliation process in Afghanistan. Wang Li also met with the Prime Minister Imran Khan in a meeting to discuss matters of mutual interest, including the China Pakistan Economic Corridor. Wang Yi exchanged views on bilateral relations and the international and regional issues of mutual interest during his meetings with Pakistani leadership. He reaffirmed the "all-weather strategic cooperative partnership" between the two countries, Wang underlined that Pakistan will always be a priority for China in its foreign policy.





Federal Minister PD&R Meeting with Vice Chairman NDRC on September 9, 2018

Realigning the goals (CPEC), Pakistan has introduced new targets of socio-economic and regional development under this unprecedented mega project.

"This development initiative would prove as a bright future for Pakistan", expressed Minister for Planning, Development & Reform (PD&R), Makhdum Khusro Bakhtyar in a marathon session with his counterpart, the Vice Chairmen National Development and Reform Commission (NDRC) of China Ning Jizhe ,Secretary Planning, Zafar Hassan, Project Director CPEC, Hassan Daud and officials from NDRC as well Chinese Embassy also attended the meeting.



The 56th progress review meeting



The 56th progress review meeting of CPEC, chaired by Minster of Planning, Development and Reforms, Makhdoom Khusro Bakhtiar, was held on 13th September 2018 in Islamabad. The meeting was also attended by Chinese Ambassador, Yao Jing. The progress review meeting aimed to seek an update over the ongoing CPEC projects and concluded that implementation of CPEC projects is to be speed up. Moreover, the review meeting also concluded that the CPEC projects should be opened to investment for other countries to diversify financing options and international consultants should be hired for financial modelling of future projects

For more micro details, please visit: www.cpec.gov.pk

CPEC Energy Projects

Project Name	Progress Update
2×660MW Coal-fired Power Plants at Port Qasim Karachi	• Financial Closed (FC) achieved • Civil works on site started in May 2015 • Jetty completed • Plant 2 months ahead of schedule • Energization in October 2017 • Ist Unit Inaugurated in November 2017 • Second Unit Commercial Operation Date (COD) 25th April 2018 • Project completed 67 days ahead of schedule • Current Status: Operational
Suki Kinari Hydropower Station, Naran, Khyber Pakhtunkhwa	• Financial Close achieved on 31st December 2016 • Land acquisition award announced on 17th November 2016. • Construction work under way. • Expected Commercial Operation Date (COD) December 2022
Sahiwal 2x660MW Coal-fired Power Plant, Punjab	• Financial Closed (FC) achieved on December 2015 • Project Completed in 28th October 2017 • Project has been connected to National grid Current Status: Operational
Engro Thar Block II 2×330MW Coal fired Power Plant TEL 1×330MW Mine Mouth Lignite Fired Power Project at Thar Block-II, Sindh, Pakistan ThalNova 1×330MW Mine Mouth Lignite Fired Power Project at Thar Block-II, Sindh, Pakistan	• Financial Closed (FC) achieved in April, 2016. • Construction work in progress. • Construction of Transmission line-contract awarded. Contractor mobilized • Thar coal plant begins pumping power into national grid in March 2019 Commercial Operation Date (COD) June, 2019
Surface mine in block II of Thar Coal field, 3.8 million tons/year	• Financial close attained in April 2016 • IA/EA signed • Mining work in progress ric tons per annum (MTPA)

For more micro details, please visit: www.cpec.gov.pk

CPEC Energy Projects

Project Name	Progress Update
	● Thar Block II Unearths Coal on 10th June 2018 ● Commercial Operation Date (COD) expected, 2019
■ Hydro China Dawood 50MW Wind Farm(Gharo, Thatta)	● Financial Closed (FC) achieved on March 27, 2015. ● Commercial Operation Date (COD) attained 5th April 2017. ● Current Status: Operational
■ 300MW Imported Coal Based Power Project at Gwadar, Pakistan	● PPIB issued LOI ● Site finalized by CCCC ● Under tariff award.
■ Quaid-e-Azam 1000MW Solar Park (Bahawalpur) Quaid-e-Azam	● COD of 3 x 100 MW attained in August 2016.
■ UEP 100MW Wind Farm (Jhimpir, Thatta)	● Financial Closed (FC) achieved on March 30, 2015. ● Commercial Operation Date (COD) attained 16th June 2017. ● Current Status: Operational.
■ Sachal 50MW Wind Farm (Jhimpir, Thatta)	● Financial Closed (FC) achieved on December 18, 2015. ● Commercial Operation Date (COD) attained 11 April 2017. ● Project Completed ● Current Status: Operational.

