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Cooperation among Business Schools along the Belt and Road: A CPEC Perspective

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**Cooperation among Business Schools along the Belt and Road:
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Synopsis

This paper discusses the important collaborative role that business schools in China and Pakistan may play to support China Pakistan Economic Corridor (CPEC), a flagship component of the Belt and Road Initiative (BRI). Given the vast scale of investment and infrastructure development related to this initiative, it is important to pay attention to the enormous need of technically and cross-culturally competent managers and business leaders to support this initiative. The paper offers a brief overview of CPEC, highlights the human resource needs in its wake and outlines various fields within which business schools in both countries could support each other as well as public and private sectors in the successful designing and execution of CPEC projects. The paper also offers some examples of cooperation already taking place among universities and business schools in China and Pakistan in support of CEPC. It also suggests some activities and deliverables of the proposed cooperation among business schools along the Belt and Road.

Key words: Belt and Road Initiative, business schools, China Pakistan Economic Corridor (CEPC), human resource development, Silk Road

Introduction

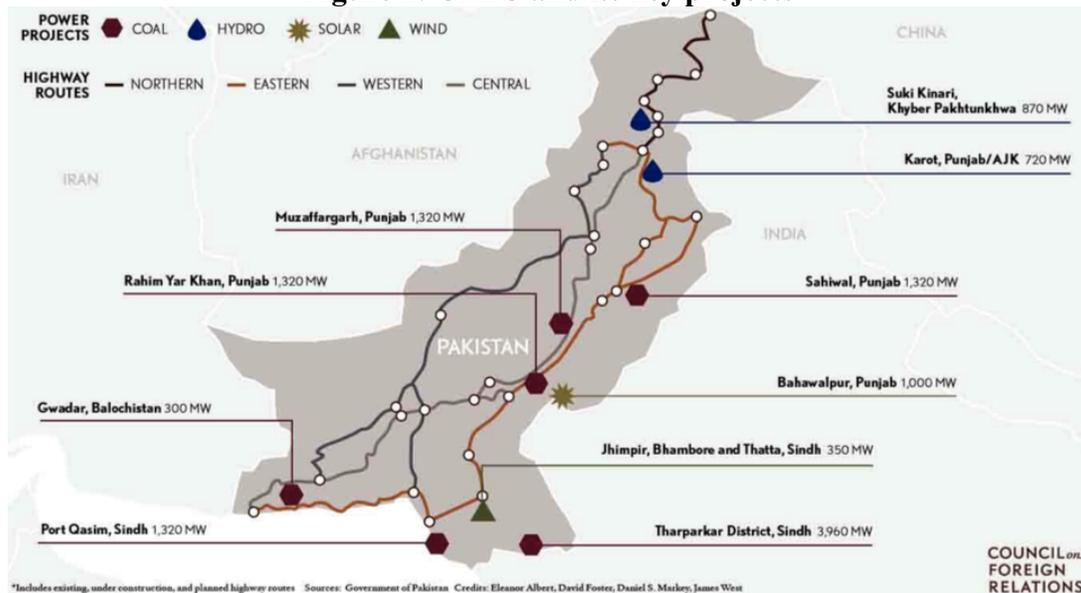
The Belt and Road Initiative (BRI) is a Chinese development strategy that focuses on connectivity and economic, cultural and political cooperation between China and the world through the historical land-based and new maritime Silk Road. The Pakistani section of the BRI is known as the China Pakistan Economic Corridor (CPEC).

Given the enormous scale of business and employment opportunities likely to be created by the China Pakistan Economic Corridor (CPEC) and other Belt and Road Initiative (BRI) projects, there is a dire need to pay attention to capacity development and human resource development in China, Pakistan and other countries to develop and train technically and culturally competent managers and leaders. Simultaneously there is a need to design and conduct academic and executive education programs to develop leaders and business managers for BRI/CPEC projects educating them about unique cultural features and regulatory frameworks of each country as well as key issues facing entrepreneurs, business managers and policy makers. Business schools in both countries can play a key role in fostering this collaborative development.

Overview of CPEC

CPEC comprises energy and infrastructure projects which are under construction throughout Pakistan connecting Western China to the Indian Ocean. Seen as the main plank of the BRI, the value of CPEC projects is estimated to be \$55 billion by 2030. This represents about 19% of Pakistan's GDP of US\$280 billion in 2016. CPEC investments alone may boost the investment ratio in Pakistan from 15% of GDP to 16.5% over the next decade (Iqbal, 2017). In November 2016, CPEC became partly operational when Chinese cargo of 250 containers was transported from Xinjiang to Gwadar Port and from there to the Middle East and Africa (*Dawn*, 2016). **Figure 1** offers a map of several multi-billion-dollar energy projects along the CPEC. CPEC is focused on energy projects, road/railways infrastructure, and special economic zones (SEZs). **Table 1** offers an overview of CPEC investments reported by government sources till December 2017.

Figure 1: CPEC and its key projects



Source: Government of Pakistan: Credits Eleanor Albert, David Foster, Daniel S. Markey, James West

Table 1: CPEC Investments – 2017 update

<i>Sector</i>	<i>Allocated Amount \$Billion</i>	<i>Percentage of Total</i>
Energy	36.00	67%
Railways	10.79	20%
Roads	6.10	11.3%
Gwadar Port	0.80	1.5%
Fiber Optics	0.04	0.2 %

Source: www.cpec.gov.pk

Energy

About \$36 billion worth of energy infrastructure will be constructed as a part of CPEC to address severe energy shortages in Pakistan. These shortages regularly amount to over 7,000MW in the peak season (Kiani, 2017), and are estimated to slash 2-2.5% of Pakistan's annual GDP. Based on higher estimate of energy shortfall, Pakistan economy lost PKR (Pakistani Rupees) 1,439bn (7% of GDP) in 2015 (*Pakistan Observer*, 2017). As a part of CPEC's fast-tracked "Early Harvest" projects (Deloitte, n.d.), over 10,400MW of energy generating capacity is expected to be produced by the end of 2018. In total, CPEC-related energy projects will eventually produce 17,000 megawatts of power and nearly double Pakistan's installed capacity. Moreover, a network of pipelines will transport liquefied natural gas and oil, including a \$2.5 billion pipeline between Gwadar and Nawabshah, which will further extend westward to import gas from Iran. While fossil fuels will be the main source of electricity production through these projects, hydroelectric, wind-power and solar projects are also being built and installed as a part of CPEC.

