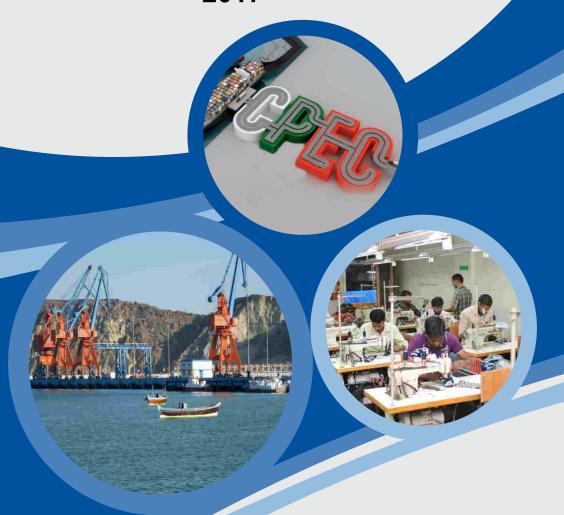
OPPORTUNITIES FOR SMEs UNDER CHINA PAKISTAN ECONOMIC CORRIDOR (CPEC) (An Exploratory Study) 2017





Turn Potential into Profit!

Small & Medium Enterprises Development Authority Ministry of Industries & Production Government of Pakistan



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Foreword

Pakistan can contribute in many ways to China's One Belt One Road (OBOR) initiative and reap economic benefits from its success. OBOR is a trade route which is being perceived as the revival of the ancient silk Road. It has been designed to create a trade network by following the principle of joint economic development, enhancement of trade and shared benefits for all participating nations. The china Pakistan Economic Corridor (CPEC), a major trade route under the OBOR initiative will be a conduit for trade and commerce which will not only link Pakistan to china, but will provide a gateway via a land route to the entire South Asian region. It will also provide a myriad of economic opportunities and a host of other positive externalities.

The OBOR initiative is a model for fostering economic growth and cooperation among the participating economies. The initiative also promises to create mutual trust through economic integration and cultural inclusion.

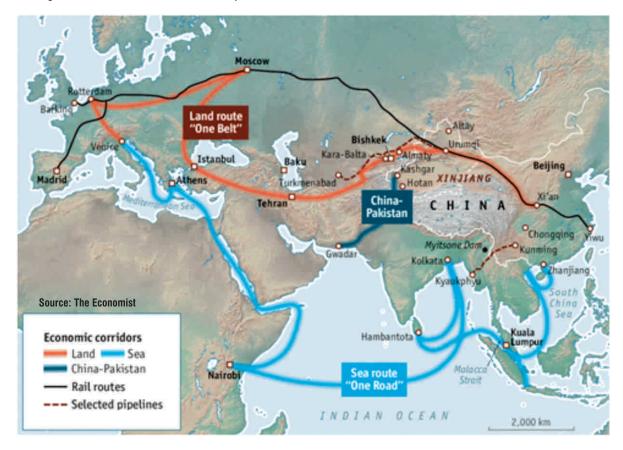
SMEDA has conducted an Exploratory study on the Opportunities for SMEs under CPEC using primary & secondary sources to develop a perspective and identify areas where Pakistan can benefit from this new trade route; especially focusing on enhancing trade opportunities between Pakistan and China. The analysis undertaken identifies potential high value, medium value and low value exports, based upon trade analysis between both the countries. Revealed Comparative Advantage highlights a number of sectors and product categories where Pakistan can benefit through increased exports to China. Going a step further stakeholder input in terms of a short survey and focus group discussion encapsulating the perception of businesses vis-a-vis CPEC and public sector support required to capitalize upon the opportunity at hand has been undertaken. As an add-on, potential opportunities for investment along the proposed Trade Corridor have also been identified in the study.

We hope that the research conducted will be useful and helpful to SMEs and policy makers, alike, in creating an environment where local enterprises can grow and flourish and the true benefits of CPEC can be realized for Pakistan.

Sher Ayub Khan Chief Executive Officer SMEDA

Opportunities for SMEs under China Pakistan Economic Corridor (CPEC) An Exploratory Study

Countries do not exist and prosper in isolation. Trading across borders and beyond, plays an important role in the economic development of any country. In an era, where world trade constitutes over US\$ 15.5 trillion, natural borders hold little significance where transnational interdependence exists.



The history of trade has come a long way; from the World Trading System established through WTO to regional trading blocks and bilateral trade agreements, all specifically trying to establish a system of engagement across countries. China's proposed 'Silk Road Economic Belt and the 21st-century Maritime Silk Road' also known as 'One Belt, One Road' (OBOR) is a manifestation of the vision of reaching out to potential markets and access resources that aim to connect China across Eurasia. China- Pakistan Economic Corridor is an important cog of OBOR.

In 2015, China and Pakistan signed the landmark agreement of CPEC, wherein China proposed to invest US\$ 51 billion to build Pakistan's energy and

transportation network — a pre-requisite for establishing connectivity between the two countries, while addressing the growing energy needs of Pakistan; an essential input towards any potential industrialization endeavour. Set to complete by 2030, the CPEC is a 3,000-km-long transportation corridor connecting Kashgar in China's Xinjiang to Gwadar in Pakistan. The trade corridor so established will provide access to the warm waters of the Arabian Sea and significantly reduce time and costs for China to transport its goods and services; apart from further strengthening its geo-political influence in the region.

Pakistan and China have been trading partners for decades andboth countries enjoy a cordial relationship.

China emerged as an economic giant on the landscape of the world's economy in 1978, when it shifted from a centrally planned to a market based economy. Since then, China has been experiencing impressive economic growth of 10% per annum, coupled with an increase in its economic and political influence. Pakistan and China enjoy a long-term multi-dimensional friendship. Earlier, both countries valued their diplomatic and strategic relationship with a rather less focus on strengthening economic ties. However, in the 1990's both countries initiated efforts to strengthen bilateral economic ties through undertaking various policy measures, beyond traditional defense and geo-political dimensions. Since then, economic collaboration between both countries has increased either in the form of trade or direct investment. With the agreement between the two countries on developing CPEC, opportunities arise for enhancing and strengthening the existing economic ties between Pakistan and China.

China's Economy & Industrial Strength

Possibly one of the most notable facts of the Chinese successes over the last few years, lies in the creation of major Chinese groups with a world vision, accentuated by a strategy to move upmarket both industrially and technologically and in a context of increasing Chinese investments abroad – their national "go-global" strategy. The size of the China's Economy (2016)¹ is evident as its GDP stands at US \$ 11.2 trillion with a growth rate of 6.7%. Agriculture contributes 8.6%, Industry 39.8% and services 51.6% to the GDP². In terms of global trade, the trade volume is US \$ 3.9 Trillion³; with imports worth US\$ 1.6 trillion and exports worth US\$ 2.1 trillion in 2016.

Industrial production in China rose 6.0 percent from a year earlier in July of 2016, compared to a 6.2 percent rise in June and slightly below market forecasts of a 6.1 percent growth. By categories, electricity, gas and water production and water supply grew by 7.4 percent, followed by manufacturing (+7.0 percent). In contrast, the mining sector fell 3.1 percent. Meanwhile, fixed-asset investment expanded 8.1 percent in January to July 2016, compared to 9.0 percent in the first six months of 2016 and market expectations of a 8.8 percent rise. Investment by private firms rose 2.1 percent year-on-year, slowing from a 2.8 percent growth in January to June 2016. Industrial Production in China averaged 12.57 percent from 1990 until 2016. China's strengths lie in the following areas:

- Exploration of natural resources
- Advanced Technological know-how
- Solid industrial foundation
- Huge Market

In manufacturing, China's extensive ecosystem has provided an unmatched environment for efficiencydriven innovation. The country has the world's largest and most highly concentrated supplier base, a massive manufacturing workforce, and a modern logistics infrastructure. These advantages give Chinese manufacturers a lead in some important knowledgebased manufacturing categories, such as electrical equipment, construction equipment, and solar panels. Today, Chinese companies improve their efficiency with a variety of cutting-edge approaches, including agile manufacturing, modular design, and flexible automation. (The apparel manufacturer Everstar, for example, uses automated equipment and online design and ecommerce systems that help consumers to customize designs for clothing and receive finished goods within 72 hours). China is also pioneering the use of open manufacturing platforms.