For more micro details, please visit: www.cpec.gov.pk

CPEC Energy Projects

Project Name	Progress Update
SSRL Thar Coal Block-I 6.8 mtpa & SEC Mine Mouth Power Plant (2×660MW)	• Financial Close of Plant and Mine second quarter of 2017. • Mine Commercial production is expected by 2019. • Plant Expected Commercial Operation Date (COD) 2018/2019.
Karot Hydropower Station	• Land acquisition award done. • Enviromental NOC issued: 14th July 2015 • EPC Stage Tariff: 28th April 2016 Financial Close achieved on 22nd February 2017 • Construction of access road/bridge, concrete batching plant, diversion tunnel and spillway, etc. are in process. • Work initiated through equity – 50% civil works completed. • Expected Commercial Operation Date (COD) December 2021.
Three Gorges Second Wind Power Project Three Gorges Third Wind Power Project	• LOS issued in August 2016. • EPA initialed on 30th November, 2016. • Financial Close March 2017. COD: Three Gorges Second Wind • Farm(TGTWF) : 30th June, 2018 • COD: Three Gorges Third Wind Farm(TGTWF): 9th July, 2018 Current Status: Operational
CPHGC 1,320MW Coal-fired Power Plant, Hub,Balochistan	• IA/ Power Purchase Agreement Signed on 25th January 2017 • LOS issued on 12th April 2016; 1st extension to LOS issued on 24th January 2017 • Ground breaking ceremony held on 21 March 2017 • Expected Commercial Operation Date (COD) 660 MW Feb 2019, 660 MW Aug 2019

For more micro details, please visit: www.cpec.gov.pk

CPEC Energy Projects

Project Name	Progress Update
Matiari to Lahore ±660kV HVDC Transmission Line Project	• Feasibility study completed • Tariff determined by NEPRA • TSA/IA initialed in December 2016 • Land acquisition for converter stations at Lahore and Matiari completed • Agreement signed between PPIB and State Grid of China on May 2018 Financial Closed (FC) achieved on 27th • February 2019 Expected COD in March 2021
Matiari (Port Qasim)-Faisalabad Transmission Line Project	• Feasibility study completed • Decision on tariff review petition announced by NEPRA • COD expected in 2018 / 2019 • TSA/IA initialed during 6th JCC China Electric Power Equipment and • Technology Company(CET) / State Grid nominated by Chinese side
Thar Mine Mouth Oracle Power Plant (1320MW) & surface mine	• Feasibility stage tariff obtained for coal. • Shareholding agreement on new equity partners in process. Under issuance of NTP/LOI.

CPEC-Energy Actively Promoted Projects

Project Name	Progress Update
Kohala Hydel Project, AJK (1100 MW)	• Feasibility Study (stage-1) Tariff Announced by NEPRA • Land Acquisition process started • Environmental NOC issued by AJ&K EPA • Financial close planned in Dec 2018 • Expected Commercial Operation Date (COD) 2025
Rahimyar khan imported fuel Power Plant 1320 MW	• Project is listed as actively promoted project • LOI by GoP issued

For more micro details, please visit: www.cpec.gov.pk

CPEC-Energy Actively Promoted Projects

Project Name	Progress Update
Cacho 50MW Wind Power Project (Sindh)	LoI Stage
Western Energy (Pvt.) Ltd. 50MW Wind Power Project	LoI Stage

CPEC-Potential Energy Projects

Project Name	Progress Update
Phandar Hydropower Station	Under review of experts from both sides.
Gilgit KIU Hydropower	Under review of experts from both sides.

CPEC Infrastructure Projects

Project Name	Progress Update
KKH Phase II (Thakot -Havelian Section) 120 KM	Work commenced in September, 2016. Contractor mobilized. To be completed by March 2020.
Peshawar-Karachi Motorway (Multan-Sukkur Section)	Construction works commenced in August 2016 Contractor mobilized Multan-Shujabad section inaugurated by Prime Minister on May 2018 Completion planned in August 2019
Khuzdar-Basima Road N-30 (110 km)	Feasibility and PC-I completed PC-I has been approved by ECNEC on 12-04-2017 Procurement of Civil Work is under process The project Basima Khuzdar has been taken up through PSDP