Roads

In terms of road infrastructure under the auspices of CPEC, newly built and revamped roads will connect seaports of Gwadar and Karachi in southern Pakistan with cities in central and northern Pakistan, and further north with western China.

There are four main routes or alignments which connect China's Xinjiang province with Pakistan's Indian Ocean seaport of Gwadar. Those are: Northern route, Western route, Central route and Eastern route.

Northern route (850 km) mostly comprises the Karakoram Highway (KKH) starts from China and enters Pakistan from Khunjerab in Gilgit Baltistan, moving onwards through Abbottabad, Hasanabdal and Burhan and connects to Islamabad-Peshawar Motorway from where there are three main routes to reach Gwadar, i.e., the Western, Central and Eastern Routes.

Western Route (2,674 km) starts from Attock in Punjab, runs through Dera Ismail Khan in Khyber Pakhtunkhwa province then enters Balochistan to reach Gwadar passing through Zhob, Qila Saif Ullah, Quetta, Sorab and Panjgur.

Central Route (2,756 km) passes through Dera Ismail Khan and reaches Gwadar via passing through Bhakkar, Muzaffargarh, Layyah, Rajanpur, Sukkur and Khuzdar.

Eastern Route (2,781 km) consists of M2 (Lahore – Islamabad Motorway), M3 (Lahore – Faisalabad Motorway), M5 (Lahore – Karachi Motorway) passing through cities of Lahore, Multan, Sukkur, Hyderabad, Karachi. Makran Coastal Highway connects Karachi and Gwadar Port in Pakistan (KCCI, 2017).

A 1,100 kilometers long motorway will be built between Karachi and Lahore, as part of CPEC. Moreover, the Karakoram Highway (N-35) between Rawalpindi and China's Xinjiang province will be reconstructed and expanded. The railway network in Pakistan will

be upgraded, including the Karachi-Peshawar section, and extended to China's Xinjiang Railway in Kashgar. The estimated \$11 billion needed to modernize the road networks will be financed by low-interest loans (Deloitte, n.d.). About \$17 billion have been dedicated to the transport infrastructure in CPEC's long-term plan including \$10.8 billion for railways and \$6.1 billion for roads (Sherdill, 2017).

In addition to road and railways connectivity, there is also a focus on information connectivity. Work is being done to reinforce and expand the communication infrastructure along the Belt and Road. In May 2016, construction began on an 820 kilometers long Pakistan-China Fiber Optic Project costing \$44 million to improve telecommunication in the Gilgit-Baltistan region, while providing Pakistan with a fifth route for telecommunication traffic (*Economic Times*, 2016).

SEZs

Pakistan government has been establishing SEZs to support business-friendly policies and attract investment across a range of industry sectors (SEZ, 2017). An SEZ is an area dedicated to promoting industrial growth through lenient economic and tax policies. Nine SEZs are being developed, located one each in the four provinces and various special areas, i.e., Gilgit, Azad Jammu and Kashmir (AJK), Port Qasim, Federally Administered Tribal Areas (FATA), and the Federal Capital.

Moreover, in addition to development of the Gwadar Seaport and connecting it to China through the road infrastructure, an SEZ is being built in Gwadar to encourage industrial development and growth. Gwadar port will have a channel depth of up to 20 meters, with 80 berths. It will also have offshore oil loading and unloading facility (Sherdill, 2017). Next, the paper discusses the human resources needed for CPEC.

Human Resource Needs

With a population exceeding 207 million (2017 census), 55% of the population below the age of 30, and an unemployment rate of at least 6% and a much greater rate (estimate) of under-employment, there is an immense need for human resource development and employment opportunities in the country (Sherdill, 2017). According to an estimate by the International Labour Organization (ILO), CPEC may create around 400,000 jobs (APP, 2017). In Pakistan, in addition to employment, CPEC's projects are anticipated to add between 1.5 to 2.5 percentage points to the country's annual economic growth (Iqbal, 2017; Shah, 2016b). Yousafzai (2017) suggests that by June 2017, CPEC had created 30,000 jobs for Pakistani workers and engineers (including 16,000 working in the energy sector). A further 8,000 jobs were being carried out by Chinese nationals. Work on transport infrastructure had created around 13,000 jobs by June 2017 (PCN, 2017a). There is thus an opportunity for tremendous and collaborative efforts to develop human resources, both in Pakistan and China, to develop leaders, entrepreneurs, managers, and workers for CPEC projects. In particular, it is essential to develop the young population, to train them on new technical systems, management techniques, and cross-cultural skills (Butt, 2017).

Much of the employment under CPEC portfolio is in the energy sector where 16,000 Pakistanis are hired as engineers and laborers. Port Qasim Coal Power project created jobs for 5,000 Pakistanis. Sahiwal Coal Power Plant Project and Zonergy Solar Power Project created 3,000 jobs each. Around 300 to 500 engineers are working on these energy projects. Moreover, two more project in energy sector, Sukki Kinari and Karot, would generate around 6,000 jobs for Pakistani engineers and workers. Many Pakistani engineers could grab this opportunity where hydropower projects are under execution.