Pakistan's Economy & Industrial Challenges

Pakistan's GDP grew by 5.28 per cent during the fiscal year 2016-17⁴, which has been considered the highest annual growth rate since 2008 - 09. The country, being an emerging economy, however, faces numerous challenges. The exports of the country stand at US\$ 20.50 billion while imports at US\$ 47 billion in 2016⁵.

The Manufacturing sector contributes 13.50 % to GDP. Major industries rely on resource-based and low-tech forms of food processing, textiles and apparel, construction material, paper products, fertilizer, and pharmaceuticals.

Pakistan's burgeoning labor force of 61.04 million is the tenth largest in the world, and can play a significant role in labour-intensive sectors of the economy through properly chalked-out plans.

Delays in policy and product up-gradation, adaptation, and implementation; difficulties in managing the economic sector; and mainstreaming it with the global supply chain are some of the challenges faced by the local industry. Other issues & challenges vis-à-vis CPEC include:

¹World Bank

²The World Factbook-CIA

³www.trademap.org

⁴Economic Survey of Pakistan 2016-17

⁵www.trademap.org

- Lack of trained professionals across different sectors such as, heavy machine operators in construction industry etc.
- Mechanism to channelize Chinese investments towards high priority growth sectors of Pakistan
- Lack of research on opportunities & direct contact of industrial sector between both countries, especially predominantly SME sector.

SMEs play a key role in reshaping national growth strategies, employment generation and social cohesion by improving standard of living of most vulnerable segment of the society. In most countries, SMEs constitute more than 90% of all enterprises and significantly contribute towards economic growth. SMEs contribute to development in multiple ways; creating employment for an expanding labor force, providing much needed flexibility and innovation in the economy and contributing to value addition in GDP. In Pakistan. around 99% of economic establishments are SMEs that collectively contribute an estimated 40% to GDP and over 40% to the exports. A similar situation prevails in most developed and developing countries, including China. Statistics highlight that, Chinese SMEs are the largest contributor to economic development in terms of contribution to GDP and exports. Despite the fact that, in Pakistan, SMEs are the largest contributor to employment generation they are unable to play an effective role to boost economic growth as they operate at rudimentary stages of development in terms of technology and skills.

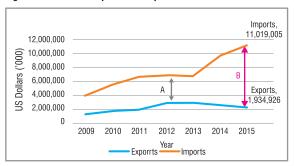
China – Pakistan Trade and Importance of CPEC

The influx of Chinese investment, businesses and workforce emanating from across the border holds great opportunities for Pakistan. Trade with China and CPEC projects are a precursor to benefits that Pakistan can reap in the long run. Not only this, the positive externalities will manifest through increased GNP, GDP, Foreign Exchange, Exports, etc. Owing to the inflow of businesses, employment opportunities, tourism, warehousing and a host of other complimentary business ventures, local businesses may benefit since the trade route from China will require a litany of facilities to ensure smooth flow of trade.

In the past few years, Pakistan's imports from China have increased disproportionately compared to Pakistan's exports to China as shown by the gap in Figure 1. The

widening of the gap between imports and exports from A to B as shown in Figure 1 is a signal of huge outflow of foreign currency to China. In 2015, Pakistan imported \$11 billion worth of goods from China; up 13 percent from the previous year.

Figure 1: Pakistan's Imports and Exports to China



Data Source: TradeMap.org

China and Pakistan's bilateral trade volume relative to China's total trade volume is very small; accounting for less than 0.5% of China's total foreign trade. However, China-Pakistan trade occupies a very important position in Pakistan's foreign trade. At present, China is Pakistan's largest trading partner. China-Pakistan trade accounted for 20% of its total foreign trade in 2015. However, while analysing import and export data exclusively for Pakistan, China has the largest share in Pakistan's imports and it is the second largest trading partner in terms of exports, accounting for 25% of Pakistan's imports and 8.5% of exports.

China and Pakistan are at different stages of industrial development. Pakistan's exports to China are mainly raw materials and primary products such as cotton yarn, rice, ethanol, ore and fish. Most of the products which are exported to China are mainly labor-intensive products.

In 2015, Pakistan's top 5 products exported to China included; cotton yarn (\$899; 47%), rice (\$133 million; 6%), woven fabric of cotton (\$88 million; 5%), ethanol (\$73 million; 4%), and chromium ores and concentrates (\$59 Million, 3%).

Pakistan's imports from China are mainly industrial products. These include; electrical and electronic equipment, machinery and equipment, organic chemicals, synthetic fibers, steel and steel products, plastics, fertilizer and so on.

Pakistan's exports to China were \$1.93 billion, while imports were \$11 billion in 2015. The trade deficit in 2015 was \$9.08 billion, accounting for 41% of Pakistan's total trade deficit. It is pertinent to note that Pakistan's

trade deficit with China has been increasing steadily as shown in Table 1.

Table 1: Pakistan's Trade Deficit with China (US dollar billion)

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
0.70	1.18	1.91	2.41	3.55	4.01	2.78	3.81	4.79	4.07	3.97	7.34	9.08	12.09

Source: TradeMap.org

China and Pakistan announced the launch of negotiations on free trade in 2005. The Free Trade Agreement (FTA) was formalized in November 2006 and came into effect in July 2007. Free trade agreement greatly reduced the tariff and non-tariff barriers between the two countries to promote bilateral trade. After the implementation of the China - Pakistan FTA, bilateral trade between China and Pakistan increased from US \$4.78 billion (2007) to US \$12.95 billion (2015), but the trade deficit with China also increased from US \$3.55 billion (2007) to US \$9.08 billion (2015), an increase of 156%.

Under CPEC, it is envisaged that Pakistan's global trade share will increase, however, it is vital to adopt an approach which can lead to a reduction in the prevalent trade deficit. The first step to increase Pakistan's exports under CPEC is through identification of products that can be exported to China. A good starting point in this regard is to study the export supply capacity and / or import demand ability of a country to assess the trade opportunities, by identifying product trends.

Methodology and Data

For the purpose of this study, an analysis of trade data between the two countries has been undertaken. Stakeholder engagement through a survey questionnaire and focus group discussion have also been conducted.

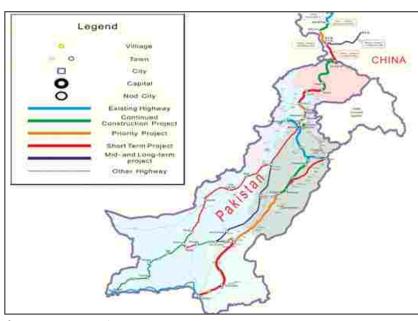
- ITC Trade Map Database at HS 8-digit level for the year 2015 has been used as data source for China and Pakistan's exports and imports
- The sectors/products with the lowest probability to be a future export have been extricated and products with the greatest potential to become long term export items to China have been selected. This approach has been adopted to prioritize sectors and markets for export related activities based on detailed trade data analysis.
- The value of exports and imports at HS 8-digit level is measured in US dollars.
- This exercise has the purpose to identify products with high potential for exports.

Export Potential

CPEC is tipped to be a forerunner to transform the

economic landscape of Pakistan in the long run. In order to reap benefits of the opportunity at hand, review of the current export basket of Pakistan can serve as a starting point for exploring options.

