Cross-border logistics between Pakistan and China: Exploring the potential for Freight Entrepreneurs in CPEC

Engr. Hassan Gul

Enrollment No: 01-246162-017

Supervisor: Dr. Abdul Baseer Qazi

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One of the most important acknowledgements is my mother, for facilitating me in this endeavor. This accomplishment would not have been possible without them. Last but the least I am thankful to all my sisters for support and courage to accomplish this task.

Dedication

This thesis work is dedicated to Allah Almighty, Bahria University and my parents who have been a constant source of support and encouragement during the challenges of graduate school and life. I am truly thankful for having you in my life. This work is also dedicated to my friends and siblings, who have always loved me unconditionally and whose good examples have taught me to work hard for the things that I aspire to achieve.

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Abstract

This study is aimed at potential entrepreneurs for flow of goods by road transportation across China and Pakistan in proposed China-Pakistan Economic Corridor (CPEC). Instead of giving all the transport opportunity to Chinese Transporters, this study targeted the present situation in the CPEC route and proposed the feasible ways to achieve the freight business on CPEC. The study has been executed with the inspiration that there is a lot of potential for trade and cooperation between Pakistan and China on One Belt One Road (OBOR). It should be noted that more than 500 Freight Forwarding companies are already operating in Pakistan and it is proposed that frequent no. of freights will be moving on CPEC in a particular time period. The study revealed that there are certain criteria to enter into the freight business on CPEC. According to this criteria company should be public or private limited and it must possess registration from SECP. If coordinated and a partnership should be developed this would be able to improve the services of cross-border logistics without a need for large-scale investments. The study suggested an alternative logistics solution. This enhanced logistics services would facilitate supply chain solutions across the nations. Because of globalization, the general importance of effective Supply Chain Management would increase for businesses.

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List of Abbreviations

CPEC (China Pakistan Economic Corridor)

OBOR (One Belt One Road)

SECP (Securities and Exchange Commission of Pakistan)

TIR (Transports Internationaux Routiers)

NTRC (National Transport Research Center)

CBL (Cross Border Logistics)

SBP (State Bank of Pakistan)

NHA (National Highway Authority)

NH & MP (National Highway and Motorway Police)

GDP (Gross domestic Product)

FDI (Foreign Direct Investment)

WeBOC (Web Based One Customs)

Chapter 1

Introduction

1.1 **Background of the Study**

The China Pakistan Economic Corridor (CPEC) is a mega project between Chinese government and Government of Pakistan. It was officially announced by President Xi Ji Ping on his visit in July 2013. CPEC is a long term project expanded over the years 2014 – 2030. CPEC is actually a framework of regional connectivity. It will not only privilege China and Pakistan but will have positive impact on Iran, Afghanistan, India and Central Asian Republic. In this economic corridor, there are multiple projects but the major and mandatory project for the successful completion of CPEC is road\infrastructure project. This project has high significance because this road will develop communication between two countries and from the two to the rest of the world.

CPEC is supposed to be a game-changer in the region. It will link Kashgar dry port with Gwader port of Pakistan via long mettle road as well as railways network. The currently used route by China is Kashgar dry port (China) and Shanghai sea port (China) which covers is about 5,153 km while the distance between Kashgar to Gwadar is about 2,800 Km. The Pakistani government claims that CPEC is not merely a project between China and Pakistan but a way forward for boosting the economy [1].

China-Pakistan Economic Corridor is a major and pilot project of the Belt and Road Initiative, to which the leaders of our two countries have attached great importance and rendered active promotion. It has also won the across-board support from our two peoples as it aims to provide new opportunities to the citizens as well as bring new impetus and vision to China-Pakistan friendship.

CPEC is a long-term and systematic project to promote economic cooperation through collaboration on Gwadar port, energy, transportation infrastructure and industrial cooperation.

CPEC will bring solid benefits to both nations. With the completion of energy and infrastructure projects, conditions in Pakistan will improve. There will be more electricity integrated into national grid and the electricity supply will be more stable. People will enjoy convenient transportation and a better livelihood. Alongside the major projects, Government of Pakistan is setting up social welfare institutions, especially in Gwadar, in the form of primary school, vocational training center, and hospital with Chinese government's grant. Government will also provide KPK province with medical, educational and training projects in line with the need of local people, to translate the benefits of CPEC immediately among them. For average persons, the outcomes of the CPEC are tangible, accessible and enjoyable to hundreds of thousands families across the country.

1.2 Scope of the study

Gearing to global need, the importance of efficient transportation management, which is being enhancing for entrepreneurs to be competitive figure in the global market. Consequently, the companies who want to have benefits from international supply chains are using global sources [2]. This has off course potential benefits but still some hurdles involve for which companies usually rethink on strategies since challenges lie ahead. The main bottlenecks are long geographical distances and cost of transportation. However, it revealed that global sourcing is a observable fact in international transportation management can be the entrepreneur strength [3].

After the completion of CPEC Pakistan will be the transshipment hub and their will be so much to transport through this road to neighboring country and European and African states Pakistan has a transit of economy. Pakistan has a border with land locked country Afghanistan so Afghanistan will be doing its trade through Pakistan to other countries. China is world fastest growing economy which enjoys 9% GDP rate [4]. China is developing CPEC because its own seaport is 5,153 Km away from western China, however, seaport of Gwadar is only about 2800 Km away.

Pakistan's geological position is also the gateway for central Asia and offers central Asian state (Afghanistan, Kyrgyzstan, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan) a shortest route of 2600 km as compare to Iran 4500 km and Turkey 5000 km.

Figure No 1.1: Gawadar as Gateway for Central Asian States (Balochilinguist, 2015)

China Pakistan Economic Corridor is the network of roads, highways and railways that connect the Kashgar dry Port of China with Gwadar sea port of Pakistan. Total length of

the route from Gwadar to Khunjerab is 2688 Km. The length includes the area of mountain, rolling and flat. For the CPEC, 2 to 6 lanes have been proposed and each lane is 3.65 meter wide. Design speed for the CPEC route is about from 70 km/h to 120 km/h. The proposed road map of CPEC and different phases of highways shown in the following map. Basically this corridor consists of three routes (Figure No: 1.1)

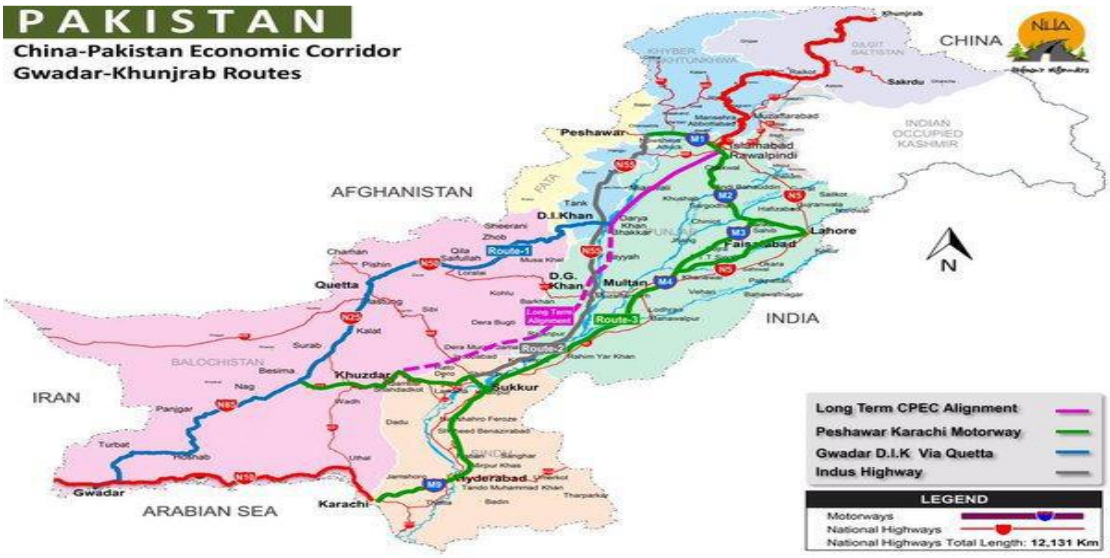


Figure No 1.1: Routes of CPEC from Gwadar to Khunjerab (NHA, Pakistan, 2016)

1.3 Need of the Study

The reason for undertaking this study is to investigate the process through which entrepreneurs can get some space in the logistics sector and to improve the efficiency of logistic sector in Pakistan. Further, the study explore the opportunities and threats of China Pakistan economic corridor. The importance of this study is that an entrepreneur will be able to find entry for him/herself in the logistics sector of Pakistan . The study has also

described the parameters that has to be considered before starting a logistic business in CPEC. Hence, this study will be the major contribution for logistic and transport industry and it will be helpful for policy makers, researchers and will be a contribution to the literature.