Besides, energy portfolio, CPEC Transport Infrastructure sector has created around

(Multan Sukkur Section), a major infrastructure project under CPEC. Moreover, KKH Phase II Havelian provided jobs to 2071 locals, Orange Line Metro Lahore created employment for 956 people and Fiber Optic project created 580 jobs. Development of Free zone project at Gwadar created 404 direct jobs with additional 2,000 indirect employees.

Construction work on ML-1 project of Pakistan Railway, Karachi Circular Railway, Gwadar Airport, Eastbay Expressway at Gwadar and other road projects are soon to be started and may create around 10,000 to 15,000 direct jobs in 2018-19. About 75 percent of these jobs are being carried out by Pakistani engineers and other professionals (Jabri, 2018).

According to a Pakistan government official, over 30,000 people had been employed by the end of 2017 in different projects under the CPEC. According to Chinese Deputy Head of Mission Zhao Lijian, who is designated as the focal person on CPEC power projects, around 60,000 Pakistanis are working on different Chinese projects in Pakistan, including those under the CPEC (ET, 2018).

The governments of China and Pakistan are making efforts to address this challenge through various agreements and interventions. In 2014, China and Pakistan signed an Economic and Technical Cooperation Agreement, as well as pledged to build "China-Pakistan Joint Cotton Bio-Tech Laboratory" and "China-Pakistan Joint Marine Research Centre" (Haider, 2015). A total of 46 agreements were formalized in April 2015 (**Appendix 'A'**). Moreover, in January 2017, Pakistan's National Accountability Bureau (NAB) signed a memorandum of understanding (MoU) with China to enhance cooperation and oversee transparency in CPEC projects in Pakistan (Irfan, 2018). Similarly, an MoU for construction of East Bay Expressway in Gwadar under the CPEC project was signed in 2017 (Irfan, 2017).

In February 2016, the two countries agreed to establish the "Pak-China Science, Technology, Commerce and Logistic Park" near Islamabad estimated at \$1.5 billion. The park will comprise 500 hectares, which will be provided by Pakistan to China's Xinjiang Production and Construction Corps, with investments from China over the course of ten years.

To promote the availability of skilled workers in the country, the National Vocational and Technical Training Commission (NAVTTTC) is providing training in 38 CPEC-specific trades in 197 institutes across Pakistan (PCN, 2017b). The Pakistan government intends to establish a training institute named Pak-China Technical and Vocational Institute at Gwadar, costing PKR943 million, to train residents to operate machinery at the port.

However, given the low literacy rate (58%) in Pakistan which is particularly low in rural areas (49%) and very low in tertiary education (10%) (WEF, 2017), there is a need to pay special attention to technical and soft-skill needed for CPEC. There is a lack of cross-cultural understanding of business environment, laws, culture and language in business leaders and managers of these countries. To address this gap, business schools along the Belt and Road will need to play a pivotal role to design and deliver academic programs and management training. This issue is dealt in detail in the next section.

Cooperation among Business Schools

The concentration of infrastructure activities around Shanghai and Beijing led to the establishment of top academic institutions in these areas. Similarly, it may be worthwhile to develop an international management education platform and mechanism for cooperation along the Belt and Road. Below, we provide a few examples of efforts for cooperation among business schools.

In May 2015, a University Alliance of the Silk Road (UASR) was founded at Xi'an Jiaotong University, China with an aim to foster openness and promote international cooperation and exchanges in higher education, training, research (in the areas of business, law, engineering, informational technology, medicine etc.), policy and cross-cultural

the Silk Road in business and other disciplines, the alliance has a special relevance to the BRI including CPEC.

In August 2017, top business schools in China (8) and Pakistan (9) launched the CPEC Consortium supported by the Higher Education Commission (HEC) of Pakistan. This partnership aims to increase academic collaboration to support the economy and management systems of China and Pakistan (HEC, 2017). The consortium seeks to bring business school leaders on one single platform for collaborative research, and educational and management development programs to support CPEC. The universities and institutes that are part of the consortium are as follows:

China: Fudan University, Hong Kong Polytechnic University, Nanjing University, Peking University, Shanghai Jiao Tong University, Tsinghua University, University of Science and Technology of China, and Zhejiang University.

Pakistan: Balochistan University of Information Technology, Engineering and Management Sciences (BUIITEMS), COMSATS Institute of Information Technology, Institute of Information Technology, Institute of Business Administration (IBA), Institute of Business Management Sciences (IMS), Lahore University of Management Sciences (LUMS), National University of Sciences and Technology (NUST), Pakistan Institute of Development Economics (PIDE), and University of the Punjab.

According to the consortium's declaration, these business schools will work together to aid their respective government and chamber of commerce in the development and operation of CPEC and its key components. These school will work on joint research and training projects to promote business-to-business relations between Pakistan and China. Such linkages will help to build international academic and professional relationships and lead to an exchange of knowledge.

Infrastructure of Cooperation

In order to understand China's business practices as well as their cultural norms, ethics and laws, there is a need to review academic and executive programs, upgrade university libraries, and develop the ability to translate Chinese publications to make them accessible to Pakistani students, research scholars, government officials and businesspersons (Javaid & Javaid, 2016). Similar measures may be considered within business schools in China to promote an understanding of Pakistani business environment and wider society. A functional understanding of Chinese and Urdu languages, in addition to English, may help academic programs and executive trainings at business schools in both countries. Moreover, regular meetings, research and case seminars, and conferences may be organized to gain a better understanding of Chinese and Pakistani economies, laws, cultures, issues of relocation and joint ventures, and the alignment of such interventions with university programs (Javaid & Javaid, 2016). Faculty and student exchanges, as well as platforms for cross-cultural interactions of businesspersons from both countries, may be extremely useful.

Business schools and universities along CPEC may establish integrated research centers or area study centers to address knowledge gaps in areas of academic focus and promote cross-cultural understanding and inter-faith harmony. Accordingly, there may be a need to reorient faculty recruitment and development program with a focus on international faculty exchange and sabbaticals.