CPEC Infrastructure Projects

Project Name	Progress Update
Upgradation of D.I.Khan (Yarik) - Zhob, N-50 Phase-I (210 km)	• PC-I Approved by ECNEC on 12th April, 2017. • Land acquisition in Progress. • Accorded highest priority in 8th JCC
KKH Thakot-Raikot N35 Remaining Portion (136 Km)	• Feasibility and PC-I completed • PC-I has been approved by ECNEC on 18-03-2017 • LOI forwarded to Chinese side Procedural formalities to be completed shortly
Expansion and reconstruction of existing Line ML-1	• Feasibility completed • ML-1 Project declared 'Strategic' by 6th JCC in Beijing • Framework Agreement on ML-1 signed on 15th May 2017 during PM Visit to China • Commercial Contract for Preliminary Design signed on 15th May 2017 • Project will be completed in 2 phases • PC-1 of Phase-1 approved by CDWP in May 2018 • Expected COD 2022
Havelian Dry port (450 M. Twenty-Foot Equivalent Units)	• Feasibility completed • Project to be put on fast track • Framework agreement signed in May 2017
Capacity Development of Pakistan Railways	• Focus groups be established for effective training and capacity enhancement.

For more micro details, please visit: www.cpec.gov.pk

CPEC Gwadar Projects

Project Name	Progress Update
Gwadar East-Bay Expressway	• Cost approved by ECNEC on 12-01-2015 • Contract Agreement was signed b/w GPA & CCCC on 24-09-2017 • Groundbreaking ceremony of Eastbay Expressway was held on 22nd November 2017 by Prime Minister • Construction works underway • Date of Completion October 2020
New Gwadar International Airport	• Design and work plan agreed • Grant Agreement signed in May 2017 • Groundbreaking done by Prime Minister on 29th March 2019
Construction of Breakwaters	• Draft business plan has been received from Chinese (COPHCL), under review by MoP&S and GPA
Dredging of berthing areas & channels	• Draft business plan has been received from Chinese (COPHCL), under review by MoP&S and GPA • Draft MoU for joint Technical and Commercial Feasibility has also been Prepared and being vetted by concerned Ministries
Development of Free Zone	• Tax exemptions for port and Free Zone notified in Finance Bill 2016 • Ground breaking done by the Prime Minister 100% private Investment inside Free Zone. To be operated by COPHCL • 1st phase completed and inaugurated in January 2018 • Significant progress and response from investors • Gwadar Free Zone investment guide line published • First Gwadar Expo was held in January 2018 • A number of industries to start construction work in soon

For more micro details, please visit: www.cpec.gov.pk

CPEC Gwadar Projects

Project Name	Progress Update
Necessary Facilities of Fresh Water Treatment, Water Supply and Distribution	• PC-I for 5 MGD RO plant for Gwadar cleared by CDWP • Phase-1, lying of pipelines from Swad Dam to Gwadar is near complition. • Desalination plant establishment on BOT is floated
Pak China Friendship Hospital	• Grant request sent by EAD to MOFCOM • Feasibility study completed by Chinese team to add 100 beds from existing 50, for subsequent extension to 300 beds LOE is signed on 10th April 2018 between EAD adn MOFCOM Implementation mintues signed on 29th • March 2019
Pak-China Technical and Vocational Institute at Gwadar	• GPA acquired 18 acres land and infra-structure of old Gwadar Degree College for establishment of Pak-China Technical & Vocational Institute • The onsite feasibility study of the project has been carried out in January 2017 by the China International Engineering Company • Minutes of onsite feasibility study has been signed with Chinese side on 09th August 2017 • LOE between EAD and MOFCOM signed in April 2018 • Implementation mintues signed on 29th March 2019
Gwadar Smart Port City Master Plan	• MoU signed in Nov 2015 • LOE signed in August 2015 • Chinese Fourth Harbour Design Institute has been nominated for Gwadar Smart City Plan • Contract Signed in May 2017 • Completion planned in 2019

For more micro details, please visit: www.cpec.gov.pk

CPEC Gwadar Projects

Project Name	Progress Update
Bao Steel Park, petrochemicals, stainless steel and other industries in Gwadar	• Necessary approval process would be completed at the earliest for inclusion as new CPEC Project under Gwadar JWG
Development of Gwadar University (Social Sector Development)	• Chinese side will identify a leading Chinese university for collaboration with University of Gwadar on marine & maritime related subjects along with other disciplines
Gwadar livelihood Project	• Upgradation and development of fishing, boat making and maintenance services to protect and promote livelihoods of local population • COPHCL would take effective measures for social sector development

CPEC Others Projects

Project Name	Progress Update
Cross Border Optical Fiber Cable	• Ground breaking cermony performed by the Prime Minister • Work commenced October 2015 • Project Completed and inagurated by • Prime Minister in july 2018
Pilot Project of Digital Terrestrial Multimedia Broadcast (DTMB)	• Project completed. • Demonstration project with Chinese side is being processed. • PC-1 of the Demonstration project approved by CDWP on 2nd May 2018.
Early Warning System (EWS), Pakistan Meteorological Department	• PC-I for CPEC is being revised in light of CDWP observations • Planning Division allocated EWS (unapproved project), Rs. 100.00 million for PSDP Projects 2017-18 • EWS stands split between CPEC and World Bank