1.4 Research Questions

Q. No 1. How new entrepreneur will find entry point in CPEC logistics?

Q. No 2. What are the opportunities for entrepreneurs of Pakistan in CPEC logistics?

Q.No.3. What are the logistical hindrance and business blockade exist for transports to be executed?

1.5 Problem Statement and Research objective

The direct objective of this study is to spread awareness among the people about CPEC transportation and opportunities and its processes. The specific objectives of the study were:

i) To explore the entry point for logistic entrepreneur in CPEC

ii) To determine the bottlenecks for entry into freight business on CPEC

iii) To find out the opportunities for freight logistic entrepreneur on CPEC.

1.6 Motivation for the study

This topic is motivated by the fact that Pakistan requires many reforms in the logistic industry. As the people are not aware of the processes, through which they can find entry for themselves in the logistics of CPEC. The aim of the CPEC is to connect Kashgar, which is the major trading hub in western China with Gawadar port of Pakistan. Currently, China is using Malacca for export and import, which requires 45 days atleast for the delivery of the products. After the successful completion of CPEC, it will reduce the trade route upto

10000 kilometers. China can deliver products in mere 10 days compared to current transit time i.e. 45 days. Pakistan will be the transshipment hub in the next few years and all the trade activity will be done through Gawadar Port. Pakistan logistic industry requires many reforms to create opportunity for his own nation.

Chapter 2

Literature Review

2.1 China Pakistan Economic Corridor

The China Pakistan Economic Corridor (CPEC) is being developed as part of strategic partnership between the Government of Pakistan and China. CPEC was announced during the visit of Pakistani premier to China in July 2013. China Pakistan economic (CPEC) corridor is a long-term plan having a period of 2014 – 2030. CPEC would create enormous opportunities in freight and logistics and entrepreneur can benefit from these opportunities through improving its organizational capability. It is estimated that at least 100,000 additional trucks would be needed to transport construction materials, movement of export-import trade and increased volume of goods[5]. If investment in the sub sector is not carried out well ahead of the CPEC projects, the prices of trucking would escalate, putting Pakistani exports at a competitive disadvantage. The cost matrix of CPEC projects would also move upwards thus increasing the indirect costs. However, if Pakistani truck manufacturers are provided ballpark figures they can invest in expansion of existing capacity in tandem with the suppliers of parts and components. Indirect benefits would increase through creation of new jobs in the industry and efficiency gains from the economies of scale[5] [6].

Logistics is the integration of different important activities such as information, warehousing, inventory, packaging, material handling and many others as well. Logistics is the part of supply chain that deals with the forward and reverse flow of goods. Logistics is the activity that connects the different function of supply chain. On the other hand,

logistics organization network includes component elements materials supply enterprises, transport enterprises, target customers [7]. As mentioned by [7], logistics efficiency depends upon the infrastructure. It means logistics' efficiency should improve by using short routes or with better infrastructure. In the current era, logistics become a competitive advantage for the firm [8]. Organization create values for customers and for themselves by developing new logistics capabilities [9][10]. Logistics is an opportunity for the entrepreneurs. In many firms, logistics is undervalued and consider as cost center but not as a strategic resource. However, logistics is a strategic resource and organization used it as competitive advantage [11]. Transportation takes a crucial part in manipulation of logistics. Since logistics have advanced from the 1950s due to the trend of nationalization and globalization in recent decades, the importance of logistics management has been growing in various areas. For industries, logistics helps to optimize the existing production and distribution processes [12].

An introduction to small business economics dealing with the (long-postponed) integration of entrepreneurship into the discipline of development economics and casting a formal light on the role of entrepreneurship in developing countries was produced by [13]. The study stated that more than a billion people living in absolute poverty, it is of great practical importance to understand when entrepreneurship is a binding constraint on economic development and catching up in developing countries. This in turn requires at least a deeper theoretical modeling. The development economists now routinely advocate the building and strengthening of appropriate institutions for development, such as the rule of law, property rights, contract enforcement, and accountability and good governance, to name but a few [14], and entrepreneurship scholars now accept that the allocation of

entrepreneurship towards particular activities, be it productive or unproductive or even destructive [15], are the outcomes of institutions [16][17].

Studies highlighted that there are many internal and external challenges for Pakistan government to implement CPEC the multi-dollars project [18]. However, it is a game changer project which will transform the fate of Pakistan and will help Pakistan modernize. It will improve the economy and trade, enhance regional connectivity, overcome energy crises, develop infrastructure and establish people to people contacts in both the countries. This project will incorporate a 2,000 kilometer transport link between Kashgar in northwestern China to the Gwadar port on the Arabian Sea near the border with Iran. When this corridor will be completed, oil from the Middle East could be off loaded at Gwadar, which is located just outside the mouth of the Gulf, and transported to China through Baluchistan and over the Karakoram Mountain. A study [4] revealed that although CPEC is a contract between Pakistani and Chinese governments but there are challenges in the political, security, and economic fields including political instability and insecurity. However looking at the CPEC, China`s concentration in constructing these corridors appears to support its trade and economic engagement with nations in the region and primarily to fulfill its rising energy requirements and enhance exports, it is anticipated that Pakistan might appear as a hub of commerce and trade in the constituency with the creation of the CPEC that would necessitate establishing numerous economic, industrial zones, physical roads, railways linking Pakistan and China.

A study [19] pointed out that China's "One Belt, One Road" is the master plan behind CPEC. CPEC is expected to resolve the energy problems of Pakistan on one hand and it will provide a shorter route to China to approach Persian Gulf on the other. The GDP

growth rate of Pakistan was expected to be 6% for FY 2016-2018. Short term projects of CPEC were completed by 2017, medium term projects by 2025 and the long-term projects by 2030. Besides CPEC's proposed opportunities of economic progress, there are some political and security threats in Pakistan. This is what Pakistan will have to be careful about. The study intends to explain different projects of China Pakistan Economic Corridor (CPEC) and presents a holistic view of existing literature on the proposed subject. It discusses review of opportunities and significance arising out of CPEC, for both countries i.e. China and Pakistan. In order to assess the potential threats and constraints to CPEC [20] highlighted that political stability is important for CPEC ,as it will create more opportunities for Pakistani people. If peace and stability is achieved, Pakistan can easily provide funds for CPEC projects so it will not be delayed. China and Pakistan will construct eastern route first because it is more secure and investors are willing to invest in this region. In another study [21] has given emphases on the imperative for significant reforms in our governance structure to take full-spectrum advantage of the CPEC and its dividends bearing positive results to the socio-economic development of the country. Another study [5] highlighted that the recently unveiled China's One Belt One Road (OBOR) plan aims to build a nationwide logistics network, and enlarge the warehousing and distribution network between major cities of Pakistan with a focus on grains, vegetables and nine Special Economic Zones are being established along CPEC route where foreign companies can invest in factories, warehouses, logistic centers and much more for consumption in Pakistani market and export.

2.2 Entrepreneurship

Entrepreneurship is the act of creating a business or businesses while building and scaling it to generate a profit. However, as a basic entrepreneurship definition, it's a bit limiting. The more modern entrepreneurship definition is also about transforming the world by solving big problems. Like initiating social change, creating an innovative product or presenting a new life-changing solution. An entrepreneur is a person who sets up a business with the aim to make a profit [22][23].

It is now a days taken for granted that entrepreneurship is indispensable for economic development. At least this is so in the disciplines of entrepreneurship and business management, where claims for the importance of entrepreneurship in the economic development process abound. Thus it has been claimed that entrepreneurship is the main vehicle of economic development [24], "the more entrepreneurs there are in an economy, the faster it will grow [25], and that the engine of economic growth is the entrepreneur [26]. These are just a few examples. A recent special edition of Small Business Economics was introduced with the statement that Entrepreneurship is considered to be an important mechanism for economic development through employment, innovation and welfare effects [17]. Today, the bulk of the entrepreneurship literature is concerned with the individual choice to become an entrepreneur, the determinants hereof and personal characteristics, and the growth, success, failure, and exit of entrepreneurs from the market. As stated by [27], this literature has typically not considered the implications for the broader economic context, and as admitted by [28], they actually know very little about whether and how entrepreneurship either contributes or does not contribute to economic growth in developing countries.