According to You Yi, Cultural Counsellor of China in Pakistan, "Educational exchange programs between China and Pakistan have a vital role in bilateral relations" (The Nation, 2017, p.1). By mutual cooperation and support, academics and students may contribute to the educational systems and economies of both countries.

About 2,500 new Pakistani students were enrolled in Chinese universities in 2017,

in engineering, economic, management, agriculture, medicine, information technology, communication and languages. About 3,000 of them are PhD students (*Geo TV*, 2017).

In 2017, 145 Pakistani students were awarded scholarships to study in China (*The Nation*, 2017). The purpose was to provide them with training and support on new technological systems and knowledge areas. Some of these students are expected to research and analyze the impact of China's investments related to CPEC projects in fields as diverse as energy, road infrastructure, and industrial cooperation (*The Express Tribune*, 2017). Pakistani students have shown increasing interest in learning the Chinese language while some of them wish to pursue further studies in China (Bacha, 2017).

Examples from China and Pakistan

China Pakistan Management Initiative (CPMI)

Business schools in Pakistan are working on improving Chinese business and culture related skills of their faculty members. In some of these schools such as the Suleman Dawood School of Business (SDSB), based at Lahore University of Management Sciences (LUMS), there is an explicit commitment to developing human resources and management for the Belt and Road including CPEC.

In 2016, the School set up a specialized center, namely the China Pakistan Management Initiative (CPMI), with an emphasis on high-quality peer-reviewed research articles, concept notes, technical and policy papers, case studies and executive training to support CPEC. CPMI is working with organizations in China and Pakistan, including academic institutions, businesses, government departments and non-governmental organizations, to support CPEC and other aspects of the BRI. This will ultimately link a well-trained youth to the new economic era of regional trade, cooperation, and connectivity. CPMI's aims are listed in **Table 1**.

According to 2017 QS World University Rankings (by subject), the SDSB is the top business school in Pakistan. It is amongst top 8 schools in South Asia and top 251-300 band across the world. The School offers a full suite of academic programs including BSc degree (four years) with two majors (Accounting and Finance, and Management Science). It also offers a case-method based full-time MBA (two years) and weekend Executive MBA. Moreover, the School offers PhD in finance, operations management, and human resource management.

The SDSB prides in active engagement with the industry with a focus on topics of current interest and management implications. A collection of more than 800 cases have been written by the SDSB's faculty members, a selection of which is also available at Harvard Business Publishing Website. The School also has a thriving executive development center which is designing specialized programs with a focus on CPEC. Moreover, the School offers international scholarships for MBA students to encourage Chinese and other international students to study at LUMS.

In 2017-18, CPMI at SDSB conducted several research and policy seminars on topics related to various dimensions of CPEC and also published a number of case studies and policy notes. In March 2018, CPMI organized an international symposium on CPEC at the Annual Management Research and Case (AMRC) Conference that was held in Bhurban, near Islamabad.

Similar initiatives are found at other universities such as NUST Business School and IBA Karachi which regularly conduct conferences and symposia on topics related to CPEC.

Table 1: Aims of China Pakistan Management Initiative

<i>CPMI's Aims</i>
<ol style="list-style-type: none"> 1. To capitalize on the potential for management development, research, teaching, and consultancy in the wake of the China Pakistan Economic Corridor (CPEC) 2. To create a Knowledge Corridor to serve the needs of and steer the direction of the Economic Corridor 3. To promote joint research, case studies, concept papers, technical papers and policy briefs on business and management in China and Pakistan 4. To apply for research funding and jointly recruit research scholars and PhD students 5. To develop joint academic and training programs with Chinese partners: <ol style="list-style-type: none"> a. To design and deliver management development programs for managers and policy makers in China and Pakistan b. To develop and impart academic courses and training programs on Chinese language, culture, Confucian and Buddhist values, laws, business norms and management techniques in Pakistan c. To impart similar training on Pakistani culture, Islamic values, Urdu language, laws, business norms and management techniques to Chinese professionals in Pakistan and China 6. To document and critically review policies and activities of CPEC and examine their implications for Pakistan and China 7. To study, assess, forecast and support logistics, supply chain, energy, security, infrastructure and human resources needed for CPEC (LUMS, 2017)

Pakistan Study Center of Science and Technology and Economy (PSCSTE)

Beijing Technology and Business University (BTBU) has established a “Pakistan Study Center of Science & Technology and Economy”. In November 2016, BTBU organized an “International Seminar on China-Pakistan Economic Corridor (CPEC) and Scientific & Technological Cooperation” at its Fucheng Campus (BTBU, 2016). BTBU is a comprehensive public university in Beijing. The Centre aims to facilitate joint consultations and services relating to science, technology and economy, facilitate the transfer of technology between the two countries, and promote the non-governmental exchange. It seeks to accelerate the development of the innovative and open economy of both countries. There are examples of similar initiatives by Lanzhou University, Fudan University and other universities in China.

Centre of Excellence-CPEC

Centre of Excellence-CPEC (CoE) is a policy-based research center in Islamabad that seeks to provide input to Pakistan’s federal and provincial governments and implementers of CPEC projects. CoE’s mandate is to conduct research on key thematic areas of CPEC, promote positive narrative on CPEC, guide implementers of CPEC on policy matters, and train business community on CPEC related business opportunities. Key thematic areas include: urban development in Pakistan under CPEC; socio-economic impact of CPEC; trade and industry cooperation; regional connectivity; financing and financial sector integration under CPEC; and, job growth and human resource development (CoE, 2017).

Possible Areas of Cooperation

To maximize the benefits of youth employment related to CPEC, business schools in China and Pakistan may prepare students and businesspersons towards gaining technical skills

expected to understand the social impact of the economy and socioeconomic dynamics of China and Pakistan (Butt, 2017).