Pakistan, a developing country, has an interest in exploring new export products; while China, may want to concentrate on discovering new markets for their existing export products. In the initial screening, current exports of the beneficiary country, which in this case is Pakistan, have been identified. To identify products that can be exported by Pakistan, China's imports from the world



Source: www.cpec.gov.pk

have been matched with Pakistan's exports to the world and Pakistan's exports to China.

China imported a total of 5,578 types of products from around the world in 2015.On the other hand, analysis of data shows that Pakistan exported 795 types of products (each product with value >US\$1 million) to the world. From a total of 795 products, Pakistan exported 513 types of products to China.

Pakistan's exports to China have been trifurcated as; High Value Exports (HVE), Medium Value Exports (MVE) and Low Value Exports (LVE) as shown in Table 2.

Table 2: Pakistan Exports to China - Categories (Value > US \$1 Million)

Category	Value of Exports (US \$ million)	Number / Types of Products
High Value Exports (HVE)	Greater than 25	108
Medium Value Exports (MVE)	5 to 25	155
Low Value Exports (LVE)	1 to 5	250

In addition to the products categorized according to export values, 66 products have been identified that are being exported by Pakistan to other countries around the globe, with the exception of China. These products are neither imported nor exported by China.

The next section on products price comparison of Pakistan's exports and China's imports provides an example of one of the initial steps to select products for further analysis for identification of products with high export potential.

These products can be used to explore the untapped potential in terms of exports. Products identified under LVE may have even higher unrealized export potential. Some products identified under 3 categories (HVE, MVE, LVE) are listed in Table 3.

Table 3: Few Products Identified under HVE, MVE, LVE⁶

Major High	Major High	Major High
Potential Export	Potential Export	Potential Export
Products under	Products under	Products under
HVE	MVE	LVE
1.Meat 2.Fish 3.Mangoes 4.Chromium Ores and Concentrates 5.Medical Instruments 6.Marble 7.Footwear 8.Rice 9.Milk and Cream 10.Granulated Sugar 11.Denim 12.Ethyl Alcohol 13.Footballs	1.Maize 2.Milk and Cream Solids 3.Bananas 4.Leather Handbags 5.Plastic/ Textile Material Handbags 6.Polyethylene Terephthalate 7.Sweet Biscuits 8.Modified Polystyrene 9.Safety Razor Blades 10.Frozen Orange Juice 11.Natural Honey 12.Frozen Fish 13.Frozen Edible Bovine Offal 14.Butter Milk 15.Butcher Knives and Hunting Knives	1.Bran 2.Articles of Leather 3.Paints and Varnishes 4.Articles of Stone 5.Folding Cartons and Boxes 6.Coats and Jackets 7. Hydrochloric Acid 8.Tools for Masons/ Watchmakers/ Miners 9.Crates and similar articles of plastic 10.Ball Point Pens 11.Vegetable Products 12.Fruit Seeds for Sowing 13.Articles of Wood 14.Clover Seeds for Sowing 15.Shelled Almonds 16.Hide and Skin of Goats 17.Crabs

⁶Detailed analysis at Annex-A

Price Comparison of Exports and Imports

The following table illustrates the per unit price comparison between Pakistan's exports and China's imports. **Table 4: Per unit price comparison of products at HS 8 - digit level for the year 2015.**

HS Code	Product	Unit	Pak. Export Price per unit (\$)	Pak. Total Export Value of Product(\$)	Pak Major Export Countries	China Import Price per unit (\$)	China - Major Import Countries	China's Total Import value of the product(\$)
03033900	Fish, frozen, excluding fish fillets	Kilogram (Kg)	2.23	124 million	Vietnam, Thailand, China	1.39	USA, Russia, Canada	177 million
04012000	Milk and Cream of a fat content by weight > 1% but <= 6%	Kilogram (Kg)	1.18	34 million	Afghanista n, UAE, Mozambiq ue	0.85	Germany, New Zealand, Australia	308 million
22071000	Undenature d ethyl alcohol of an alcoholic strength by volume of 80 % vol or higher	Litre	0.56	231 million	China, Korea, Netherland s	0.57	Pakistan, Vietnam	122 million
08045020	Mangoes	Tons	726	40 million	UAE, UK, Oman	2980	Australia, Peru, Thailand	30 million
19053100	Sweet Biscuits	Kilogram (Kg)	2	17 million	Afghanista n, UAE, Mauritius	4.6	Indonesia, Denmark, Malaysia	305 million
17019910	White crystalline cane sugar (Granulated sugar)	Kilogram (Kg)	0.44	230 million	Afghanista n, Djibouti, Saudi Arabia	0.44	Korea, Thailand, Guatemala	301 million
02023000	Frozen boneless bovine meat	Kilogram (KG)	3.48	26 million	Vietnam UAE, Saudi arabia	5.42	Austrialia Uruguay Brazil	1.99 Billion

Data Source: Trademap.org

An Example: Bovine Meat

A potential product which Pakistan can export to China is Frozen Boneless Bovine Meat (HS Code: 02023000), the example is illustrated in Box 1.1.

Box 1.1: HS Code 02023000 - Frozen Boneless Bovine Meat (FBBM)

Pakistan's Potential

According to the Economic Survey of Pakistan, bovine (cow and buffalo) meat production was 2 million tonnes in 2015-16. Pakistan exports approximately 7,465 tonnes of frozen boneless bovine meat (FBBM) to Vietnam, UAE, Saudi Arabia and other countries with a total value of \$26 million. The average price of FBBM exported from Pakistan to all the countries in the world is approximately \$3.48 per kilogram. Pakistan does not export FBBM to China which has a huge demand for FBBM. In 2015, China imported FBBM worth \$1.99 Billion, a total of 472,209 tonnes. Major countries which exported this category of meat to China were Australia (106,561 tonnes), Uruguay (86,374 tonnes), Brazil (56,402 tonnes), New Zealand (52,090 tonnes), Argentina (42,688 tonnes). The average price at which China imports FFBM from these countries is \$5.42 per kilogram.

Identification of the Problem

The stark difference in price of \$1.94 per kilogram makes China a potential market for Pakistan to export FBBM, however, the problem lies in the quality of meat and China's strict regulatory requirements. Conforming to a multitude of regulations in the complex regulatory framework of China is a major challenge for meat exporters in Pakistan. The export of meat from Pakistan to China is limited, and regulations being onerous; it will take time before Pakistan is able to start exporting meat to China. However. Pakistan can learn from international best practices and start to export FBBM to China by establishing modern slaughter houses.

Learning from Best Practices

Brazil has emerged as the second largest exporter of FBBM in the world after India. In 2015, Brazil exported FBBM worth \$3.95 billion. The Brazilian government and its meat processing industry has collaborated in creating a conducive environment to expand its meat industry and has become a world leader in FBBM. Meat export is also a value-chain (production, processing and marketing) activity, similar to most exports. Thus, focus on all three areas is necessary to boost exports.

Pakistan has enormous potential to export FBBM, however, it is necessary to ensure quality in the local market and then extend the effort to the foreign market. By introducing quality products in the domestic market, Pakistan can test and improve its supply chain and also win confidence of Chinese importers. Once hygienic and international standardized compliance requirements are met, only then the local supply chain will be able to respond to Chinese demands.

In the current environment, it is difficult for SMEs to export individually to China. However, the opportunity for SMEs lies in becoming important players in the value chain of various products and services. Subcontracting, joint ventures and other mechanisms need to be explored for maximizing gains through partnership between the two countries.