Empirically, entrepreneurship is viewed as a primary mode of economic development; indeed most job creation occurs in small, entrepreneurial firms [29][30][31]. Going further, [32] suggests that entrepreneurship may be the wellspring of most economic growth. Researchers continue to examine entrepreneurship's role in the growth and development of economic markets, and although there is general consensus that entrepreneurial activity is of critical importance, there is disagreement about the specific relationship between venturing and economic development. Much of the research builds upon the assumption that economic growth is driven by entrepreneurial innovation; while the dominant view centers around product innovation as an economic driver (e.g.,[33]), other scholars argue for the importance of process innovation [34]. Other work (e.g., [35] suggests that entrepreneurship produces knowledge spillovers arising from agglomeration, which in turn drive economic growth.

Another study [36] determined that logistics hold a great set of opportunities for young entrepreneurs. The logistics industry is subject to certain dynamics such as tax reforms, FDI relaxation, and government's extra initiatives, which may pose challenges for the new startups and their long survival. Another economist, [37] [38]revealed that as employees age they are less inclined to act entrepreneurially, and that their entrepreneurial intention is lower the more they identify with their job. Whereas gender, education, and previous entrepreneurial experience matter, leadership and having entrepreneurial parents seem to have no impact on the entrepreneurial intention of employees. In recent decades, entrepreneurship has become a major economic and social phenomenon, a subject of research and a new field of education. While entrepreneurship is not a new concept, it regained importance particularly in scientific research. Entrepreneurship is seen as a vector

for innovation and economic efficiency but also as a powerful job creator. Along with the evolution of entrepreneurship, there is a growing interest in the development of training programs to encourage entrepreneurship in universities. The challenge remains to find a consensus on the content to be taught and the type of learning to guide student behavior. Several empirical studies indicate that education can foster entrepreneurship. Yet the impact of entrepreneurship education programs on entrepreneurial skills and entrepreneurial values remains largely unexplored [39].

Entrepreneurial activity is not the same thing as competition, but they are closely related in many contexts. Competitive entry generally entails entrepreneurship of some kind, and potential competition in many circumstances requires the potential for entrepreneurial activity. A classically competitive industry structure is generally associated with a plethora of enterprises producing closely substitutable products or services, and these enterprises may typically be the result of entrepreneurship. However, there is a strain of economic thought that might suggest that competitive conditions or market structures are disadvantageous to entrepreneurship, especially in developing economies such an hypothesis is often associated with the work of Schumpeter, particularly in the domain of entrepreneurship resulting in and from R&D [40].

Innovative entrepreneurs, on one hand, have emerged as a crucial source of growth for virtually all of the traditional units of economic analysis, encompassing individual behavior with respect to the firm, region and nation [17] [41] [42] [43][44][45]. On the other hand, many scholars are interested in understanding those factors that encourage entrepreneurship, and especially entrepreneurial activity based on knowledge [46]. According to these authors, institutional factors are important elements in explaining

entrepreneurship rates at the individual and country levels. In general terms, in growth theory, it is assumed that the entire geographic context, typically a country, will automatically benefit from accurate institutional arrangements [47][48]. The general underlying assumption of this approach is that better institutions are automatically available to all the agents in the economic process. Since institutions behave like a public good, all agents will benefit from these factors, which will increase the rate of economic growth [49] in a knowledge based economy.

The application of institutional economics is especially helpful to entrepreneurial research. In that sense, the intentionality of innovative individuals toward entrepreneurial decisions could depend on the context in which they are involved and it can lead to different patterns of growth [50]. Thus, the productive and entrepreneurial decisions chosen by human behavior are influenced by institutional factors[46]. This idea has expanded into the field of entrepreneurship research, in the sense that both formal and informal institutions could either constrain or foster the decision to create a new business based on knowledge and opportunity perceptions [51].

Thus, some scholars propose the application of institutional economics to the analysis of entrepreneurship[40][51][46][52][53][54][55].One approach to this framework is suggested by [56] who propose five dimensions of the entrepreneurial environment: a) government policies and procedures, b) social and economic factors, c) entrepreneurial and business skills, d) financial assistance to businesses and e) non-financial assistance. Following this study, and adapting the approach of [49][57], government policies and procedures and financial and nonfinancial assistance to businesses are related to formal

institutions, while social conditions, such as confidence and perceptions of the environment, concern informal institutions.

2.3 Logistics and Supply Chain

Logistics is one of the most dynamic sectors of the economy, contributing to economic growth and international competitiveness. In the face of the steady growth in freight volumes throughout the world, the focus is on increasing the efficiency of freight logistics and reducing environmental impacts. Logistics covers planning, implementing and controlling the movement of raw materials, semi- finished products and finished goods [58]. The efficiency of freight logistics has a direct impact on product prices and security of supply. Estimates put logistics at 12 % of the total cost in the manufacturing sector and at more than 20 % in the retail sector [59]. This makes logistics a key determinant of the competitiveness of the Europe economy.

The growth in international trade and its related freight distribution systems requires the development of logistics capabilities. Logistics investments are the allocation of capital to improve the efficiency of freight distribution through infrastructures (terminals, real estate, and telecommunications); operations (transport modes and equipment); and human resources (labor, management, governance, research, and development). The outcomes of investing in logistics capabilities are numerous and are mainly related to increased integration with global trade, better utilization of national transport assets, more competitive exports, lower costs for imports, and increased employment opportunities [60]

An area that is increasingly seeking ways of adding value through continuous improvement and innovation is logistics [61]. The logistics industry is an example of the development of a vital new service-based industry. It has transformed from the business concept of transportation to that of serving the entire logistical needs of customers. Not only independent logistical firms but also most manufacturing firms need to be aware of the service aspects of the productsthey present their clients.

The service component offers a very good change of gaining sustainablecompetiti ve advantage in the hyper-competitive global market. Conversely poor service or a reluctance to innovate offers a fairly good change of losing customers [62] [9].

At the most basic level, logistics management is concerned with the effective movement and storage of product, approximating the traditional economic utilities associated with creating value through time and place transformation [63]. Another study [64] offers the following definition: “Logistics management is that part of Supply Chain Management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customer requirements. Logistics, therefore, involves managing facilities, transportation, inventory, materials, order fulfillment, communications, third party providers and information within the firm in a way that contributes to customer value [65].

According to [66], third party logistics is the use of contracted firm(s) to supply services in the planning, implementation and controlling of the flow and storage of raw materials, in-process inventory, finished goods, and related information throughout the supply chain. It involves the use of external companies to perform logistic functions

that have traditionally been performed within an organization [67]. Thus, the functions performed by the third party may involve the entire logistics process or selected activities within the supply chain. According to [68], performance of a third party firm refers to improved marketing, financial, and operational efficiencies. They add that the above definition closely links performance to three key concepts i.e. efficiency, effectiveness, and flexibility of third party logistics firms in performing their duties. A study [69] indicated that efficiency is a measure of productivity in which what has been accomplished is measured against what is possible to accomplish. Effectiveness is the degree to which business objectives are being achieved with in specified time to adapt to changing environment. Any firm that succeeds on the above three concepts automatically achieves good performance in the industry. Despite previous research, no study examines how IT Capability, IT Adoption, Logistics service quality) affect Performance of third party Logistics providers.

CHAPTER 3

Research Methodology

3.1 Research Design

To find out the potential(s) for Pakistani entrepreneur in the China Pakistan Economic Corridor (CPEC) especially in the field of transport/logistics, the present study followed the qualitative research methodology.

Qualitative research is defined as a market research method that focuses on obtaining data through open-ended and conversational communication. This method is not only about "what" people think but also "why" they think so. For example, consider a convenience store looking to improve its patronage. A systematic observation concludes that the number of men visiting this store are more. One good method to determine why women were not visiting the store is to conduct an in-depth interview of potential customers in the category.

The qualitative research methods allow for in-depth and further probing and questioning of respondents based on their responses, where the interviewer/researcher also tries to understand their motivation and feelings.

3.2 Respondents

In the present research, respondents were selected from governmental, non-governmental and private sectors including National Transport Research Center (NTRC), Ministry of Communication (MoC), Ministry of Foreign Affairs (MoFA), Center for Excellence CPEC, Ministry of Planning Development and Reforms (MoPD&R), Marshall

Movers and Packers, Eagle Mover and Logistics, CPEC Division Higher Education Commission Pakistan.