Key themes for cooperation may focus on the *seven key pillars* of CPEC's long-term plan including: connectivity (transport and information networks), energy, trade and industrial parks (SEZs), agriculture development and poverty alleviation, tourism, people's livelihood and non-governmental exchanges, and financial cooperation. Business schools will need to think about cooperation in the shape of applied research and development, thematic research, policy think-tanks, governance, cross-cultural training and socio-economic growth.

Ying (2017) suggests that in order to develop inter-school partnership, three factors may be considered: (1) commercial viability, i.e., go/no-go decision with due market analysis, and selection of the champions from various fields, (2) maturity of infrastructure ecosystem, i.e., identification of strong partnerships across the Belt and Road countries, and locating adequate centers of excellence which are logistically viable, and (3) portfolio fit, i.e., providing vision to expand more than just a project, and a focus on complementary roles instead of substitution. It is important to focus on not only existing champions but also forging partnerships that could result in centers of excellence with support of adequate infrastructure and portfolio.

However, in addition to the technical skills and studies suggested by Yin, it is equally important to pay attention to the softer side of managing and leading the BRI projects. More specifically, we may consider cooperation in the following areas.

Operations Management and Supply Chain Management

Pakistani business schools may be interested in learning from Chinese schools specializing in maritime and logistics studies. Very few schools in Pakistan work in these areas, while China has many schools specializing in various aspects of maritime and overland logistics. Pakistan's economy, geography, political (in)stability and security concerns pose unique challenges in devising optimal solutions to the country's logistics and transportation issues. These could be fruitful areas of research and case studies for academics in both China and Pakistan. For example, potential partners may include Tongji University in China, Suleman Dawood School of Business (SDSB, based in LUMS), National University of Science and Technology in Pakistan and National University of Singapore. In particular, the Master program for Supply Chain and Logistics at Tongji and executive training programs on the same topic at SDSB may be of particular value to students and business executives.

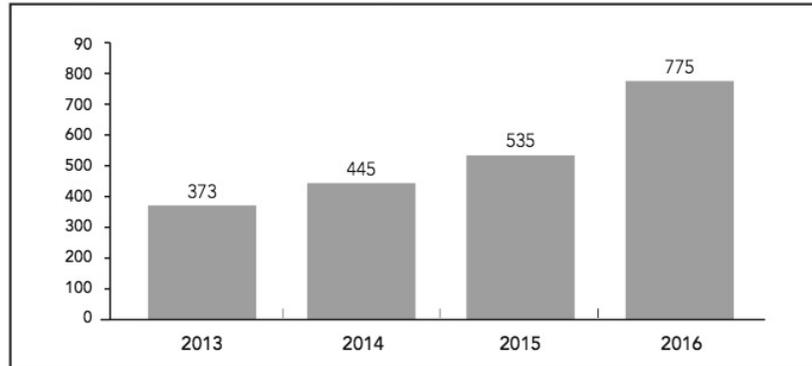
Human Resource Management

Chinese schools can collaborate with Pakistani counterparts for gaining insights into the cultural and behavioral aspects of the Pakistani workforce. Such insights can be useful for Chinese companies and enterprises willing to invest in Pakistan. Similarly, Pakistani schools can learn about Chinese business culture, norms and ethics to inform Pakistani businesses and current and future employees of Chinese companies. Such learning can also help Pakistani companies to implement policies related to human resources which may be relatively more effective and efficient compared to lessons learned from western-centric studies. For example, schools in Pakistan may seek to benefit from Shanghai University's SILC business school's international and cross-cultural expertise. Similarly, the Social Enterprise Development Centre at SDSB-LUMS (Pakistan) may offer expertise in cultural, religious and gender issues of the workforce in Pakistan. In the niche area of tourism and event management, Shanghai Jiao Tong University may be a great resource.

According to ACCA (2017), based on data from the Securities and Exchange Commission of Pakistan (SECP), there is a noteworthy growth in the registration of Chinese

increase from 373 companies on 30 June 2013 to 775 (out of a total of 80,428 companies) registered in the country on 30 June 2016 (see **Figure 2**). This indicates the need for better cross-cultural understanding to develop and manage human capital in both countries.

Figure 2: Pakistani Companies with Chinese Directors



Based on a survey of survey of finance and business professionals in Pakistan, ACCA (2017) notes that around 86% of the 500 respondents agreed that they should attend short courses on Chinese language, culture, and business practices. The study further reports, based on responses by Chinese executives, that while responding to the question ‘What do you think are the key skills needed by Pakistani executives to be prepared for the future requirements related to CPEC?’, the executives from the Chinese companies listed the following: international vision, good understanding of Chinese culture, knowledge of Mandarin, familiarity with Chinese ways of conducting business, communication skills, familiarity with company and tax laws and rebates and concessions allowed under CPEC in Pakistan, and full awareness of relevant business policies of Pakistan government.

Finance

The centrally planned economy of China has resulted in the evolution of a unique financial system in the country. Coordination among academics in the area of finance in the two countries can support negotiators on both sides of the border in designing financing options suitable for proposed projects. Such cooperation would also help investors and potential investors in analyzing the financial strength and expected future performance of companies in the two countries, especially in business-to-business transactions. The growth of Islamic financial products in Pakistan can be an interesting segment of financial system for Chinese academics to study and perhaps help the Chinese government gain from such opportunities. For example, in commercial marketing and finance, The Chinese University of Hong Kong and Centers for Islamic Finance based in the Institute of Business Administration Karachi and the Suleman Dawood School of Business may be worthy of consideration.

Scholars may pay attention to financing structures for CPEC which differ on the basis of sectors and projects. Most of the power projects have debt to equity ratio of 80:20, which signifies that the inflows into Pakistan represent debt financing rather than equity investments. The markup on debt and return on equity may not only result in a higher electricity rate for the next many years, but profit and principal repayments in dollars - expected to increase after 2021- may put an ongoing pressure on the Pakistani currency and forex reserves (KCCI, 2017).