Revealed Comparative Advantage

Revealed comparative advantage (RCA) (Balassa, 1965) indices utilize the export and import pattern to identify the sectors/ products in which a country has comparative advantage, by comparing the country's export profile with the world average. The RCA index is the ratio of two shares. The numerator (E_{yp} / E_{p}) is the share of a country's total exports of the commodity of interest in its total exports. The denominator (E_{vt} / E_t) is share of world exports of the same commodity in total world exports. If the index number has a value of greater than 1, then the country has a revealed comparative advantage in that commodity or product.RCA measures the export potential of a country; equation (1) below shows the revealed comparative advantage:

$$RCA_{yp} = \frac{\left(E_{yp} / E_{p}\right)}{\left(E_{yt} / E_{t}\right)} \dots (1)$$

where:

 $\begin{array}{l} E_{yp} = \text{ country p's exports of commodity y} \\ E_{yt} = \text{world exports of commodity y} \end{array}$

 E_p =total exports of country p

 E_t = total world exports

Equation 1 above represents the revealed comparative advantage with reference to world exports. For analysis of revealed comparative advantage with regards to trade between Pakistan and China, equation (1) was modified as follows:

$$RCA_{yp}^{c} = \frac{\left(E_{yp}^{c}/E_{p}^{c}\right)}{\left(E_{yp}/E_{p}\right)}....(2)$$

Here RCA_{vp}^c is the revealed comparative advantage index for exports of product v from Pakistan to China, where

P = Pakistan

C = China

 $E_{vp}^{c} =$ exports from country p to country c and y is

the commodity E_p^c =total Exports from country p to country c

 $E_{yp} = {
m total}$ exports of product y from country p $E_p = {
m total}$ exports of country p

After the application of modified RCA index (equation 2), it has been identified that from total exports of Pakistan to China, 92 products (each product with a total value of \$1 million or more in Pakistan's exports to the world) have 'revealed' comparative advantage. The list of these 92 products is provided in Annex – B.

Herfindahl-Hirschman Index

Herfendahl-Hirschmann index measures the sectoral concentration of a country's exports. It reveals the degree to which a country's exports are dispersed across different economic activities. High concentration levels are sometimes interpreted as an indication of vulnerability to economic changes. Over time, decreases in the index may be a signal to indicate broadening of the export base. This index is the sum of squared shares of each commodity in total exports. A country with a perfectly diversified export portfolio will have an index close to zero, whereas a country which exports only one product will have a value of 1 (least diversified).

$$\text{Herfindahl} - \text{Hirshman Index} = \sqrt{\sum_{i} \left[\frac{\sum_{t} x_{iat}}{\sum_{t} X_{at}} \right]^{2}}$$

where

t = set of all countries in the world

i = product/sectors

a = country

 $X_{iat} = \text{export of sector/product i by country a}$

 X_{at} = total export of country a

Application and analysis of Herfindahl – Hirshman index for the year 2015 reveals that Pakistan's exports are dispersed across different activities relative to other Asian

countries shown in table 5. India and Indonesia's exports are more diversified as compared to Pakistan, while Pakistan's exports are significantly more diversified in comparison to Bangladesh. However, if Pakistan's index value is analysed independently, then it can be interpreted as a country with less diversified export portfolio. Pakistan's exports are heavily dependent on textile, leaving it vulnerable to economic fluctuations.

Table 5: Herfindahl-Hirshman Index - Country Comparison 2015

Pakistan	India	Bangladesh	Malaysia	Indonesia	Sri Lanka
0.309165	0.231642	0.593412	0.371885	0.289376	0.362279

Trade Intensity Index

Trade Intensity Index has been used to analyze whether the value of trade between Pakistan and China is greater or smaller than would be expected on the basis of their importance in world trade. Trade Intensity Index can be defined as the ratio of one country's exports to the country of interest and total exports of a country divided by the ratio of world exports to the country of interest and total world exports.

Trade Intensity Index $(T_{pc}) = \frac{\binom{E_{pc}}{E_p}}{\binom{E_{wc}}{E_p}}$ where: where:

P = Pakistan

C = China

 $\begin{array}{ll} E_{pc} &= \text{ exports of country p to country c} \\ E_{p} &= \text{ total exports of country p} \\ E_{wc} &= \text{ world exports to country c} \\ E_{w} &= \text{ total world exports} \end{array}$

The index has a value between 0 and $+\infty$. Values greater than one indicate that there is an'intense' trade relationship with the country of interest. An index of greater than unity indicates a bilateral trade flow that is larger than expected, given the partner country's importance in world trade. A value of less than one means that trade flow is smaller than expected.

The Trade Intensity Index value based on the export values of 2016 is 0.774 which indicates that Pakistan's export intensity with China is less than expected, considering that China is Pakistan's neighbouring country and is one of the top trading countries of the world. The

natural trading partner theory posits that countries tend to trade more with neighbouring countries. If the index value is adjusted for geographical distance, it will decrease even more. As shown in Table 6, Pakistan's trade (export) intensity with China has been decreasing over the past 5 years. The index value was slightly greater than one in 2012 and 2013 but it has fallen below one since 2014. Pakistan's exports to China have seen an annual decrease in value of 12% between 2012 and 2016.

Table 6: Pakistan's Trade (Export) Intensity Index with China

Pakistan - China	2012	2013	2014	2015	2016
Trade Intensity Index	1.081	1.026	0.882	0.861	0.774

Stakeholder Interaction

A short survey to ascertain the opinion of businesses was conducted by SMEDA to identify key areas for improvement and enhancement of exports to China under CPEC and facilitation of SMEs operating in Pakistan and China. The respondents ranged from Pakistani businessmen currently exporting to China and Pakistani companies operating in China. The short survey was qualitative in nature to ascertain, quickly, underlying reasons for increase in imports from China and identification of export potential. The survey helped to provide an insight to develop ideas for potential areas for further research and identification of problems faced by traders and SMEs.

Respondents highlighted that imports have increased owing to an increase in demand for a range of products. The energy crisis/ lack of electricity has led to increase in demand for oil and electricity producing equipment as companies have had to procure oil-powered generators to meet their own minimum electricity requirements. Imports of electricity producing machinery has been increasing ever since the energy crisis hit Pakistan in 2008.

Furthermore, the respondents emphasized that market mechanism in Pakistan is not yet sound. The main reason for slow economic development is that Pakistan's economy is dominated by agriculture. Pakistan's exports depend heavily on cotton, the problem is that reliance on a limited range of exports and a few trading partners is not always beneficial. If the demand for cotton falls, then Pakistan can experience massive fluctuations in export earnings and the shift in balance of payments can destabilize the economy. "Pakistani SMEs can benefit in

many ways, however, there is a need to up-lift technical and skilled related capabilities of businesses" Pakistan is lagging behind in transportation, communications, energy and education. Since 2008, Pakistan's economic growth slowed down, therefore, funds for public sector development projects for infrastructure development were inadequate. Therefore, reliance on foreign aid and loans increased. There is a need to increase collaboration with China, first, by encouraging Chinese enterprises to

invest in Pakistan to bring capital and technology here; and secondly by increasing trade.

"Pakistani SMEs can benefit in many ways, however, there is a need to up-lift technical and skilled related capabilities of businesses"

In the long run, CPEC will increase

the electricity generating capability of Pakistan and develop requisite infrastructure that will also benefit local businesses.

The respondents have shown concern that Pakistan should protect its local industry and subsidize the local manufacturing sectors to increase competitiveness and restrict imports. A cautious and prudent approach is required to discourage imports of Chinese products, especially in product categories where domestic firms exist and there is potential for growth.

According to one respondent, "Develop a web portal for sharing contracting opportunities under CPEC. Also adopt a participatory approach for redressal of issues of the business community. An interactive web based mechanism could be one option to reach out to businesses across the length and breadth of the country."