3.3 Sampling Intensity

Usually in the qualitative research methodology, three types of sampling is carried viz a viz

- **Purposive Sampling**
- **Quota Sampling**
- **Snow Ball Sampling**

Purposive and quota sampling are similar in that they both seek to identify participants based on selected criteria. However, quota sampling is more specific with respect to sizes and proportions of subsamples, with subgroups chosen to reflect corresponding proportions in the population. However, in the snowball sampling which is also known as chain referral sampling – is considered a type of purposive sampling. In this method, participants or informants with whom contact has already been made use their social networks to refer the researcher to other people who could potentially participate in or contribute to the study. Snowball sampling is often used to find and recruit "hidden populations," that is, groups not easily accessible to researchers through other sampling strategies [70]. In the present study the snowball sampling was adopted.

During the visit to the organizations identified, some referrals were also received. The detail is given in table no 3.1.

During the interview although semi structured questionnaire was followed but often some information were asked in addition to questionnaire considering the qualitative research methodology.

Table No. 3.1 Name of the respondents from potential organizations

S.No	Organization	Person contacted & Designation	Referred By
1	Ministry of Economic Affairs	Ch. M. Aslam Joint Secretary	Hammad Shamimi
2	Ministry of Planning, Development & Reform	Mr. Hassan Dawood Butt, Project Director CPEC	Ch. M. Aslam
3	Centre of Excellence CPEC	Dr. Fahad Amjad, HeadPolicy;Regional Connectivity	Mr. Hassan Dawood Butt
4	Higher Education Commission CPEC Centre	Brig. (Retd.) Safdar Ali Shah	Prof. Dr. S. M. Nizami KIU Gilgit
5	National Transport Research Center	Mr. Shahbaz Latif Mirza, DD Road Transport	Brig. Safdar Ali Shah
6	National Transport Research Center	Mr. Sayyar Khan, Assistant Chief	Mr. Shahbaz Latif Mirza

7	Ministry of Communications	M. Shoaib Dogar, Director Road & Transport	Mr. Shahbaz Latif Mirza
8	ITC Logistics (PVT) Ltd.	M. Arif Khan, GM Operations	Brig. Safdar Ali Shah
9	International Packers & Movers	Mr. Azeem Khan, National Manager Operations	M.Arif Khan, ITC Logistics
10	Marshal Packers & Movers	Mr. Mansoor Ahmad, CEO	Mr. Azeem Khan IPM
11	Hadi goods and transport company	Mr. Adeel Rao, CEO	Mr. Rao Adnan, Events Multan
12	TPL Goods Company ISB	Mr. Shujat Ullah, CEO	Supervisor
13	Micro Star Good Company Danyore –GB	Mr. Mohammad Majeed, CEO	Supervisor

3.4 Research Tool

An open-ended semi-structured questionnaire was developed to conduct interviews. For the preparation of the questionnaire, detailed review of literature was carried out.

3.5 Analysis of the Data

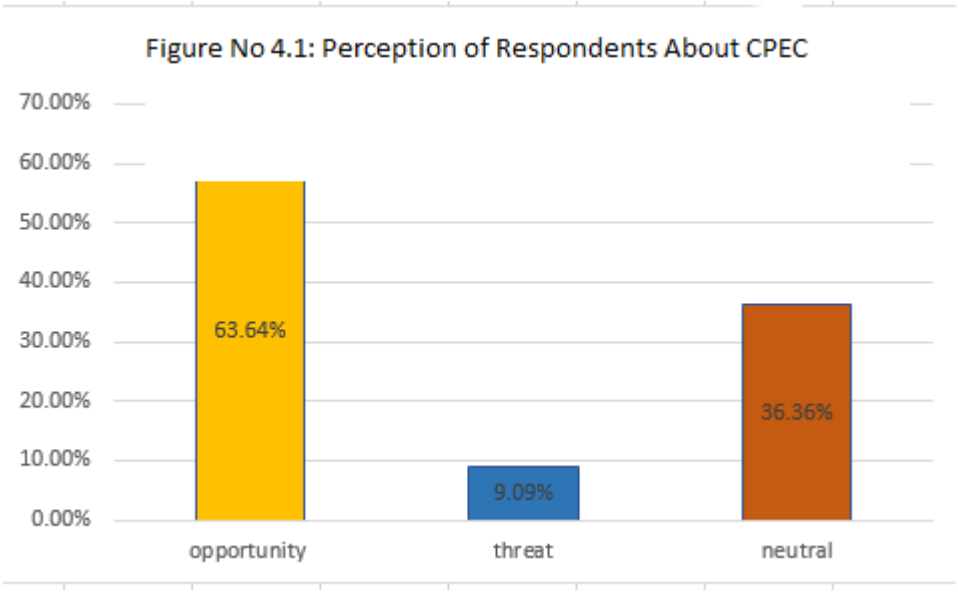
The data collected from respondent survey was arranged using NVIVO ver. 12 software for windows. Each parameter was arranged as per frequent from the respondents. Then themes were developed as per objectives of the study. Later, descriptive statistics were applied by calculating statistical mode for the different questions. The frequency bar chart for different question were prepared using MS Excel software.

CHAPTER 4

RESULTS

4.1. Perception about CPEC logistics

To determine the awareness of the people about the logistic entrepreneurship in CPEC in terms of opportunities, threats and neutral perceptions targeted respondent were interviewed. It was revealed that the majority of respondents have a positive thinking about the entrepreneurial opportunities in CPEC as they think after the completion of special economic zones, there will be a lot of opportunity for entrepreneurs' of Pakistan in logistic sector and its allied services. It was concluded that 63.64% of the respondents having the view that there is an opportunity for our entrepreneurs in logistics and its services e.g tyre business, restaurants, trucking business, spare parts selling etc. and 9.09% said it is threat while 36.36% are not clear about entrepreneurship on CPEC. The Figure No 4.1 shows the response of the respondents towards CPEC logistics



4.2. Entry Point for Entrepreneurs

The second objective of the study was to determine the entry point for the potential entrepreneurs' in CPEC logistics. It was revealed that there is no. documented criteria available in concerned offices or available literature, which can show the entry point for an entrepreneur in CPEC. However, during the visit to different concerned offices and interviews with the respondents the criteria for entering into the national and international logistic was asked verbally. It was also revealed that presently none of the national logistic company or International/foreign Company having commercial presence of logistic transport between two countries (Pakistan & China) in Pakistan. However in future once CPEC will be functional both national and International logistic companies will be allowed to operate after having registration with concerned authorities. They would have to ask for enrolment/approval of Ministry of Communications.

To grant the approval for Cross Border Logistics (CBL) in CPEC the Ministry will check the following pre-requisites both for national/International logistic entrepreneurs as determined from the interview with Director Roads & Transport- Ministry of Communications Pakistan:

a. The Transport Company should be registered under the Companies Ordinance with Securities and Exchange Commission of Pakistan (SECP).
b. The Company should be a Public or Private Limited Company.
c. The Company should have a valid NTN/ Income Tax/ Sales Tax Registration.
d. The Company must have a minimum number of vehicles registered in the name of the Company as given below:

   Local Transport Company -- 5 Vehicles.

e. Minimum 3 Axle Trucks.

f. The vehicle must have valid fitness certificate issued by a Competent Authority acceptable to this Ministry for International transport Operations.

g. Fitness certificate for international transport operations will be issued by the Provincial Governments and will be authenticated by NH&MP.

h. National transport companies desirous for investment abroad/ incorporation of companies abroad should seek prior approval from State Bank of Pakistan (SBP).

i. National Companies should share a proposal including their local and foreign currency payment modalities with State Bank of Pakistan (SBP) along with the details of their cross border agreements, if any.

j. A Transport Company seeking approval for cross border goods transport operations shall submit attested documents including valid registration and vehicle fitness certificate (validated by NH&MP) and an updated list of drivers along with their valid driving licenses with the application. The list of drivers will be updated after every six months or whenever there is a change in the list.

k. Upon receipt of the application, the Ministry of Communications will forward particulars of the company to relevant security agencies through Ministry of Interior for security check which will be an ongoing process.

l. The company will be enrolled for international Transport Operations upon fulfilling the above requirements for five years which will be renewed for another term upon adequate performance. However, the enrolment of company is liable to immediate

cancellation/blacklisting upon receipt of any adverse remarks from a security agency at any time.

m. NTRC under Ministry of Communications will maintain the database for various aspects of enrolled companies and cross border traffic including both national and foreign vehicles. The database includes but is not limited to No. of vehicles, transport operations, drivers registration of vehicles and fitness certificate etc.

n. The companies should be required to submit an undertaking on judicial paper to the effect that they will operate the transport in accordance with the rules / regulations of the Government in case of any loss or damage incurred in Pakistan or abroad due to a deficiency in the documents or any other mal-practice will be solely their responsibility.