Public Policy

“Socialism with Chinese characteristics” has been a lynchpin for informing Chinese government’s long- and short-term policies. Cooperation between business schools in Pakistan

also assist in aligning policies of the two governments for smoother implementation of CPEC related projects. In this regard, public policy and governance centers based in the Pakistan Institute of Development Economics and LUMS may be worth considering. At the policy level in Pakistan, government departments and business schools may focus on possible interventions to facilitate ‘doing business’ in the country. Pakistan is ranked quite low (144th) in terms of ‘ease of doing business’ (World Bank, 2017). For example, it takes 215 days to obtain an electricity connection and involves five procedures in Karachi as compared with the South Asian average of 136 days and 5.7 procedures (ACCA, 2017).

Marketing

The Chinese government has pursued a policy of projecting a ‘benevolent’ image of the country especially in poorer regions of Africa and East Asia. China is, in a way, pursuing a policy of exporting the ‘socialist culture’ to the rest of the world. At the same time, Chinese firms are introducing their own standards and norms of work practices. This provides an opportunity for interested scholars in Pakistan to analyze Chinese economic and ideological policies and would also aid Chinese academics in analyzing the implementation of marketing and branding policies by the Chinese government in Pakistan in comparison to their experiences in other countries. Business schools in Shanghai Jiao Tong University and IBA Karachi may be a great resource in this regard.

Other Disciplines

Given the unique nature of the Chinese economic structure and Pakistani dynamics, developing organizational strategies consistent with economic, cultural and behavioral aspects for firms operating in both countries can be an interesting area to explore. Cooperation among business schools can exploit the divergence in economic and cultural paradigms of both countries and develop the capacity to extend help and training to businesses in the development and implementation of long-term strategies. Peking University, Quaid-i-Azam University and LUMS may be worth considering in this endeavor.

Other areas of cooperation may include the following: diversity management to develop social, cultural and political harmony, international business, laws (international trade, commercial, taxation, labor), cross-cultural management, manufacturing and engineering management, information and communication technology (including data science), food and agriculture, etc.

Industry sectors

The *industry sectors* for such cooperation may include: energy projects, textiles, construction (cement, building materials etc.), engineering (including automotive, iron and steel, etc.), mining, leather, agriculture, food and fertilizers, telecommunication and fiber optics, tourism, security management, etc.

Industries in Pakistan will need to pay special attention to improving their efficiency and leadership and management practices in order to remain competitive in the global market given the increased connectivity through CPEC. Textile industry in Pakistan has faced serious challenges in the past due to electricity shortages and also low productivity. In the wake of CPEC, the industry may face new challenges from large and competitive firms in China. For example, Xinjiang province in Pakistan’s immediate neighborhood is China’s top cotton growing area, producing about 60% of the country’s cotton. The province is currently undergoing rapid industrialization and is expected to be a major textile exporting hub. In 2017, Chinese government dedicated \$27Bn investment in Xinjiang’s transport infrastructure for better regional connectivity while a \$2.8Bn fund has been reserved to set up garment factories.

Implications of this production and export from Xinjinag for Pakistan's textile industry needs to be carefully examined. It will be inevitable for Pakistan to not only improve the competitiveness and breadth of textile production but also diversify its exports in other sectors.

As noted by KCCI (2017), CPEC is attracting attention of many foreign firms. Shanghai Electric is seeking to buy 66% shares in K-Electric for a record \$1.67Bn. Moreover, global companies are investing or exploring to invest in diverse sectors from Automotive (Renault, KIA, Hyundai), Cement (Anhui Conch of China, Asian Precious Minerals of UK), Dairy (Friesland Campina buying Engro Foods) to Electronics (Turkey's Arcelic \$ 258Mn buyout of Dawlance).

Proposed Activities and Deliverables of Business Schools' Cooperation

Intended or preferable activities or outcomes of the proposed cooperation among business schools on CPEC and other parts of the Belt and Road may include:

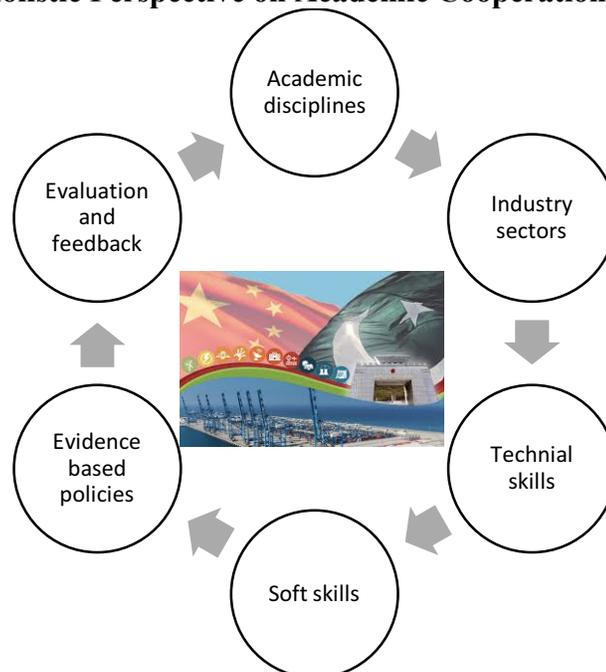
1. Academic courses and programs to cover knowledge gaps in CPEC/BRI related areas: Business schools may consider designing and offering independent or joint courses and programs at the undergraduate and postgraduate levels. Such courses may include the international business environment along the Belt and Road, doing business in Pakistan/China, legal and regulatory environment, cross-cultural management in Pakistan/China (culture, religion, language, society, etc.), intercultural business communication, human resource management, financial environment, regulation and norms, language (Urdu/Mandarin/English), supply chain management, energy production and distribution, international e-commerce, entrepreneurship in Pakistan/China, financial innovation, family-owned enterprises in Pakistan/China, and policy and management response to extremism and militancy.
2. Faculty exchange: Faculty exchange can be recommended for two weeks to one term (12-14 weeks). Extensive courses (full or half) can be taught in subjects such as doing business in Pakistan or China, business environment (culture and laws) in Pakistan or China, etc. The Faculty can combine teaching with research activities. The host institution will provide return flights, accommodation, and teaching allowance.
3. Student exchange and foreign internships: These internships can be from one to six weeks on credit or non-credit basis. Students can attend formal courses and guest lectures. Industry visits and internships can also be included. University, NGO and government scholarships for students from countries along the Belt and Road can be offered. When students practice their internships in an international environment, their adaptability to different cultures will be greatly enhanced. Therefore, they will be equipped with the ability to get along well with peers and people from different cultural backgrounds.
4. Research publications: Research can be encouraged through joint research papers in high-quality journals (e.g., ABDC rank 'A' and above), joint research books or special issues. Topics of interest can include studies of successful models for industrial growth, areas of convergence in business and industries, Chinese and other successful models of industrial and science parks, and manufacturing clusters to draw lessons for the development of industrial, science or knowledge parks in the Belt and Road countries, identification and development of trade and commerce for mutual collaboration, and identification of Chinese industries that can be relocated or linked with industrial parks in participating countries.
5. Joint academic conferences (focused on research papers, cases, policy papers, etc.).
6. Joint case studies in peer-reviewed journals such as the Asian Journal of Management