For more micro details, please visit: www.cpec.gov.pk

	● Work is at advance stage with World Bank ● The components don't overlap ● System will be integrated to draw maximum benefit

CPEC Rail Based Mass Transit Projects

Project Name	Progress Update
■ Karachi Circular Railway	● JCC agreed in principal for inclusion of Mass Transit System as part of CPEC component. ● Transport Working Group has been asked to work on the projects based further studies and consultation. ● Feasibility of Karachi Circular Railways completed in May 2017. ● Groundbreaking is expected in 2019.
■ Greater Peshawar Region Mass Transit	● JCC agreed in principal for inclusion of Mass Transit System as part of CPEC component. ● Transport Working Group has been asked to work on the projects based further studies and consultation. ● Feasibility of Greater Peshawar Region Mass Transit is under process.
■ Quetta Mass Transit	● JCC agreed in principle for inclusion of Rail Based Mass Transit Systems in Provincial headquarters as part of ● CPEC. JWG on Transport Infrastructure has been asked to complete the necessary formalities. ● Feasibility of Quetta Mass Transit is under process.
■ Orange Line - Lahore	● Construction work is underway. ● Orange line project will be complete in 2019.

CPEC New Provincial Projects

Project Name	Progress Update
Keti Bunder Sea Port Development Project	• Further studies and consultations to be initiated • Projects referred to concerned JWGs for consideration
Naukundi-Mashkhel-Panjgur Road Project connecting with M-8 & N-85	• Further studies and consultations to be initiated • Projects referred to concerned JWGs for consideration • Planning-PC-1 preparation is underway
Chitral CPEC link road from Gilgit, Shandor, Chitral to Chakdara	• Further studies and consultations to be initiated • Projects referred to concerned JWGs for consideration Planning-PC-1 preparation is underway
Mirpur - Muzaffarabad - Mansehra Road Construction for Connectivity with CPEC Route	• Further studies and consultations to be initiated • Projects referred to concerned JWGs for consideration • Approval of PC-1 in process
Quetta Water Supply Scheme from Pat Feeder Canal, Balochistan	• Relevant Provincial Govts. to work out proposals on implementation of projects
Iron Ore Mining, Processing & Steel Mills complex at Chiniot, Punjab	• Relevant Provincial Govts. to work out proposals on implementation of projects

CPEC Proposed Special Economic Zones (SEZs)

Project Name	Progress Update
Rashakai SEZ, KP	• Feasibility studies of SEZs is shared with Chinese side. • The MoU and Engagement Agreement for the development joint undertaking of the RSEZ project was signed between KPEZDMC and CRBC in January 2018. Subsequently, the two parties set out to negotiate the terms of Joint Venture Agreement, which has already been signed in November 2018. Presently, the two parties are in end stages of finalizing and signing the Concession Agreement, following which the Ground Breaking of the project will take place.
China Special Economic Zone Dhabeji	• Feasibility studies of SEZs is shared with Chinese side.
Bostan Industrial Zone	• Feasibility studies of SEZs is shared with Chinese side.
Allama Iqbal Industrial City (M3), Faisalabad	• Feasibility studies of SEZs is shared with Chinese side.
ICT Model Industrial Zone, Islamabad	• Feasibility studies of SEZs is shared with Chinese side.
Development of Industrial Park on Pakistan Steel Mills Land at Port Qasim near Karachi	• Feasibility studies of SEZs is shared with Chinese side.
Special Economic Zone at Mirpur,AJK	• Feasibility studies of SEZs is shared with Chinese side.
Mohmand Marble City	• Feasibility studies of SEZs is shared with Chinese side.
Moqpondass SEZ Gilgit-Baltistan	• Feasibility studies of SEZs is shared with Chinese side.

For more micro details, please visit: www.cpec.gov.pk

CPEC-Social Sector Development Projects

Project Name	Progress Update
People to People Exchanges	Efforts for intensification of People to People contact, media and cultural exchanges (including movies, drama, theatre etc.) would be done through agreed yearly programmes. Both sides resolved to promote Chinese and Pakistani culture and heritage as a way of long term partnership
Transfer of Knowledge in Different Sectors	Experts from industrial zones, rural and urban development, job creation & SMEs, water resources management & treatment and agriculture. Training workshops on industrial zone held from 11-18th October 2017.