For cross border logistics following will be the pre-requisites for the National Logistic Entrepreneurs/Operators.

a. The Transport Company should be registered under the Companies Ordinance with Securities and Exchange Commission of Pakistan (SECP).

b. The Company should be a Public or Private Limited Company.

c. The Company should have a valid NTN/ Income Tax/ Sales Tax Registration

d. The Company must have a minimum number of vehicles registered in the name of the Company as given below:

Company with Foreign share -- 10 Vehicles

e. Minimum 3 Axle Trucks.

f. The vehicle must have valid fitness certificate issued by a Competent Authority acceptable to this Ministry for International transport Operations.

g. Fitness certificate for international transport operations will be issued by the Provincial Governments and will be authenticated by NH&MP.

h. A foreign Company intending to carryout cross border goods transport operations must have joint venture with local partner and maximum foreign equity would be 70%.

i. International Transport Companies should approach State Bank of Pakistan (SBP) through Authorized Dealer (Bank) for registration of their FDI (inwards) within 30 days of making their investment in Pakistan.

j. International Companies should share a proposal including their local and foreign currency payment modalities with State Bank of Pakistan (SBP) along with the details of their cross border agreements, if any.

k. A Transport Company seeking approval for cross border goods transport operations shall submit attested documents including valid registration and vehicle fitness certificate (validated by NH&MP) and an updated list of drivers along with their valid driving licenses with the application. The list of drivers will be updated after every six months or whenever there is a change in the list.

l. Upon receipt of the application, the Ministry of Communications will forward particulars of the company to relevant security agencies through Ministry of Interior for security check which will be an ongoing process.

m. The company will be enrolled for international Transport Operations upon fulfilling the above requirements for five years which will be renewed for another term upon adequate performance. However, the enrolment of company is liable to immediate cancellation/blacklisting upon receipt of any adverse remarks from a security agency at any time.

n. NTRC under Ministry of Communications will maintain the data base for various aspects of enrolled companies and cross border traffic including both national and foreign vehicles. The data base includes but is not limited to No. of vehicles, transport operations, drivers registration of vehicles and fitness certificate etc.

o. The companies should be required to submit an undertaking on judicial paper to the effect that they will operate the transport in accordance with the rules / regulations of the Government in case of any loss or damage incurred in Pakistan or abroad due to a deficiency in the documents or any other mal-practice will be solely their responsibility.

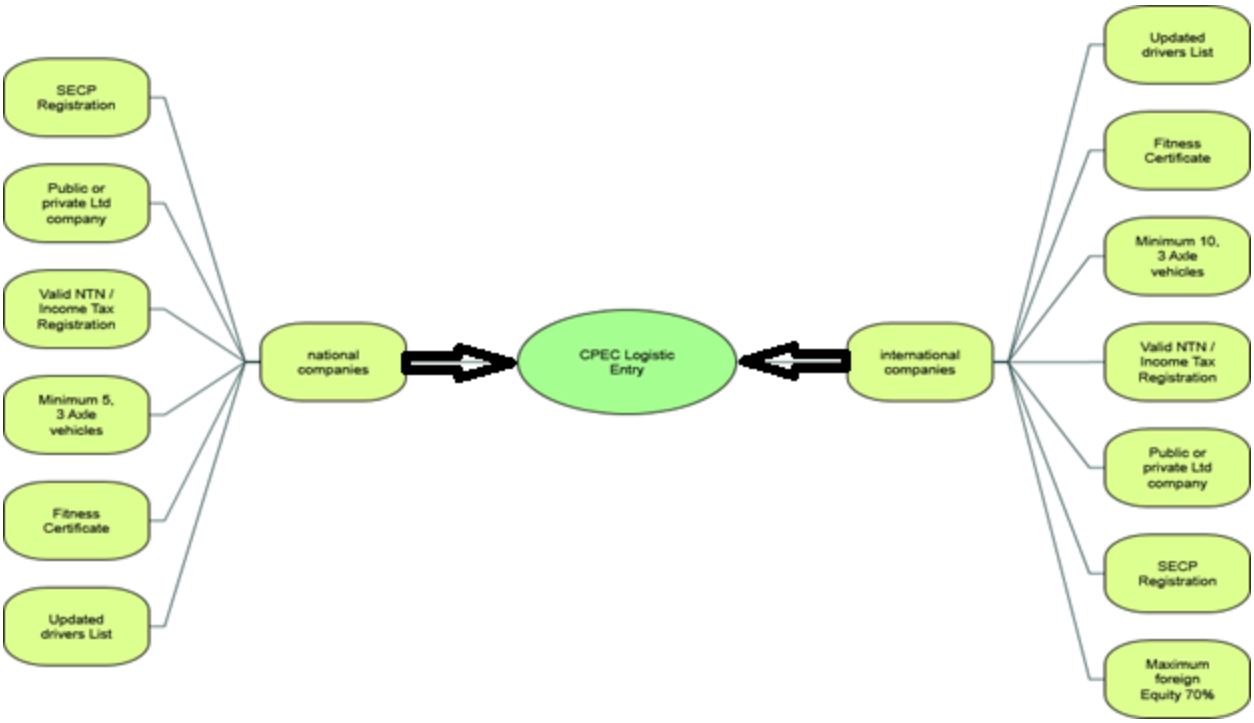


Figure 4.2 Logistic Company Registration Process at Ministry of Communication.

4.3 Parameters that have to be considered while starting a Logistic Business in CPEC

Allowable Load Limits: According to our respondents heavy axle loading is the key factor in fast pavements deterioration in Pakistan, causing road sector inefficiencies leading to a total annual loss of Rs240 billion or 6.8% of the GDP[71]. The loss is further exacerbated by the fact that truck drivers and owners consider overloading as a profitable practice unaware of the adverse effects of this practice. According to the [72] the National Highway safety Ordinance of Pakistan, there are more than 250,000 registered commercial trucks in which most of the trucks are 2-axle and 3-axle. According to the report 90 % commercial vehicles carry more than the allowed axle load on our pavements [71]; Table No 4.1):

Table No: 4.1: Summary of the Heavy Commercial Vehicle on Road Since 2000-17

MOTOR VEHICLES ON ROAD-HCV

(In 000 Nos.)

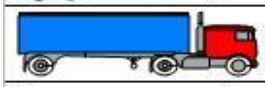
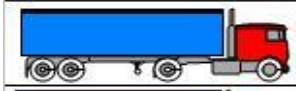
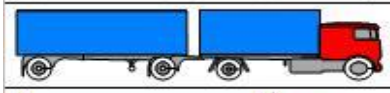
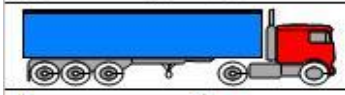
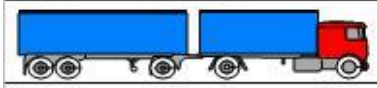
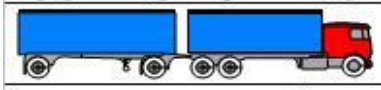
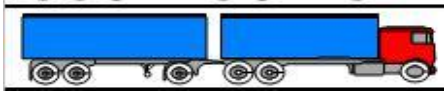
Year	Ambu-lance	Buses	Trucks	Tractor	Tankers (Oil & Water)	Others	Total
2000-01	1.7	86.6	132.3	579.4	8.0	89.0	4,471.0
2001-02	4.1	96.6	145.2	630.5	8.4	71.5	5,016.8
2002-03	4.3	98.3	146.7	663.2	8.4	71.4	5,315.0
2003-04	4.4	100.4	149.2	722.7	8.6	71.3	5,711.2
2004-05	4.5	102.4	151.8	778.1	8.5	69.4	6,048.3
2005-06	4.5	103.6	151.8	822.3	8.6	60.2	7,084.5
2006-07	4.6	108.4	173.3	877.8	8.8	38.5	8,063.6
2007-08	5.2	109.9	177.8	900.5	9.8	40.8	8,878.5
2008-09	5.6	111.1	181.9	911.7	10.8	41.3	9,413.7
2009-10	4.0	123.3	200.5	940.8	11.1	21.8	9,866.4
2010-11	4.5	125.6	209.5	970.9	11.4	24.0	10,443.8
2011-12	3.9	129.2	212.3	1,008.7	12.5	50.4	10,960.7
2012-13	3.7	130.2	220.5	1,128.7	12.3	60.5	11,576.1
2013-14	4.0	140.0	240.0	1,228.0	12.6	65.0	13,242.4
2014-15	4.0	148.0	252.0	1,283.0	12.6	68.0	13,885.6
2015-16	3.8	150.6	263.8	1,351.6	14.0	75.5	15,568.8
2016-17 P	4.0	157.2	275.4	1,410.9	14.6	78.8	16,173.5

P: Provisional

Source: Ministry of Communication (NTRC)

Table 4.1 revealed that the rate of increase in registered trucks in Pakistan during the last two decades approximately (2000-2010; 2011-2017) increased by 51% and 31% respectively. It was informed by the NTRC that 90% of the trucks are carrying load beyond their allowable capacity. Which is resulting in destruction or degradation of roads.