7. Joint policy papers, feasibility studies, industry-specific technical papers, and concept notes (to serve as think-tanks for governments and private corporations).
8. Joint applications for research grants—identification of and approaching funding agencies for joint projects.
9. Short duration executive training for businesspersons and government officials.
10. Celebration of cultural festivals and events related to countries and ethnicities along the Belt and Road.
11. Translation of important research papers, case studies, news reports and documentaries into Mandarin and English.
12. Development of faculty members in specified areas with a focus on interdisciplinary research to promote the global vision, intercultural awareness, and professional competence.
13. Provision of adequate resources as well as incentives to faculty members to enable and motivate them to participate in CPEC related activities

The above efforts for cooperation will encourage people-to-people bond, acquisition and enhancement of talent, and mutual development. For such endeavors to work, government and educational leaders in China, Pakistan and other Belt and Road countries will need to provide adequate infrastructure and resources as well as incentives for academics to enable and encourage their full participation in the BRI/CPEC.

Based on the preceding discussion, **Figure 3** offers a holistic perspective on academic cooperation to support the BRI/CPEC. It indicates that the schools along the Belt and Road may synergize their expertise in diverse academic disciplines within with a focus on development and dissemination of applied research and case studies for relevant industry sectors. To provide and develop the much needed human resources for BRI/CPEC, such cooperation may focus on development of both technical and soft skills in the current and future leaders and managers of BRI/CPEC projects. Moreover, the policy formulation at the macro-national and industry level will need to be informed by evidence based research and case studies and there will be an ongoing system of evaluation and feedback.

Figure 3: A Holistic Perspective on Academic Cooperation for BRI/CPEC



Conclusion

Both China and Pakistan have a rich resource of academics, researchers and practitioners in a wide range of discipline including accounting, law, human resource management, international business, economics, finance, construction, engineering and project management. However, these professionals may need cross-cultural training, with a specific focus on CPEC, to enable and enhance their productive contribution.

There is a need to develop centers of excellence and international initiatives for mutual exchange and development of students, teachers, and practitioners, to develop high-quality business talent with an open, international mindset. For example, academics and policymakers may focus on devising new global financing arrangements that involve major commercial banks and public-private partnerships.

CPEC provides an opportunity for stepped-up research to examine and design optimal trade and investment policies to bolster development in countries along the Belt and Road. In Pakistan, for example, there is a dire need to research the opportunities and challenges that the business community and government need to be aware of to take advantage of CPEC. For greater transparency, ownership and accountability, CPEC projects may be subjected to a proper “due diligence” process of identification, appraisal and design. An independent monitoring setup may be put in place to serve as a credible information warehouse for CPEC. Similarly, a task group of professionals or experts may be formed to review and scrutinize selection and design of all projects based on consistent criteria (BIPP, 2017).

Scholars may also wish to address other important questions. How will businesses in China, Pakistan and other countries along the Belt and Road identify new opportunities based on existing cooperation? How will they push forward the investments made by Chinese corporations in Pakistan and other countries for industrial development and complementarity? How will the financial industry boost bilateral commercial cooperation?

Business schools in important cities along CPEC in Pakistan (such as Gilgit, Skardu, Lahore, Dera Ghazi Khan, Quetta, Karachi) and in China (such as Urumqi, Kashgar, Lanzhou, Xi'an, Beijing and Shanghai) may seek and provide answers to such questions and guide national strategy actively and help improve the mobilization of international projects, funding, and human resources through jointly fostering inter-disciplinary and cross-cultural management talent. With the collaboration of business schools, scholars, students, and entrepreneurs of diverse backgrounds will experience customs and knowledge streams of different nations and develop technical and leadership expertise needed for the successful execution of CPEC/BRI.