The following are the major facilities demanded by respondents for supporting local enterprises:

- Provide loan/ credit facility through one window operation
- Decrease price of electricity for manufacturers
- Disseminate information regarding all rules and regulations for facilitating exports
- Skill and capacity building
- Common Facility Centres
- International Linkage Development
- Organize Export Exhibitions
- Swift contract / conflict resolution with Chinese

The potential sectors identified for enhancing trade &

business through the survey include; education (English language schools), health, minerals, transport, garments, cutlery, gems and jewellery, e-commerce (B2B)

and B2C), fruit processing, poultry, livestock, pesticides, etc.

"Investment security in China and business visa relaxation can enhance exports from Pakistan"

The major constraints for expansion of local business include; lack of information regarding CPEC, language barrier, adherence to standards and quality and lack of trust between businesses.

The respondents have highlighted that foreign investors should be given incentives for export oriented joint ventures. The foreigners can provide expertise in design, strategic planning, logistics and financing while production can be handled by the local manufacturers. "Government of Pakistan can support local SMEs through provision of knowledge and technical support. This will support business growth and create employment opportunities in the country."

The government has delineated some measures to support trading companies. CPEC-related activities are set to expand in land transport infrastructure and develop

an international port. Secondly, the government plans to develop special economic zones that will have lesser duties and taxes with the goal of inviting foreign and domestic direct

"Government of Pakistan can support local SMEs through provision of knowledge and technical support. This will support business growth and c r e a t e e m p l o y m e n t opportunities in the country."

investment. However, such measures may not provide an uplift to exporters due to certain structural issues like security, ease of doing business, etc. which continue to undermine Pakistan as a country with a lot of potential.

Focus Group Discussion

As part of this exploratory study, a focus group discussion was also conducted. The objective of the focus group discussion was to explore opportunities for Pakistan's business community. It also provided an opportunity to discuss incentives for attracting Chinese businesses to invest in Pakistan. Participants included Chinese businessmen operating in Pakistan and local

SMEs that have joint ventures with Chinese businesses.

It was unanimously agreed that there should be more joint ventures with China as joint ventures can be an internationalization strategy for SMEs in Pakistan and enable SMEs with limited productive resources or market information to explore international avenues.

Moreover, the immediate need to open new avenues to expand the cultural ties between the two countries was highlighted. It was stressed that governments of both China and Pakistan may develop special programmes for Chinese and Pakistani students to learn Urdu and Chinese languages for better communication.

"Pakistan is an emerging market with growing consumption pattern. This is an opportunity to establish manufacturing units in Pakistan to meet growing demands of the populace."

"Pakistan is an emerging market with growing consumption pattern. This is an opportunity to establish manufacturing

units in Pakistan to meet growing demands of the populace. "The availability of information about Chinese and Pakistani SMEs may be ensured by establishing effective channels of communication and by creation of an SME database.

The participants emphasised that in context of CPEC, technology transfer from China has to play an increased role in economic development of Pakistan, and therefore, it should receive more attention from policy-makers. Technology transfer should include skill transferring, techniques of manufacturing and marketing, and facilities for institutions to guarantee that technological developments are accessible to a wide range of individuals who can then further improve and utilize the technology for new products, processes, and services.

There is a general perception that CPEC may pose a threat to SMEs in Pakistan. Contrary to this observation, the participants had the opinion that CPEC will prove to be beneficial not only for existing SMEs but for nascent businesses as well. However, business community still fears that their businesses will be adversely affected, given Chinese technological advancement and investment capital available with businesses.

It was highlighted that there is need to enhance the capacity of existing units and diversify the production

base to improve Pakistan's export profile. The goods and services which should be promoted for exports should be on the basis of their comparative advantage, demand and growth potential in China.

The participants emphasised that a culture of quality at every stage of value chain should be promoted to enhance exports. Strict quality control measures should be taken, even for domestic sale of goods to make the producers quality conscious. Concurrently, compulsory quality certification for manufacturers of high quality products is also required and it may be complemented with facilitation centres to ensure quality of finished products.

Private sector shouldbecome an active player in development, especially in the export sector. However, there is a need of incentives such as; easy access to loans, tax rebates, etc. The private sector should be encouraged to establish Pakistan's image as a trade hub and a corridor for the regional countries. The prospects arising from CPEC will be accompanied by several challenges for manufacturers and exporters. The most important of these challenges is meeting quality requirements. The manufacturers should become fully compliant with these requirements. Moreover, the integration of export oriented SMEs into an organized structure is crucial to give a boost to Pakistan's exports.

Overall, Pakistan's trade deficit has widened during the fiscal year 2016-17, indicating an amalgamation of cyclical and structural factors. The balance of trade may continue to face pressure due to a negative trend in exports. The annual decrease in export value between 2012 and 2016 is 2% per annum.

The increasing trade deficit is driven by a 7% fall in exports from 2015 to 2016 and an 8% increase in imports in the same time period. Pakistan's exporters are suffering from a combination of low growth rates in key markets, increasing competition from other developing countries in a range of product categories.

In Pakistan, it is vital to diversify the economy and broaden the export base to achieve growth targets and to eradicate poverty. The manufacturing sector in Pakistan requires raw materials or semi manufactured goods to produce goods/ products that are demanded internationally and in China. In theory, this route to macroeconomic stability can surely augment Pakistan's exports, monetary stability and the general production

level of the country.

Some of the industrial priority sectors such as Horticulture, Minerals, Food Processing, Logistics, Construction Sector, Dairy & Livestock, Fisheries, ICT and Allied Service, Light Engineering and Textile Apparel & Made-ups hold significance for Pakistan and can provide avenues for cooperation between the two countries.

Pre-requisites to capitalize on CPEC Opportunities

- Local procurement for infrastructure development
- Promoting & attracting JVs in Manufacturing sector, including steel, iron ore, foundry etc.
- Develop mechanism of support for local manufacturers for setting up industrial units based on Chinese technology
- Conducive policy framework for local and foreign investment – reducing the regulatory interface
- Ensuring Technology transfer
- Creating balance between trading & manufacturing

The proposed industrial cooperation opportunities in the given sectors are as follows:

	Sectors	Proposed Areas for Industrial Cooperation
1	Horticulture	 Establishment of cool chain facilities Establishment of Value Added Processing Facilities
2	Mineral	 Marble Marble Stocking Yards with Block Squaring and Tile Manufacturing Facilities Marble Slabs Processing Units Onyx Handicrafts Processing Units Granites Slabs Processing Units Sandstone Tiles Processing Units Chromite Chromite Warehouse Chromite Lumps and Concentrates Processing Units Gypsum Gypsum Powder and Plaster of Paris processing units Gypsum Board Processing Units Coal Coal Washing and Briquetting Units Iron Ore Processing Units Chromite ferrochrome Processing units Large scale units based on chromite and iron ore potential - Steel Mills Infrastructure Development Mines up-gradation and Establishment of Common Facility Centers and Common Facility Training Centres
3	Food Processing Sector	 Processed Meat Dairy Products Juices & Beverages Fruit & Vegetable Processing Bakers & Confectionery Spices Processing & Packaging Cereals based processed foods
4	Logistics	 Training institutes to increase availability of quality human resource for warehouse management & operations. Warehousing Freight forwarding Transportation services
5	Construction	 Joint Ventures with local Constructors/Consulting Firms. Co-manufacturing and assembly of construction machinery. Establish a self sustainable National Design Institute to prepare professional engineers for design of construction machinery. Encourage Foreign Direct Investment (FDI) in Special Economic Zones (SEZs) for manufacturing of earth moving / construction machinery