Table No: 4.2; Summary of the Permissible Gross Vehicle Weight (Toms) on different types of truck.

TRUCK TYPE	Permissible Gross Vehicles Weight (In Tons)
 2 AX SINGLE (Bedford)	17.5
 2 AX SINGLE (Hino/Nissan)	17.5
 3 AX TENDEM	27.5
 3 AX SINGLE	29.5
 4 AX SINGLE-TENDEM	39.5
 4 AX TENDEM-SINGLE	39.5
 4 AX SINGLE	41.5
 5 AX SINGLE-TRIDEM	48.5
 5 AX TENDEM-TENDEM	49.5
 5 AX SINGLE-SINGLE-TENDEM	51.5
 5 AX TENDEM-SINGLE-SINGLE	51.5
 6 AX TENDEM-TRIDEM	58.5
 6 AX TENDEM-SINGLE-TENDEM	61.5

Axle Load Limits	Weight	Tire Pressure
Single Axle	**12** tons	Rear Axle = **120** psi Front Axle = **100** psi
Tandem Axle	**22** tons	
Tridem Axle	**31** tons	
Front Axle	**5.5** tons	

This study has pointed out that these are the permissible axle load limits. These limits should be considered while operating a logistic business across the borders. Heavy Axle loading will not be tolerated while across the borders.

4.4 Truck Dimensions and fabrication rules

Pakistan Road Freight sector has its own economic existence and contribution to GDP but it is poorly regulated despite being deregulated. It is operating in a highly competitive environment

with huge informal and un-organized segment. The main flaws in poor regulation includes no control over the dimensions of goods transport vehicle specified in Table No 4.3.It was revealed that when the vehicle is fabricated in the local market ,it is just to have more space and to carry more load. Due to this overload, almost 100% of the tyre are inflated in excess and are mostly as high as 160 PSI against permissible design limits of 100 PSI which results in accidents. It was also observed that damaging effect of various types of trucks are very severe and quite high.

The illegal modification of trucks in the back street markets, low freight rates due to unhealthy competition and prevalence of ineffective vehicle examination system in the country encourages overloading which damages the roads and causes accidents.

In order to modernize and introduce new vehicles on the roads there is a need to declare this sector an '**INDUSTRY**'. Since there is no adequate truck manufacturing industry in Pakistan, types and makes of these trucks are varied. Bodies are mostly manufactured in Pakistan by local manufacturers are not following proper dimensions. Bed Ford (53%), Hino (23%), Nissan (16%), Isuzu (5%), other (3%) are common types of trucks[71].According to the rules and regulation, no local person is allowed to fabricate or alter goods transport vehicle unless duly authorized by the maker of the vehicle in this behalf.

Our research revealed proper dimensions for truck fabrication (Table No 4.3).

Table No. 4.3: Summary of the Vehicle Dimensions for Truck Fabrication to be use on CPEC

<table>
<tr><th colspan="4">General Access Rigid Goods Vehicles (Type G)</th></tr>
<tr><th>S.No</th><th>Code</th><th>Name of Vehicle</th><th>Dimensions Control</th></tr>
<tr><th>(1)</th><th>(2)</th><th>(3)</th><th>(4)</th></tr>
<tr><td>1</td><td>G1</td><td>Pickup</td><td>
<table>
<tr><th colspan="2">Dimensions</th><th>Limit</th></tr>
<tr><td>(a)</td><td>Vehicle length</td><td>3.50m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.50m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>3.00m maximum</td></tr>
<tr><td>(d)</td><td>Bed length</td><td>1.80m minimum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall not be less than 10cm from total width</td></tr>
</table>
</td></tr>
<tr><td>2</td><td>G2</td><td>Mini Truck</td><td>
<table>
<tr><td>(a)</td><td>Vehicle length</td><td>5.30m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.50m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>3.50m maximum</td></tr>
<tr><td>(d)</td><td>Bed length</td><td>1.80m minimum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall not be less than 10cm from total width</td></tr>
<tr><td>(f)</td><td>Effective rear overhang</td><td>1.30m maximum</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>G10</td><td>2-Axle Rigid Truck</td><td>
<table>
<tr><td>(a)</td><td>Vehicle length</td><td>12.00m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.55m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.30m maximum</td></tr>
<tr><td>(d)</td><td>Bed length</td><td>1.80m minimum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall not be less than 10cm from total width</td></tr>
<tr><td>(f)</td><td>Effective rear overhang</td><td>1.80m maximum</td></tr>
</table>
</td></tr>
<tr><td>4</td><td>G11</td><td>3-Axle Rigid Truck</td><td>
<table>
<tr><td>(a)</td><td>Vehicle length</td><td>12.00m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.55m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.30m maximum</td></tr>
<tr><td>(d)</td><td>Bed length</td><td>1.80m minimum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall not be less than 10cm from total width</td></tr>
<tr><td>(f)</td><td>Effective rear overhang</td><td>2.80m maximum</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>5</td><td>G-12</td><td>Double Steering –Tandem Axles Trucks</td><td><table>
<tr><td>(a)</td><td>Vehicle length</td><td>12.00m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.55m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.30m maximum</td></tr>
<tr><td>(d)</td><td>Bed length</td><td>12.00m maximum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall not be less than 10cm from total width</td></tr>
<tr><td>(f)</td><td>Effective rear overhang</td><td>2.80m maximum</td></tr>
</table></td></tr>
<tr><td colspan="4">Part 2- General Access Articulated Goods Vehicles (Type Gx)</td></tr>
<tr><td>1</td><td>Gx3</td><td>3-Axle Articulated Truck</td><td><table>
<tr><td>(a)</td><td>Vehicle length</td><td>17.40m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.55m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.30m maximum</td></tr>
<tr><td>(d)</td><td>Kingpin Forward projection</td><td>1.90m minimum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall not be less than 10cm from total width</td></tr>
<tr><td>(f)</td><td>Effective rear overhang</td><td>1.80m maximum</td></tr>
</table></td></tr>
<tr><td>2</td><td>Gx4</td><td>4-Axle Articulated Truck</td><td><table>
<tr><td>(a)</td><td>Vehicle length</td><td>17.40m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.55m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.30m maximum</td></tr>
<tr><td>(d)</td><td>Kingpin Forward projection</td><td>1.90m minimum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall not be less than 10cm from total width</td></tr>
<tr><td>(f)</td><td>Effective rear overhang
1-tandem-single
2-single-tandem</td><td>1.80m maximum
2.80m maximum</td></tr>
</table></td></tr>
<tr><td>3</td><td>Gx5</td><td>5-Axle Articulated Trucks</td><td><table>
<tr><td>(a)</td><td>Vehicle length</td><td>17.40m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.55m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.35m maximum</td></tr>
<tr><td>(d)</td><td>Kingpin Forward projection</td><td>1.90m minimum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall not be less than 10cm from total width</td></tr>
<tr><td>(f)</td><td>Effective rear overhang
1-tandem-tandem
2-single-tridem</td><td>2.80m maximum
3.30m maximum</td></tr>
</table></td></tr>
</table>

4	**Gx6**	**6-Axle Articulated Trucks**	**(a)**	Vehicle length	17.40m maximum
			(b)	Vehicle width	2.55m maximum
			(c)	Vehicle height	4.35m maximum
			(d)	Kingpin Forward projection	1.90m minimum
			(e)	Outer Track width	Shall not be less than 10cm from total width
			(f)	Effective rear overhang 1-tandem-tandem 2-single-tridem	2.80m maximum 3.30m maximum

Part-3 General Access Liquid Goods Vehicles (Type LG)

1	**LG1**	**Mini Tanker**	**Dimensions**		**Limit**
			(a)	Vehicle length	6.00m maximum
			(b)	Vehicle width	2.50m maximum
			(c)	Vehicle height	3.00m maximum
			(d)	Outer Track width	Shall be equal to total width of the vehicle
			(e)	Effective Rear Overhang	1.50m maximum
2	**LG10**	**2-Axle Rigid Tanker**	**(a)**	Vehicle length	10.00m maximum
			(b)	Vehicle width	2.50m maximum
			(c)	Vehicle height	3.50m maximum
			(d)	Tank Height	3.40m maximum
			(e)	Outer Track width	Shall be equal to total width of the vehicle
			(f)	Effective rear overhang	1.50m maximum
3	**LG11**	**3-Axle Rigid Tanker**	**(a)**	Vehicle length	12.00m maximum
			(b)	Vehicle width	2.50m maximum
			(c)	Vehicle height	4.00m maximum
			(d)	Tank Height	3.80m maximum
			(e)	Outer Track width	Shall be equal to total width of the vehicle
			(f)	Effective rear overhang	2.80m maximum