CPEC Social Sector Development

Project Name	Progress Update
Establishment of Pakistan Academy of Social Sciences	Efforts to being made for establishment of PASS with the Chinese Academy for Social Sciences. HEC has been made focal agency on Pakistan and consultative process has commenced.
Transfer of Knowledge in Education Sector through Consortium of Business Schools	Consortium of Top Business Schools from Chinese and Pakistan Side established. HEC is leading the Project.

PDSP PROJECTS- Western Routes

Project Name	Progress Update
Hakla D.I Khan Motorway	• ECNEC approved separate PC-Is for construction and land acquisition on 07.11.2016 • Construction commenced and Work in Progress • Date of Completion Planned: December 2019
Hakla D.I Khan Motorway	• PC-I Approved by ECNEC on 12th April, 2017 • Land acquisition in Progress Accorded highest priority in 8th JCC
Zhob Quetta (N-50)	• Land Acquisition along Existing road Under Process. • ECNEC approved separate PC-Is for construction and land acquisition of the project on 28.03.2019 • Prime Minister perfom the ground-breaking on 29th March 2019 • Press Link: PM performs ground breaking of Quet-ta-Zhob Dual Carriageway
Khuzdar-Quetta– Chaman Section (N-25)	• Sorab – Kalat -Quetta section will form part of Western Route • Detail designing and feasibility in progress
Surab-Hoshab (N-85)	• Completed
Gwadar – Turbat – Hoshab (M-8)	• Completed and Inaugurated

CPEC Opportunities

This section elaborates the current and future opportunities associated with CPEC for different sectors and segments of the society.

CPEC OPPORTUNITIES



AGGLOMERATION ECONOMY

The actualization of agglomeration economies lies in the top tier of opportunities that CPEC is going to breed in Pakistan. According to world development indicators, in 1960, 11.52% of the population was living in urban agglomerations, 18.14% in 2000 and it increased to 22.33 in 2017. Urban planners/scholars have been citing agglomeration economies as making the actual backdrop of growth in the mega-cities and large city-regions in the world. Returns of economic activities increase in direct proportion with increasing the scale of urbanization, conditional only to the sustainability of efficiency of all the respective urban fabric. Here local governments, businesses, and consumers are easily reachable to each other, making the possibility of materializing a whole greater than the sum of its parts. Pakistan has been lagging behind in agglomeration economy due to a number of factors. CPEC is setting up a fabric of energy infrastructure components, which are going to create a matrix strong enough to hold together its agglomeration economies. To stitch this fabric together in a seamless whole requires a vibrant system of urban governance, wisely chosen loci for the urban agglomerations, and development of skills and knowledge. Making the most out of CPEC opportunities, Pakistan should also transform its economically static urban agglomerations. To build the pending urban, industrial, and economic dreams, CPEC brings a high time for planning and development departments to come forward in collaboration with consortia of respective scholarship and construct the designs of materializing agglomeration economies. Node cities of CPEC connecting whole Pakistan and establishment of SEZs have a great potential of agglomeration economy. These venues have a huge potential for SMEs development, job creation, and contribution in the overall economic development of Pakistan.

OPTICAL FIBER CONNECTIVITY



The fiber cable connectivity plays an important role to facilitate and boost the tourism industry in Gilgit-Baltistan (G-B) and Azad Jammu Kashmir (AJK). It can be used to advertise natural tourist spots of G-B and AJK at international level and will enable many tourist services e.g. use of social websites, GPS system and with technology, tourists would be able to do online bookings of hotels well ahead of time. Fiber optics project under CPEC plays a vital role for unimpeded trade through Khunjerab border and will provide same internet facilities as available at any developed part of the country. As digital infrastruc-

CPEC OPPORTUNITIES

al deficit in GB is one of the biggest hurdles for efficient cross-border trade facilitation between China and Pakistan through the Khunjerab border.

The availability of new internet connectivity will help to modernize government administration processes which will enhance the delivery of public services and provision of information through the Internet. It will also enable various e-government facilitates such as the construction of national data centers, safe cities, intelligent transport systems and various single windows operations for the better security and easiness of local people.

The inception of 3G/4G connectivity in G-B and AJK will provide high-speed internet access for the student of universities. Moreover, it will also help Higher Education Commission of Pakistan (HEC) to introduce more online education, distance learning degree programs, virtual classrooms, digital library to access books from anywhere anytime, and e-learning short courses and online job portal for students studying in universities and their collaboration with related companies and industries for the local people of G-B and AJK.

The inception of Optical Fiber Connectivity under CPEC will further expand the e-commerce market of Pakistan which is expected to grow up to US$1 billion by 2020. Recently world's largest e-commerce company, Alibaba signed a MoU with the Trade Development Authority of Pakistan to promote digital entrepreneur culture for small and medium enterprises (SMEs) in Pakistan. It will also provide a platform for different training programs for SMEs in the field of e-commerce. As a result, it will enhance foreign investment by exporting Pakistani products to international markets.