6	Dairy & Livestock	 Dairy Cooperative Program: Creating Scale with Establishment of Dairy Cooperatives Training Institutes for Dairy and Livestock Farm Supervisors and Technicians Disease Free Zones (Quarantine, Vaccination and Feed Quality Control) Organized/ Commercial Dairy Farming Zones Genetic Improvement through High Quality Semen and Embryos (AI, Embryo Transfer Facilities) Milk Collection & Dairy Processing Units especially infant formula milk (e.g. Meiji and Nido) Corporate Farming (high yield breed cows with controlled shed) Cheese, Cream & Sweetener Production Units Semen Production Units Vaccine Production Units
7	Fisheries	 Introduction of Mid-size FRP Vessels & Boat Up gradation Shrimp aquaculture in PPP mode Joint Ventures for state of art Processing Facilities Aqua culture
8	ICT & Allied Services	 Training Facilities / Technology Universities Convention / Exhibition Centers Conference Centers Business Incubation Centers for new Startups One Window Operation Center for Govt. dealing Research Facilities Recreational Facilities etc.
9	Light Engineering	 Technical Assistance and Infrastructure Support Developing Special Economic Zones (SEZs)
10	Textile Made-ups & Apparel	 Technical Textiles (Weaving, Processing and Dyeing) Facilities Garments and Apparel Accessories Manufacturing Facilities Textile Chemical and other Auxiliaries Ginning

Furthermore, Pakistan's regional endowments and existing clusters offer potential opportunities for industrial collaboration. The same are provided at Annex-

Conclusion

The level of efficiency and technological advancement varies between both Pakistan and China. Pakistan, therefore, needs to develop a strategy to attract Chinese investment for the development of local industry, particularly SMEs.

To reap long-term economic benefits, both countries should avoid industrial competition and rather focus on developing complementarities. Through establishing enterprises, contracting projects and technology transfer,

China can support Pakistan to develop its comparatively advantageous industries, such as mining, agriculture, and various manufacturing sub-sectors. China can provide support in production-based structural transformation of Pakistan's industrial sector. Thus, the various modes for industrial cooperation, that may be explored include:

- Joint Ventures
- · Technical Cooperation
- Foreign Direct Investment
- · Mergers & Acquisitions
- Reciprocal business opportunities and incentives

Today, we see an influx of relatively large Chinese businesses investing in Pakistan. The spill-over effects of these investments are bound to create a market for local SMEs, however, the private sector needs to improve its

readiness level to truly capitalize upon the emerging opportunities that the Government of Pakistan is providing through strengthened economic ties between the two brotherly countries; i.e. Pakistan and China.

Annex - A

					ι	JS \$ ('000) - Y	ear: 2015		
Sr. No.	Code	Product	China's imports from the world	Pakistan's Exports to the world	Pakistan's Exports to China	Pak Exports to the world minus Pak exports to China	China's Imports form the world minus Pak Exports to China	Share of Pak Export to China vis-a-vis Pak Export to the World	Pakistan's Imports
				igh Value E			l		
1	'02023000	Frozen boneless bovine meat	1,990,808	26,306	0	26,306	1,990,808	0.0%	1,317
2	'26100000	Chromium ores & concentrates	1,791,978	70,934	59,973	10,961	1,732,005	84.5%	114
3	'90189090	Medical/veterinary instruments & appliances, nes	1,240,565	329,508	6,918	322,590	1,233,647	2.1%	0
4	'25151200	Marble & travertine, merely cut into a square/rectangular blocks/slabs	1,026,594	39,376	35,486	3,890	991,108	90.1%	44
5	'64039900	Footwear with rubber soles, leather uppers, not coverng the ankle	957,123	74,260	49	74,211	957,074	0.1%	8,146
6	'10063010	Semi-milled or wholly milled long grain	878,678	520,155	1,142	519,013	877,536	0.2%	0
7	'04012000	Milk & cream, 1% <fat<=6%, not<br="">concentrated or sweetened</fat<=6%,>	307,766	33,701	0	33,701	307,766	0.0%	42
8	'17019910	Granulated sugar	301,457	230,133	0	230,133	301,457	0.0%	0
9	'22072000	Ethyl alcohol & other spirits, denatured of any strengh	237,813	76,678	14,262	62,416	223,551	18.6%	102
10	'10063090	Other semi-milled or wholly milled rice	289,623	895,990	113,26 8	782,722	176,355	12.6%	519
11	'03033900	Other frozen flat fish	177,718	124,297	17,031	107,266	160,687	13.7%	0
12	'52094200	Denim, cotton>=85%, wt.>200g/m2	144,155	447,171	1,620	445,551	142,535	0.4%	3,970
13	'22071000	Undenatured ethyl alcohol, of alcohol v.>=80%	122,745	231,498	73,974	157,524	48,771	32.0%	5

14	'08045020	Mangoes, fresh or dried	20,418	39,972	18	39,954	20,400	0.0%	17
15	'95066210	Basketballs, footballs and volleyballs	16,708	167,754	7,029	160,725	9,679	4.2%	76
			Medium	Value Ex	ports (M	VE)			
16	'10059000	Maize excl. seed	1,103,776	11,256	0	11,256	1,103,776	0.0%	1,501
17	'04022100	Milk & cream in solid forms of > 1.5% fat, concentrated, unsweetened	952,435	7,897	0	7,897	952,435	0.0%	1,323
18	'08039000	Other bananas, fresh or dried, excl.plantains	772,940	20,634	0	20,634	772,940	0.0%	40
19	'42022100	Handbags, outer surface of leather, or of composition/patent leatherHandbags, outer surface of leather, or of composition/patent leather	720,371	7,566	23	7,543	720,348	0.3%	6,181
20	'39076090	Other primary polyethylene terephthalate	308,905	21,757	2,132	19,625	306,773	9.8%	0
21	'19053100	Sweet biscuits	304,874	17,508	0	17,508	304,874	0.0%	1,452
22	'39031910	Modified polystyrene (excl.expansible), in primary forms	277,337	19,646	0	19,646	277,337	0.0%	1,324
23	'42022200	Handbags, outer surface of plastic sheeting or of textile materials	232,058	17,782	1,099	16,683	230,959	6.2%	1,376
24	'82122000	Safety razor blades, including razor blade blanks in strips	100,563	8,966	1,421	7,545	99,142	15.8%	0
25	'20091100	Frozen orange juice	92,638	8,416	50	8,366	92,588	0.6%	167
26	'04090000	Natural honey	74,740	7,579	0	7,579	74,740	0.0%	1,174
27	'02062900	Frozen edible bovine offal (excl. tongues & livers)	65,091	9,927	0	9,927	65,091	0.0%	15
28	'03049900	Frozen meat of other fish	61,375	10,088	0	10,088	61,375	0.0%	1,220
29	'82121000	Razors including safety razors & open blade type	23,726	8,733	886	7,847	22,840	10.1%	0
30	'04039000	Buttermilk, curdled/fermented/acidi fied milk & cream	8,404	7,213	0	7,213	8,404	0.0%	60