<table>
<tr><td>4</td><td>LGx3</td><td>3-Axle Articulated Tanker</td><td>
<table>
<tr><td>(a)</td><td>Vehicle length</td><td>17.40m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.50m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.00m maximum</td></tr>
<tr><td>(d)</td><td>Tank Height</td><td>3.80m maximum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall be equal to total width of the vehicle</td></tr>
<tr><td>(f)</td><td>Effective rear overhang</td><td>1.80m maximum</td></tr>
<tr><td>(g)</td><td>Kingpin forward projection</td><td>1.90m maximum</td></tr>
</table>
</td></tr>
<tr><td>5</td><td>LGx4</td><td>4-Axle Articulated Tanker</td><td>
<table>
<tr><td>(a)</td><td>Vehicle length</td><td>17.40m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.50m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.00m maximum</td></tr>
<tr><td>(d)</td><td>Tank Height</td><td>3.80m maximum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall be equal to total width of the vehicle</td></tr>
<tr><td>(f)</td><td>Effective rear overhang
1-tandem-single
2-single-tandem</td><td>1.80m maximum
2.80m maximum</td></tr>
<tr><td>(g)</td><td>Kingpin forward projection</td><td>1.90m maximum</td></tr>
</table>
</td></tr>
<tr><td>6</td><td>LGx5</td><td>5-Axle Articulated Tanker</td><td>
<table>
<tr><td>(a)</td><td>Vehicle length</td><td>17.40m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.50m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.00m maximum</td></tr>
<tr><td>(d)</td><td>Tank Height</td><td>3.80m maximum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall be equal to total width of the vehicle</td></tr>
<tr><td>(f)</td><td>Effective rear overhang
1-tandem-tandem
2-single-tridem</td><td>2.80m maximum
3.30m maximum</td></tr>
<tr><td>(g)</td><td>Kingpin forward projection</td><td>1.90m maximum</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>7</td><td>LGx6</td><td>6-Axle Articulated Tanker</td><td><table>
<tr><td>(a)</td><td>Vehicle length</td><td>17.40m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.50m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.00m maximum</td></tr>
<tr><td>(d)</td><td>Tank Height</td><td>3.80m maximum</td></tr>
<tr><td>(e)</td><td>Outer Track width</td><td>Shall be equal to total width of the vehicle</td></tr>
<tr><td>(f)</td><td>Effective rear overhang
1-tridem-tandem
2-tandem-tridem</td><td>2.80m maximum
3.30m maximum</td></tr>
<tr><td>(g)</td><td>Kingpin forward projection</td><td>1.90m maximum</td></tr>
</table></td></tr>
<tr><td colspan="4">Part-4 General Access Vehicles Carrier (Type GV)</td></tr>
<tr><td>1</td><td>GV10</td><td>2-Axle Rigid Motorbike Carrier</td><td><table>
<tr><td>(a)</td><td>Vehicle length</td><td>12.00m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.55m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.40m maximum</td></tr>
<tr><td>(d)</td><td>Outer Track width
projection</td><td>Shall not be less than 10cm from the total width</td></tr>
<tr><td>(e)</td><td>Effective rear overhang</td><td>1.80m maximum</td></tr>
<tr><td>(f)</td><td>Loading Conditions</td><td>Shall only be used empty or for transportation of wheeled vehicles or boats</td></tr>
</table></td></tr>
<tr><td>2</td><td>GV11</td><td>3-Axle Rigid Motorbike Carrier</td><td><table>
<tr><td>(a)</td><td>Vehicle length</td><td>13.00m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.60m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.40m maximum</td></tr>
<tr><td>(d)</td><td>Outer Track width
projection</td><td>Shall not be less than 10cm from the total width</td></tr>
<tr><td>(e)</td><td>Effective rear overhang</td><td>2.80m maximum</td></tr>
<tr><td>(f)</td><td>Loading Conditions</td><td>Shall only be used empty or for transportation of wheeled vehicles or boats</td></tr>
</table></td></tr>
<tr><td>3</td><td>GVx4</td><td>Articulated Car Carrier</td><td><table>
<tr><td>(a)</td><td>Vehicle length</td><td>19.81m maximum</td></tr>
<tr><td>(b)</td><td>Vehicle width</td><td>2.55m maximum</td></tr>
<tr><td>(c)</td><td>Vehicle height</td><td>4.87m maximum</td></tr>
<tr><td>(d)</td><td>Outer Track width
projection</td><td>Shall not be less than 10cm from the total width</td></tr>
<tr><td>(e)</td><td>Effective rear overhang</td><td>3.50m maximum</td></tr>
</table></td></tr>
</table>

			(f)	Loading Conditions	Shall only be used empty or for transportation of wheeled vehicles or boats
			(g)	Kingpin Forward Projection	1.90m maximum
			(h)	Top Dock Rear Extension	1.00 maximum
			(i)	Bed height	1.50m maximum
Part-5 Conditional Access Good Vehicles (Type GV)					
1	**GV3w**	**Rigid Wide Bed**	**(a)**	Vehicle length	12.00m maximum
			(b)	Vehicle width	3.05m maximum
			(c)	Vehicle height	4.87m maximum
			(d)	Bed height	1.50m minimum
			(e)	Effective rear overhang	3.10m maximum
2	**GVx5/6w**	**Articulated Wide Bed**	**(a)**	Vehicle length	19.81m maximum
			(b)	Vehicle width	3.05m maximum
			(c)	Vehicle height	4.87m maximum
			(d)	Bed height	1.30m minimum
			(e)	Effective rear overhang	3.10m maximum

4.5 Opportunities identified by the respondents in CPEC for Entrepreneur

The interviews with respondents revealed that there are several opportunities on CPEC for entrepreneur including logistic entrepreneurs. The Figure No 4.4 shows the percentage of the respondents who identified the entrepreneurships in different disciplines.

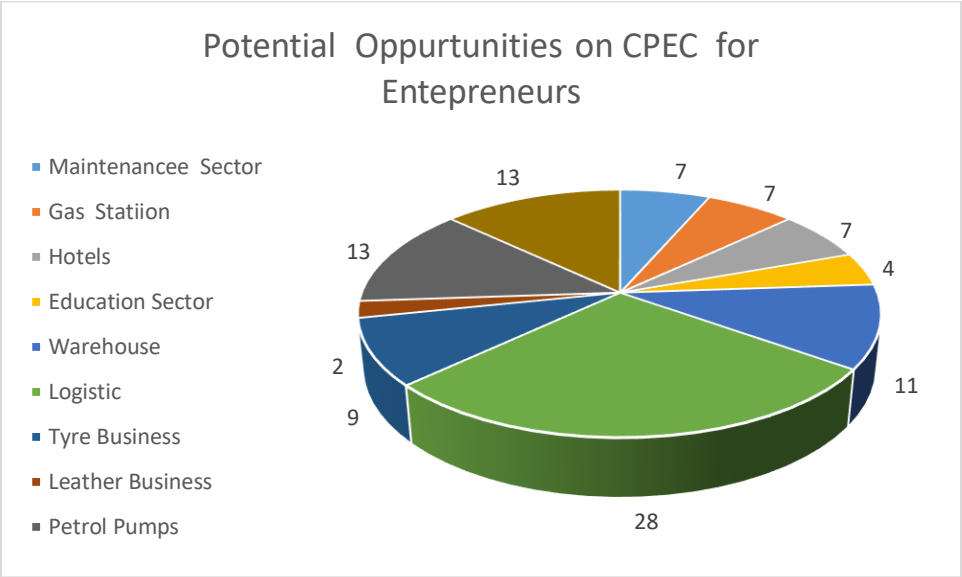


Figure No 4.3: Potential Opportunities for the entrepreneur on CPEC

Almost all the respondents identified that there are many opportunities for logistic entrepreneurs on CPEC. As CPEC is expected to use as one road for transportation to support different businesses. However, the respondents also informed that in addition to logistic maintenance sector, gas station installation, hotel business, development for education, warehouses, tyre industry, leather business and petrol pumps establishing could be potential businesses for entrepreneurs along CPEC and this correlates with the innovative business model in logistic services [73]

4.6 Barriers/hurdles for entrepreneurs on CPEC

The study also identified the barrier/hurdles, which can be faced by entrepreneurs while establishing logistics business or any other business along CPEC. During the interviews with respondents different barriers have been identified including security issues, natural hazards, Religious issues, non-trained drivers, issues related to 18th Amendments(Provincial), Government policies, behaviors of Pakistani Police and customs personnel's, language, traditional warehouses, taxation system, custom processes, reforms in banking sector, female involvements (harassments) and smugglings etc. Certain barriers which are discussed below should be addressed to create opportunity for entrepreneurs in the international and national logistics.