This fast and secure connectivity will also help to revolutionize the payment method by introducing the concept of digital banks for e-transactions. Currently, in Pakistan, around 95% of the e-business payments are being paid by cash on a delivery system which is one of the major hurdles facing by existing e-commerce companies, their customers and young entrepreneurs for the online startup businesses in Pakistan.

HOUSING CHALLENGES IN PAKISTAN



Housing is the acknowledged as the core policy challenge by the PTI led Government. Estimates of State Bank of Pakistan enlists that there was a backlog of 4.4 million houses only in the major urban centers of Pakistan (Sheikh 2017). Therefore, it is expected that by 2035 five biggest urban centers of Pakistan will account for 78% of total housing shortfall. Likewise, the rural housing sector is no exception to the above-mentioned scenario but here urban-centric housing is focused. Principal causes explaining worsening urban housing problem in Pakistan are particularly related to demographic shifts which resulted in the high urban population growth. Other complementary causes are; changing sociological dynamics in the urban areas and social

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dislocations in rural areas. These reasons directly cause an increase in housing needs. Consequently, the housing process has risen exponentially much faster than incomes which made housing predominantly problem of both middle- and low-income people in Pakistan.

In this regard, there are new avenues of opportunities for cooperation between China and Pakistan in order to effectively address and manage urban-centric housing question. China could extend meaningful policy insights based on its own experiences in dealing the housing policy issues primarily based on four following reasons;

1. **China now represents the world's largest construction market in terms of built space, adding over 2 billion square meters of floor area annually-nearly half the global total.**
2. **Half of China's annual constructed space is residential, which resulted in China's boom in residential construction.**
3. **Recent housing sector reforms in China during 1988 and 1998 which sponsored comprehensive market-based housing provision.**
4. **Previously China has the experience to addressed housing problem on social grounds rather than relying on market-oriented mechanisms.**

Based on the above-mentioned Chinese experiences in the housing sector there are an extensive set of opportunities to address the dire need of housing in Pakistan. Three main opportunities could be;

Incorporate housing as a new avenue of profitable investments under CPEC by encouraging Chinese construction/ housing companies to build affordable houses schemes in Pakistan.

Frame robust regulatory frameworks for the housing sector in order to protect the housing rights of the people of Pakistan.

Ensure the provision of suitable land for the affordable housing through the mechanism of land zoning, land pooling and engaging the landowners by sharing the property rights, such as providing them planned plots instead of land compensation.



MARBLE SECTOR POTENTIAL

Pakistan's exports basket is limited, and markets are concentrated. Textile contributes lion's share of our export earnings. However, Pakistan is endowed with abundant resources, if tapped efficiently, will provide sufficient foreign exchange earnings. One such natural resource is Marble and Granite (or dimension stones). Estimated reserves of marble and granite in Pakistan are respectively 300 and 1000 billion tons. These numbers place Pakistan 6th largest producer of the dimension stones. Major colours in

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marble include white, grey, black, green, pink, brown and yellow, and can be found in Buner, Mohmand, Mardan, Parachinar, Gilgit, Hunza, Lasbella and Khuzdar. Regarding granite, they can be found with black, green, pink, grey, gold, yellow and red colours in regions such as Gilgit, Dir, Chitral, Malakand, Swat, Swabi, Kohistan, Nagarparker and Chagai.

Despite the potential of the sector, marble and granite exports of Pakistan are 2% of its total exports and are mostly in raw form i.e. blocks and slabs. Top export destinations in the year 2016 are China (89%, $31M worth of exports), South Korea (1.93%) and Saudi Arabia (1.8%). Its contribution to the country's GDP is only 0.5% and provide jobs to nearly 40,000 people. Many reasons can be attributed for not harnessing the sector's potential such as lack of stone dimensioning technology, regulations, lack of focus on value addition and investment.

Pakistan Stone Development Company (PASDEC) has been founded in 2006 to promote the marble and granite sector. The company has taken many initiatives to make the sector globally competitive. For instance, the initiatives regarding the minimization of quarrying waste from 85 to 45%, developing procedures to ease business operations in the sector, training workforce, promoting strategic partnerships and export marketing.