31	'82119200	Butcher's knives, hunting knives & other knives having fixed blades	4,298	6,702	1	6,701	4,297	0.0%	0
	Low Value Exports (LVE)								
32	'23023000	Brans, sharps & other residues of wheat	21,063	4,948	0	4,948	21,063	0.0%	5
33	'61012000	Men's or boys' coats, etc, of cotton, knitted or crocheted	9,365	4,866	0	4,866	9,365	0.0%	27
34	'61043200	Women's or girls' jackets, of cotton, knitted or crocheted	21,406	4,783	42	4,741	21,364	0.9%	7
35	'71031000	Prec or semi-prec stones (o/t diamonds) unwkd or smp. sawn or rough shpd	82,243	4,463	804	3,659	81,439	18.0%	177
36	'42050090	Other articles of leather or of composition leather, nes	55,427	4,463	53	4,410	55,374	1.2%	38
37	'32089090	Other paints & varnishes, nes	227,406	4,456	0	4,456	227,406	0.0%	0
38	'68159990	Articles of stone or of other mineral substances nes	19,283	4,164	158	4,006	19,125	3.8%	512
39	'48192000	Folding cartons, boxes & cases, of non- corrugated paper or paperboard	86,977	4,096	0	4,096	86,977	0.0%	1,921
40	'28061000	Hydrogen chloride (hydrochloric acid)	13,736	3,595	0	3,595	13,736	0.0%	98
41	'82055900	Tools for masons, watchmakers, miners & hand tools nes	59,400	3,064	32	3,032	59,368	1.0%	0
42	'39231000	Boxes, cases, crates & similar articles of plastics	455,228	2,357	0	2,357	455,228	0.0%	6,621
43	'96081000	Ball point pens	38,937	1,493	0	1,493	38,937	0.0%	0
44	'14049090	Vegetable products, nes	80,499	1,371	4	1,367	80,495	0.3%	128
45	'12099900	Other seeds fruit and spores, for sowing	36,894	1,343	141	1,202	36,753	10.5%	0
46	'44219090	Articles of wood, nes	633,138	1,192	26	1,166	633,112	2.2%	1,153
47	'12092200	Clover seed, for sowing	14,019	1,189	0	1,189	14,019	0.0%	0
48	'08021200	Shelled almonds	44,049	1,174	0	1,174	44,049	0.0%	0

49	'41062200	Hide & skin of goat/kid, tanned/crust, without wool, dry state	14,001	1,133	0	1,133	14,001	0.0%	0
50	'16051000	Crab, prepared or preserved	2,483	1,057	253	804	2,230	23.9%	5

Annex - B US \$ ('000)

Product code	Product label	Pakistan's exports to China 2015	Pakistan's exports to world 2015	RCA
'74020000	Unrefined copper; copper anodes for electrolytic refining	1747	1747	11.41598
'26011100	Iron ores and concentrates, including roasted iron pyrites: Iron ores and concentrates, other	3507	3507	11.41598
'26012000	Iron ores and concentrates, including roasted iron pyrites: Roasted iron pyrites	2900	2900	11.41598
'26190000	Slag, dross (other than granulated slag), scalings and other waste from the manufacture of	3080	3082	11.40857
'39079900	Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins,	1764	1766	11.40305
'25051000	Natural sands of all kinds, whether or not coloured, other than metal bearing sands of chapter	6066	6123	11.3097
'39151000	Waste, parings and scrap, of plastics: Of polymers of ethylene	3016	3143	10.95469
'26030000	Copper ores and concentrates	1120	1173	10.90017
'03052000	Livers and roes, dried, smoked, salted or in brine	1432	1585	10.31399
'25151200	Marble, travertine, ecaussine and other calcareous monumental or building stone of an apparent	35486	39376	10.28818
'13023900	Vegetable saps and extracts; pectic substances, pectinates and pectates; agar-agar and other	2194	2569	9.749574
'25151100	Marble, travertine, ecaussine and other calcareous monumental or building stone of an apparent	3414	4021	9.692651
'03051000	Fish, dried, salted or in brine; smoked fish, whether or not cooked before or during the smoking	3894	4595	9.674389
'26100000	Chromium ores and concentrates	59973	70934	9.651936
'03062400	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine;	8444	10121	9.524406
'52051200	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	828916	1017987	9.295685
'52051100	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	71822	90756	9.034316
'39159000	Waste, parings and scrap, of plastics: Of other plastics	15719	20138	8.910903

'03048900	Fish fillets and other fish meat (whether or not minced), fresh, chilled or frozen. frozen	2444	3140	8.885557
'23012010	Flours, meals and pellets, of meat or meat offal, of fish or of crustaceans, molluscs or other		8837	8.172171
'90278000	Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers,		1948	7.5247
'74031900	Refined copper and copper alloys, unwrought: Refined copper: Other	2430	4313	6.43191
'52091200	Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing more than 200	88519	162881	6.204106
'52052200	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	49867	102651	5.545787
'03019900	Live fish: Other live fish: Other	1439	3005	5.466753
'08134030	Fruit, dried, other than that of headings 08.01 to 08.06; mixtures of nuts or dried fruits	26725	63317	4.818485
'52052100	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	2982	7675	4.435498
'41120000	Prepared leather sheep/lamb	12511	33704	4.237636
'52053100	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put		22242	4.18514
'52053200	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	53744	152229	4.030377
'74040090	Waste and scrap, copper or copper alloy: other	22411	64782	3.949299
'52054200	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	8921	25949	3.924696
'63079020	Prayer mats (janamaz)	459	1338	3.916244
'85234910	Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the	721	2250	3.658187
'22071000	Undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol or higher; ethyl alcohol	73974	231498	3.647917
'27101942	Petroleum top naptha		32074	3.524382
'52052400	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put		12554	3.432796
'52051300	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	11525	38692	3.400422
'63053300	Sacks and bags, of a kind used for the packing of goods: Of man-made textile materials: Other,	3345	11476	3.327505

'23012090	Flours, meals and pellets, of meat or meat offal, of fish or of crustaceans, molluscs or other	679	2332	3.323949
'84304900	Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or	1383	4885	3.231995
'13023290	Vegetable saps and extracts; pectic substances, pectinates and pectates; agar_agar and other	579	2154	3.06864
'52062400	Cotton yarn (other than sewing thread), containing less than 85 % by weight of cotton, not	264	1006	2.995843
'52062100	Cotton yarn (other than sewing thread), containing less than 85 % by weight of cotton, not	478	1919	2.843584
'52091100	Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing more than 200	20200	83147	2.773434
'16051000	Crustaceans, molluscs and other aquatic invertebrates, prepared or preserved: Crab	253	1057	2.73249
'52081200	Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing not more than	50973	214956	2.707097
'56012900	Wadding of textile materials and articles thereof; textile fibres, not exceeding 5 mm in length	809	3749	2.463464
'13023210	Vegetable saps and extracts; pectic substances, pectinates and pectates; agar -agar and other	7511	37135	2.309019
'52053400	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	1674	8321	2.296641
'32041400	Synthetic organic colouring matter, whether or not chemically defined; preparations as specified	215	1132	2.168229
'22072000	Undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol or higher; ethyl alcohol	14262	76678	2.123356
'03038900	Fish, frozen, excluding fish fillets and other fish meat of heading 03.04. other fish, excluding	1468	7972	210219
'52052300	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	5431	29603	2.094388
'71031000	Precious stones (other than diamonds) and semi -precious stones, whether or not worked or graded	804	4463	2.056564
'52121100	Other woven fabrics of cotton: Weighing not more than 200 g/m2: Unbleached	9313	52800	2.01358
'14049050	Vegetable products not elsewhere specified or included: Other: Hena leave and powder	383	2178	2.007493
'52061200	Cotton yarn (other than sewing thread), containing less than 85 % by weight of cotton, not	1518	8652	2.002942
'73269090	Oth art i/s forged/stam n -work	728	4182	1.987286

'74032100	Refined copper and copper alloys, unwrought: Copper alloys: Copper-zinc base alloys (brass)	350	2015	1.982924
'52081300	Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing not more than		83039	1.928669
'41044900	Other hides dry state(crust)	2094	12552	1.904482
'41041900	Oth hide,skin wet state	255	1555	1.872074
'82122000	Razors and razor blades (including razor blade blanks in strips): Safety razor blades, including	1421	8966	1.809291
'52051400	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	800	5100	1.790742
'85177000	Telephone sets, including telephones for cellular networks or for other wireless networks;	946	6196	1.742982
'07095100	Other vegetables, fresh or chilled: Mushrooms and truffles: Mushrooms of the genus Agaricus	247	1710	1.648975
'07123900	Oth truffle drycut whole slic	215	1497	1.639569
'03033900	Fish, frozen, excluding fish fillets and other fish meat of heading 03.04: Flat fish (Pleuronectidae,	17031	124297	1.564201
'10063090	Rice other varieties		895990	1.443169
'52091900	Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing more than 200		9190	1.404587
'52081100	Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing not more than	481	3939	1.39403
'52053300	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	279	2312	1.37762
'57011090	Oth carpets wool animal hairs	139	1176	1.349338
'63053900	Sacks and bags, of a kind used for the packing of goods: Of man-made textile materials: Other	2351	21008	1.277559
'52054400	Cotton yarn (other than sewing thread), containing 85 % or more by weight of cotton, not put	546	4937	1.262533
'55095300	Yarn (other than sewing thread) of synthetic staple fibres, not put up for retail sale: Other	3105	28279	1.253461
'10064000	Rice: Broken rice		490358	1.225484
'03062700	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine;	482	4530	1.21468
'12099900	Seeds, fruit and spores, of a kind used for sowing: Other: Other	141	1343	