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Appendix ‘A’

Agreements signed between Pakistan and China on 20 April 2015

1. Economic and technical cooperation agreement between China and Pakistan.
2. Exchange of Notes of feasibility study of the Demonstration Project of the DTMB.
3. Exchange of notes on provision of Anti-Narcotics Equipment.
4. Exchange of notes on provision of Law Enforcement Equipment.
5. Exchange of Notes on Feasibility Study of Gwadar Hospital.
6. MoU on provision of Chinese governmental concessional Loan for second phase up-gradation of Karakorum Highway (Havelian to Thakot) between Ministry of Commerce of China and Ministry of Finance and Economic Affairs of Pakistan.
7. MoU on provision of Chinese governmental concessional Loan for Karachi-Lahore Motorway (Multan to Sukkur) between Ministry of Commerce of China and Ministry of Finance and Economic Affairs of Pakistan.
8. MoU on provision of Chinese governmental concessional Loan for Gwadar port East Bay Expressway Project between Ministry of Commerce of China and Ministry of Finance and Economic Affairs of Pakistan.
9. MoU on provision of Chinese governmental concessional Loan for Gwadar International Airport between Ministry of Commerce of China and Ministry of Finance and Economic Affairs of Pakistan.
10. Protocol on Banking Services to Agreement on Trade in Services.
11. MoU on provision of Material for Tackling Climate Change between National Development and Reform Commission of China and Ministry of Finance of Pakistan.
12. Framework Agreement on Cooperation on Major Communications Infrastructure Project.
13. MoU on Cooperation between NDRC of China and Ministry of Planning Development and Reform of Pakistan.
14. MoU on Pro-Bono Projects in the Port of Gwadar Region between Ministry for Planning, Development and Reform of Pakistan and the International Department of the Central Committee of the Communist Party of China.
15. MoU on establishment of China-Pakistan Joint Cotton Bio-Tech Laboratory between the Ministry of Science and Technology of China and the Ministry of Science and Technology of Pakistan.
16. Framework Agreement between the National Railway Administration, China and the Ministry of Railways, Pakistan on Joint Feasibility Study for up-gradation of ML1 and Establishment of Havelian Dry port of Pakistan Railways.
17. Protocol on the Establishment of China-Pakistan Joint Marine Research Center between State Oceanic Administration of China and the Ministry of Science and Technology of Pakistan.
18. MoU on cooperation between the State Administration of Press, Publication, Radio, Films and Television of China and Ministry of Information, Broadcasting and National Heritage of Pakistan.
19. Triple Party Agreement between China Central Television and PTV and Pakistan Television Foundation on the re-broadcasting of CCTV-NEWS/CCTV -9 Documentary in Pakistan.
20. Protocol on establishment of Sister Cities Relationship between Chengdu city Sichuan Province of PRC and Lahore City.
21. Protocol on establishment of Sister Cities Relationship between Zhuhai City, Guangdong province of the People’s Republic of China and Gwadar city, Balochistan of Pakistan.
22. Protocol on establishment of Sister Cities Relationship between Karamay City, XianjianUgur, autonomous region of China and Gwadar city, Balochistan of Pakistan.
23. Framework Agreement between NEA and MoPNR on Gwadar-Nawabshah LNG Terminal and Pipeline Project.
24. Commercial Contract on Lahore Orange Line Metro Train Project.
25. Agreement on financing for Lahore Orange line Metro Train project.
26. MoU on financing for KKH up-gradation Phase-2 (Havelian to Takot). KLM. Gwadar East Bay

27. Financing Agreement relating to the 870MW Hydro-Electric Suki Kinari Hydropower Project between EXIM Bank of China, Industrial and Commercial Bank of China Limited and SK Hydro (Private) Limited.
28. Financing Cooperation Agreement between the EXIM Bank of China and Port Qasim Electric Power Company (Private) Limited (on Port Qasim 2x660MW Coal-fired Power Plant).
29. Framework Facility Agreement for 720MW Karot Hydropower Project between China Development Bank Corporation, EXIM Bank of China and Karot Power Company (Private) Limited.
30. Term Sheet of the facility for Zonergy 9x100MW solar project in Punjab between China Development Bank Corporation, EXIM Bank of China and Zonergy Company limited.
31. Drawdown Agreement on Jhimpir wind Power project between UEP Wind power (Private) Limited as Borrower and China Development Bank Corporation as lender.
32. Terms and Conditions in favor of Sindh Engro Coal Mining Company for Thar Block II 3.8Mt/a mining Project, Sindh province, Pakistan Arranged by China Development Bank Corporation.
33. Terms and Conditions in favor of Engro Powergen Thar (Private) Limited, Sindh province, Pakistan for Thar Block II 2x330MW Coal Fired Power Project Arranged by China Development Bank Corporation.
34. Framework Agreement of Financing Cooperation in Implementing the China-Pakistan Economic Corridor between China Development Corporation and HBL.
35. MoU with respect to Cooperation between WAPDA and CTG.
36. MoU among PPIB, CTG, and Silk Road Fund on Development of Private Hydro Power Projects.
37. Facility operating Agreement for Dawood Wind Power project between ICBC and PCC of China and HDPPL.
38. Framework Agreement for Promoting Chinese Investments and industrial Parks Developments in Pakistan between ICBC and HBL on financial services corporation.
39. The financing term sheet agreement for Thar Block-I between ICBC, SSRL.
40. Energy Strategic Cooperation Framework Agreement between Punjab Province of Pakistan and China Huaneng Group.
41. Framework Agreement on the China Pakistan Economic Corridor Energy Project Cooperation between Ministry of Water & Power and China Export & Credit Insurance Corporation (SINOSURE).
42. Cooperation Agreement between Sino-Sindh Resources (Pvt.) Ltd and Shanghai Electric Group for Thar Coalfield Block I Coal-Power integrated Project in Pakistan.
43. Cooperation Agreement for Matiyari-Lahore and Matyari (Port Qasim)-Faisalabad Transmission and Transformation Project between National Transmission Distribution Company (NTDC) and National Grid of China.
44. IA on Port Qasim Coal fired Power Plant between Power China and GoP.
45. Facility Agreement for the Sahiwal Coal-fired Power Plant Project between industrial and Commercial Bank of China Limited, Huaneng Shandong Electricity limited and Shandong Ruyi Group.
46. Cooperation Agreement on Hubco Coal-fired Power Plant.

(Source: *The Express Tribune*, 2015)