Nevertheless, the huge potential still exists to exploit the sector. The booming construction industry in China offers tremendous opportunity for investors of both the countries to make joint ventures and take the sector ahead. Possible joint ventures can be formed in SEZs of Mohmand and Rashakai. High-quality marble in Mohmand and better connectivity of Rashakai economic zone via M1 motorway and its proximity to current marble clusters presents an ideal place for investment. The planned special economic zone in Buner and its existing 500+ marble factories connected through Swat Expressway via Palai and Ambella will provide further alternative option for foreign investors to take advantage of the unparallel marble reserves of the country. Also, Moqpondass and Bostan SEZs show potential to top the marble reserves of Balochistan and GB, respectively.

E-TECHNOLOGY THROUGH OPTICAL FIBER



The 44 million Dollar Pak-China Optical Fiber Cable (OFC) project completed in 2018 is a part of CPEC early harvest projects, featured with the development of ICT via the communicational infrastructure of around 820 kilometers OFC from Rawalpindi to Khunjerab. This project will enable high-speed international connection to cater to the rapidly growing internet needs. Moreover, it will help to boost the digital innovation in the country according to the universal trends along with providing Pakistan with a global platform of connection and making a positive impact on the lives of local masses. Besides, OFC project will bring new skill development dimensions and training programs for operation by integrating different sectors with ICT. This will emerge the requirements of IT and telecom services division jobs and trainers for operational and execution mode, raising the IT-related employment opportunity in below-mentioned sectors along with other key attributes, like:

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Providing a scheme of integration via Broadband Avenue along with high internet speed across the region via connecting the villages with urban areas and bringing efficiency in the processes of all the government departments, schools, colleges, universities, healthcare institutes, research and development institutes, marketing and busi- ness operational practices.

Supplying public internet access programs which will benefit students in research and inte- grated learning programs, job seekers for connecting their skills with available opportunities and enhancing their existing skills via online career courses, and business personals for export-oriented relations with potential global partners along with merchandising their manufacturing products.

Introducing the concept of e-governance with the focus on providing all the government services electronically to the local citizens. Furthermore, operating various governance applications with optimal utilization of ICT resources while allowing for the decentralized implementation.

Presenting technology for security purposes such that providing online emergency, safety and disaster-based services to the citizen in real time to minimize the irreplaceable losses.

Establishing technological tourism and travel facilities for visitors and tourists by launching the travelling structure information, attractive tourism spots and available travelling agents/consultants on particulars at a single portal.



EXCHANGE OF ARTS AND CRAFTS

With the initialization of CPEC, concerns about culture and Chinese influence have been raised particularly by local residents where the cultural norms, values and traditions are well rooted in the region. It is equally vital to show each other the cultural norms and values to develop acceptance and respect for being different and yet similar.

In this regard, art galleries and artists can play a strong role in portraying both cultures through paintings, posters and script. Art galleries may invite Chinese artists to showcase their work as well as our artists both painters/actors should participate to exhibit their work in China.

Local artists should be given a chance to be the part of such caravans so that they can take the responsibility to share and preserve local cultures

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CHINA PAKISTAN JOINT DEVELOPMENT OF MUSEUMS AND STORYTELLING THEATER



A lot of opportunities are there in the coastal region of Balochistan which is selected for coastal tourism. This is "2+1+5" tourism spatial structure in Pakistan which includes two centers, one axis and five zones: Karachi Port and Gwadar Port as the two centers, and the coastal tourism belt as the development axis, and five tourist zones of Jiwani & Gwadar tourism zone, Jhal Jhao, Ormara, Sonmini and Keti Bander.

Apart from water safari parks and other recreational activities museum and Storyteller Theater can be an addition to attract tourists. Such activities more frequently would become a mean to attract local and foreign tourists.

Moreover, shrines, forts, temples or other assets may need to be preserved for cultural growth to showcase our culture to the Chinese side.



SALVAGING THE ORGANIC SCRUMPTIOUS FRUITS OF Gilgit Baltistan

Gilgit-Baltistan (G-B) has the capacity to produce approximately 200,000 tons of scrumptious fruit every year comprising of Apricots, Almonds, Peaches, Apples and Walnuts. Whereas the handling capacity of this fruit is in such a bad shape that according to an estimate approximately 70% of produced fruit in Ghizer district alone fails to reach any market. There is a dire need for acquiring modern tools and techniques to perform picking, sorting, handling, processing, branding, practising, storing, marketing and distribution for this resource in an efficient manner.

Apricots, Peaches and Berries picked through manual labour has a very limited shelf life, roughly between 3 to 4 days, therefore there is a need for cold storage to store and transport this fruit to far-flung areas to address their needs. Lack of cold storage/supply chain facilities is causing a loss of approximately 50,000 tons of fruit (in G-B/Northern Areas) every year. This amounts to approximately 11 Billion rupees in case we are talking about fresh apricot only.