'03062700	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine;	482	4530	1.21468
'12099900	Seeds, fruit and spores, of a kind used for sowing: Other: Other	141	1343	1.19855
'74040010	Waste and scrap, copper or copper alloy: brass scrap	803	7675	1.194401
'87059000	Special purpose motor vehicles, other than those principally designed for the transport of	251	2400	1.193921
'52021000	Cotton waste (including yarn waste and garnetted stock): Yarn waste (including thread waste)	1231	12285	1.143921
'68022100	Worked monumental or building stone (except slate) and articles thereof, other than goods of	553	5567	1.13401
'39076090	Oth polyethylene terephthalate	2132	21757	1.118668
'41131000	Leather prep.after tann goat	11898	121905	1.114206
'52095200	Woven fabrics of cotton, containing 85 % or more by weight of cotton, weighing more than 200	333	3484	1.091137
'03061700	Crustaceans, whether in shell or not, live, fresh, chilled, frozen, dried, salted or in brine;	4981	55338	1.027558

Annex - C

Given below are a few potential Industrial Cooperation projects that can be initiated at the early harvest stage of CPEC. However, the list below is not exhaustive and it is suggested that an in-depth exercise for identification of potential industrial cooperation projects be undertaken through direct interaction with counterpart public and private sector entities.

Sr.No.	Proposed Initiatives	Description	Investment Potential	Potential Locations
1	Sea Food City	Investment in fisheries supply chain to enable deep sea fishing and EU compliant fish processing	Boat manufacturing, deep sea fishing and fish processing	Korangi Fish Harbor, Karachi Fish Harbor & Gwadar Fish Harbor.
2	Marine aquaculture	Sindh & Coastline, with defined land allocation policy	Shrimp farming, prawn farming, pearl farming	Passni, Gwadar, dam, Hub, Thatta, Gharo, KT Bandar
3	Diseases free Livestock Zones	10 zones in south Punjab with restricted entry, quarantine zones and international certifications	Cow/calf operations, fattening, mechanized slaughtering meat processing, Offal processing	DI Khan, Bhakkar, Layyah, DG Khan, Rajanpur, RYK, Mirpur Khas, Sanghar, Qilla Saifullah,
4	Cyber Cities	3 Cyber Cities with 200 acres, state of the art IT infrastructure, fiber optic bandwidths etc.	Software houses, multimedia animation industry, call centers/BPO	Islamabad, Lahore & Karachi

5	Auto Manufacturing	Assisting Chinese capabilities for manufacturing small vehicles.	Small tractors and cars, Motorbikes	Gwadar, Karachi
6	Ship Building	Shipyard development & operations	Manufacture and service 600,000 ships.	Gwadar/Ormara
7	Halal City	Processing & Manufacturing of certified Halal Products	Food and non food Halal products	Peshawar, Lahore, Karachi, Gwadar

Regional Endowments & Potential Clusters for Value Addition

Given below are the potential clusters located along the Trade Corridor. The table identifies regional endowment and indicative value addition potential.

Sr.No.	District /Area	Regional Endowment	Indicative Value Addition Potential
1	Gilgit, Kohistan	Precious Stones, Sweet Potato, Dry Fruits, Fresh Fruits, Gold Panning, Minerals, Marble & Granite	Gems & Jewelry, Minerals Processing, Fruit Processing, Marble & Granite
2	Hazara Division	Mineral, Soap Stones, Poultry farming Marble & Granite, Hydro Power	Minerals Processing , Fruit Processing, Marble & Granite, Poultry Farming
3	Burhan , Taxila	Marble, Glass, Ordinance, Factory, Heavy Mechanical Complex	Marble, Glass, Ordinance, Factory, Heavy Mechanical Complex
4	Daud Khel, Khushab, Esa Khel, Mianwali	Agriculture Land, Marble, Livestock & Dairy, Gypsum, Cement, Minerals, Coal, Salt Mines	Gypsum & Mineral, Cement, Coal & Salt , Marble
5	Bakkhar	Livestock Farming , Sugarcane, Grains, Kinno Farming , agro base	Agro based, Halal Products
6	Layyah	Livestock Farming, Sugarcane , Grains, Kinnu Farming, agro base,	Agro based, Halal Products, Pharma. Industry
7	Kot addu	Cement Ginning, Agriculture	Agro based, Halal Products
8	DG Khan	Cement , Cotton Ginning, Agriculture, Marble	Agro based, Halal Products
9	Gwadar	Agriculture, Dates, Fruits, Sea Food	Sea Food Processing, Deep Sea Fishing, Mining & Processing, Warehousing
10	Dera Bugti	Minerals, Natural Gas & Petroleum	Mineral Processing
11	Khuzdar	Marble, Minerals, Agriculture	Mineral & Marble Processing

12	Basima –(near khuzdar)	Marble, Minerals	Mineral & Marble Processing					
13	Panjgur	Marble, Minerals	Mineral & Marble Processing					
14	Turbat	Agriculture, Dates, Fruits, Sea Food, Minerals	Minerals Processing, Sea Food Processing, Warehousing					
	Potential Clusters within 100 KM of Trade Corridor							
1	Lasbella	Agriculture, Fruits, Minerals, Sea food Processing, Fisheries	Marble & Minerals (Existing)					
2	Kalat	Marble, Minerals, Agriculture	Marble & Mineral					
3	Jacobabad, Larkana Shahdad kot, Kashmore	Rice, Wheat	Agro Processing					
4	Sukkur /Khairpur	Date Farming, Wheat , Sugarcane, Dairy Farming, Cement Industry, Cotton	Agro Processing Date Processing					
5	Kashmore, Darkhi Ghotki, Rahim yar khan, Sadiqabad	Agriculture, Cotton Ginning Mari Gas Filed, Fertilizer Companies, Mango Farming	Agriculture Mango processing					
6	Loralai	Marble, Lime Stone, Dry Fruits	Marble City					
7	Multan	Agriculture, Mango Farming, Pottery, Mosaic & Handicraft, Sufi Tourism	Fruit Processing, Agro processing, Mosaic & Handicraft, Hotel Industry					
8	Dera Ismail Khan	Dates, Agriculture	Dates Processing & Farming					
9	Risalpur	Match Industry, Lime Stone	Marble City (Existing)					
10	Mohmand Agency	Marble, Minerals	Marble City (Existing)					

Works Cited

Balassa, B. (1965). Trade Liberalization and Revealed Comparative Advantage. The Manchester School of Economic and Social Studies , No. 33: 99-123.

Lefebvre, E., & Lefebvre, L. (2000). Small and Medium-Sized Enterprises, Exports and Job Creation: A Firm Level Analysis. Research and Publications Program .

Neto, W. A., & Bacchi, M. R. (2014). Growth of Brazilian beef production: effect of shocks of supply and demand. Rev. Econ. Sociol. Rural, 52 (2).

Seyoum, B. (2009). Export-Import Theory, Practices, and Procedures. New York: Routledge.

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