1. There is a lack of professional truck manufacturing companies as per international standards, which need to be established in near future.

2. Climatic/ weather conditions along the CPEC especially in Gilgit Baltistan and the Khunjerab Pass are not favorable due to which sometime for long time the traffic remain blocked and wastage of time occurs.

3. Police check posts and the behavior of police personnel's is the biggest obstacle in their way towards in many cases e.g. if accident occurs whether there is a mistake of truck driver or not the truck is held in the custody of police for many days due to which transporters have to face loss, late delivery ,sometimes temperature sensitive products get expired.

4. In some areas, there is time restriction for trucks which cause delay in delivery which is a big wastage of time specially when driver travel by time management.

5. Overloading: To enhance their revenue, transporters resort to overloading, which causes damage to roads, reduces speed and leads to frequent vehicle breakdowns. The delivery of

freight becomes uncertain and is usually delayed. In Pakistan, the product manufacturers prefer transport companies who violate the rule of axle load because it increases the profit. The fine for overloading is not enough in Pakistan. According to NH&MP , the fine for over loading is from 1000rs to 5000rs which is not enough .

6. Non Professional Drivers: The transport business have extreme threat. Expensive trucks are in hands of non-professional drivers. Most of the drivers are not educated and they use drugs in routine because of no service and pay structure policy has been made by the government. There is a need to make policies for medical checkup of the drivers quarterly.

7. Less profit: Due to heavy taxes ,toll rates and expenses the profit is not too much because of which transporters don't maintain their vehicles on international standards.

8. Trucks Entry across Border: Pakistani trucks are not allowed to enter China but Chinese trucks have access till Sust Border in Pakistan. The Govt. of Pakistan must revisit the rules and regulations for this.

9. Emergency aids for trucks: When truck faces accident, there is no proper rescue system.

10. Engagement of truck freight for strikes/protest: Whenever, there is any protest or strikes the law enforcement agencies take the freight/ container for road blockage purpose which waste time and effects business.

11. New Trucks: The transporters in Pakistan prefer Japanese trucks over Chinese trucks but there is a heavy duties on Japanese trucks and European trucks that's why it is not feasible for the transporters to import the new model trucks from the international market.

12. Registration process: The procedures of registration as Logistic/transporters on CPEC is very complicated and lengthy which need to make simple by the Ministry of Communication. The best option is one window operation at NHA head quarter.

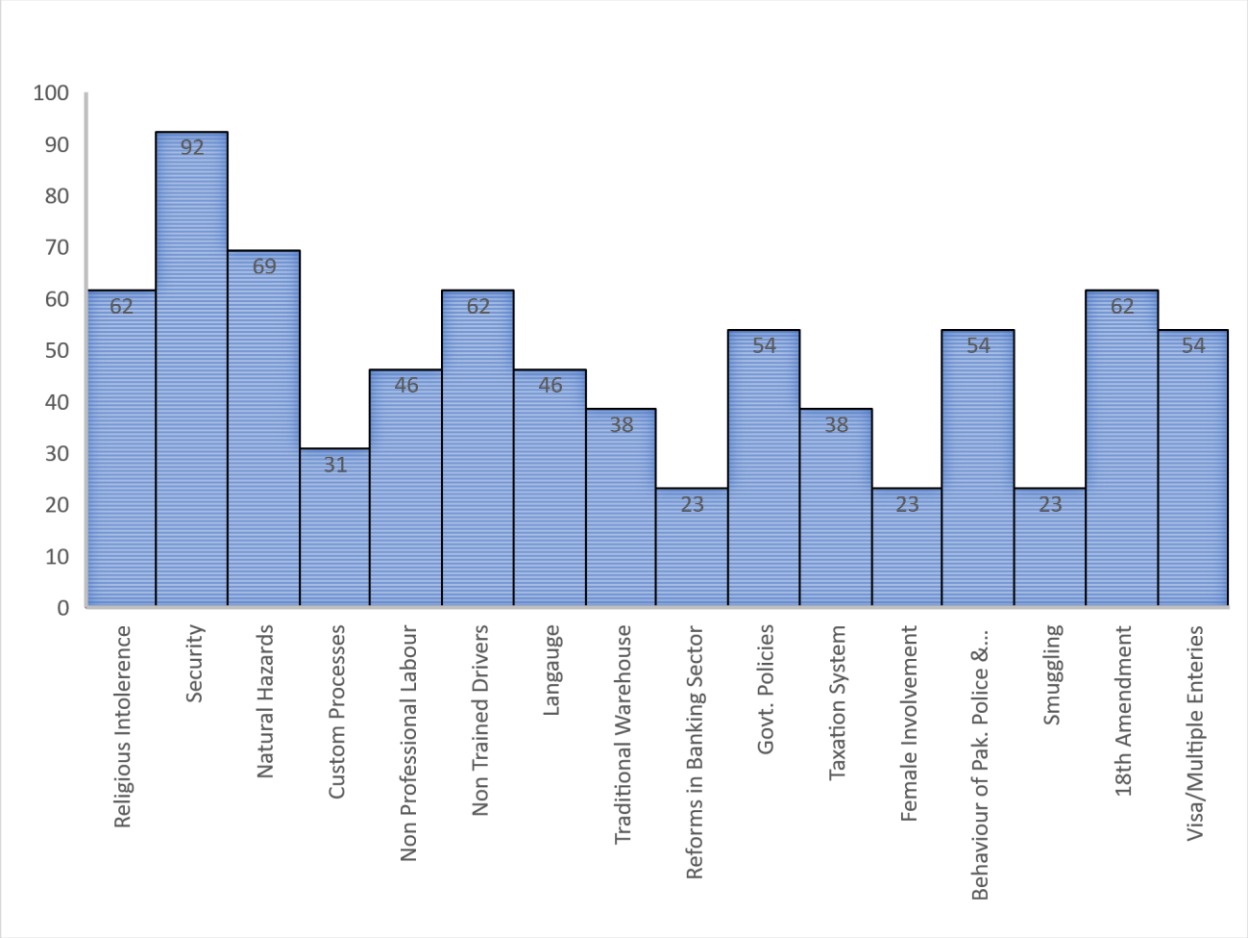


Figure No 4.4: Percentage of different barriers for entrepreneur on CPEC.

4.7 Conclusion and Recommendations of the Study

As CPEC is claimed to be a game changer by many of the experts [5] and after its proper functioning Pakistan will be the transshipment hub so if our people want to grab the opportunity for business we must have to bring reforms in the present system. Moreover, the current problems of the logistic industry should be addressed before CPEC completion and we should prepare ourselves for the upcoming project to be more successful. The present study concluded that prior to this study clear picture of information is not available

for entrepreneurs to be the part of CPEC in future. There are certain rules and regulations that exists for entrepreneur that must be aware off. Therefore, this study highlighted these rules and regulation as the case may be.

Pakistan is among the few countries of the world where there is no separate ministry for logistics and transport. The sector is an important link in the entire supply chain in the region after the launch of the China-Pakistan Economic Corridor (CPEC) and a separate ministry will become a focal point for the industry. Chinese companies should connect with local companies or enter into joint venture to handle transshipment or transit cargoes through Gwadar Port.

Additionally, present study highlighted different barrier for entrepreneurs in CPEC which main include the Government policies, behaviors of Pakistani Police and customs personnel's, language, traditional warehouses, taxation system, custom processes, reforms in banking sector, female involvements (harassments) and smugglings etc.

It is that hoped Pakistan will become a hub for transshipment trade once CPEC is fully on ground. Being a signatory to the Convention on International Transport Routes (TIR Convention), the customs connection on the international transport of goods under the cover of TIR Convention is an important link and Customs border posts including Gwadar, Taftan, Chaman, Turkham, Sust and the country's 12 dry ports are already TIR-compliant. The customs posts are already linked electronically through WeBOC and there is no issue of compliance or connectivity under TIR. This will facilitate fast movement of transit and transshipment cargoes across the country.

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