Packaging is yet another ignored aspect of the fruit industry in G-B, attractive packaging of Chinese dry fruit caused a steep drop in the price of local produce last year. Chinese Walnuts, though less tasteful but well packaged dominated the market, thereby causing huge loss to local Walnut produces. Local Walnut produced organically tastes much better than the one imported from China, but the efficient Supply Chain and packaging is bringing the Chinese Walnut to our markets

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on relatively cheaper rates.

These above mentioned challenges offer numerous opportunities to local/foreign Entrepreneurs and enterprise brands who must come forward along with Government bodies assistance to fill these gaps and assist local industry in coming forward to mitigating this imminent threat.

FINANCING AND FINANCIAL SECTOR INTEGRATION



Exports promotion through CPEC

Development of Special Economic Zones (SEZs) under CPEC provides an opportunity to boost exports of the country if the special focus is given to the imports of the other economies. It is imperative to consider the development of the tries that produce products imported by other economies while developing SEZs. An increase in the exports shall contribute to decreasing the current account deficit as a result of high inflows of dollars. Furthermore, a sustainable increase in the inflows through exports shall result in making Pakistan's currency more liquid, hence minimizing the risk of severe adverse fluctuations.

Innovative modes of revenue generation through CPEC

The main objective of fiscal policy is to increase revenue generation by capitalizing on the identified new opportunities, particularly in the periods of high FDI influx and economic growth. CPEC being discussed as game changer would bring along certain new sources for revenue generation that could be used to meet the increased demand for expenditure. One of the innovative modes for revenue generation that CPEC offers could be to levy higher or specialized tax rate on the disposal of the land near to the infrastructure development zones under CPEC as the value of property adjacent to these zones will appreciate significantly in value as result of these infrastructure developments.

CoE Activities

This section is solely dedicated to exhibit the Centre of Excellence-China-Pakistan Economic Corridor (CoE-CPEC) indoor and outdoor official visits, RTCs, MoUs, delegation visits, and presentations etc.



Dr Liaqat, Executive Director along with the Scholars of COE-CPEC is briefing the delegation of Australian High Commission at the centre



MoU Signing Ceremony Between CoE-CPEC and China Centre for Special Economic Zone Research-Shenzhen University-China



RTC on Reforming the State-Owned Enterprises of Pakistan-Learning from China and the BRI Countries



A delegation from Fudan University, Shanghai



MoU Signing Ceremony Between CoE-CPEC and AJK University, Muzaffarabad



Delegation from Traditional chinese Medicine Department, Jiangxi University.



Yasir Masood, Deputy Director Media and Publications representing COE-CPEC in a trilateral symposium of China, Pakistan and Afghanistan held at Beijing.



National Seminar on CPEC and Regional Connectivity: Opportunities and Challenges AJK University



Training on Computable General Equilibrium (CGE) Modeling in CoE-CPEC



Training and Field survey of Socio-Economic Baseline for E-35 Hazara Motorway



Training on Geographic Information System (GIS) based mapping Technique

Articles Submission Guidelines

Writers who have an interest in the CPEC are invited to contribute to the **CPEC Quarterly Magazine.**

CPEC Quarterly Magazine is a publication of Centre of Excellence for China-Pakistan Economic Corridor (CoE-CPEC), Islamabad. The magazine encompasses into different sections to facilitate all the relevant quarters and stakeholders of CPEC. The Reader's Corner of the magazine in particular is aimed at dissemination of evidence-based information and policy recommendations/ projections regarding CPEC with all its manifestation. The main focus of our research-based articles is banked on six thematic areas which are available on our website. Other than that contributors are encouraged to come up with the new facets of CPEC related articles with the tangible source of information. The whole concept of 'Belt and Road Initiative' in connection to CPEC can also be accommodated in the magazine. The selection of articles will be based on topicality, originality, clarity, the extent to which they advance knowledge, understanding and application and their likely contribution towards inspiring further development, research and debate. If the write-ups are not slotted in the upcoming edition, it will be queued for the next issue. The authors will be notified, in case of acceptance or rejection of their contribution.

Please Note:

- Manuscripts emailed to CoE-CPEC for publication should contain between 1,000 and 2500 words including automated footnotes in Microsoft Word (in Chicago Manual format).
- Authors are requested to use English spellings and not American.
- Tables for the main text and each of its appendices should be numbered serially and separately.
- The source of the data in a table should be given in a footnote immediately below the table.
- Article footnotes should be numbered consecutively.
- Only previously unpublished works will be accepted and copyright will be assigned to CoE-CPEC.
- Permission to use copyright material submitted to us will be the responsibility of the author.

Email us your research articles in accordance with the aforementioned guidelines at:

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