

Vice Chancellor Message



It is due honor for me to introduce the University of Veterinary and Animal Sciences (UVAS), Lahore, which has been ranked among the top ten universities as per Higher Education Commission (HEC) Pakistan 2020 ranking. This university is known for its involvement in quality teaching, training, clinical services, research activities, civic engagements, policy formulation and close working with all the stake holders of the Livestock sector.

The livestock sector has the largest share in the economy, contributing about 58.6% to the agriculture value added and about 11.4% to the national GDP. The share of livestock products in the generation of foreign exchange is about 13% which is quite meager as compared to its potential being on 4th rank in total livestock population of the world. This is due to the reasons that this sector has been facing many problems. However, currently Pakistan has started developing CPEC (China Pakistan Economic Corridor) with Chinese Government, which is considered a flagship project of current times. In addition to other benefits of CPEC, it is argued that this project may bring many beneficial aspects for the Livestock sector of Pakistan too. There is the need of pointing out and materializing these opportunities.

The Center for Applied Policy Research in Livestock (CAPRIL) of UVAS has been involved in highlighting the policy initiatives for the Livestock sector in the form of organizing various evidence-based policy research activities. This center has produced many policy papers, policy briefs, and research reports. I appreciate the efforts of editorial team for producing this policy paper on a very important aspect of CPEC and related opportunities from Livestock sector of Pakistan. I expect that this paper will help our policy makers to devise prudent policies in this regard.

Prof. Dr. Nasim Ahmad (S.I.)



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EXECUTIVE SUMMARY

Pakistan and China enjoy a friendly relationship from many decades. Both trade and diplomatic relations have strengthened over time. Pakistan and China have been working for mutual benefits since 1950. These bilateral relations have seen warmer and cold relations during changing world politics and scenarios. However, as a whole, both are known as friends of all times. Regarding bilateral trade between both countries has expanded over time and has been mostly skewed in favor of China. The relationships between both countries are touching new peaks after cooperation on the China-Pakistan Economic Corridor (CPEC) since 2005. China has replaced the US and becomes the largest import destination for Pakistan. CPEC has brought many opportunities for Pakistan to improve its trade balance by import substitution and increased exports.

Pakistan is an agricultural country and also has a comparative advantage in the production of many agricultural commodities mainly due to cheap labor. Livestock which is a subsector of the agriculture sector contributes significantly to the National Gross Domestic Product (GDP). Pakistan is blessed with a variety of livestock resources, there's a need to benefit from unharnessed potential in this sector. Though both livestock and poultry are contributing significantly to the economic growth of the country, however, their contribution to exports is not substantial. There's a dire need to revisit current production and trade patterns, as well as policies in perspective of emerging opportunities to benefit from the export potential of the livestock sector. This report will provide an overview of Pakistan's trade in livestock products with the world in general and China in particular over the last five years. The main objectives of this report are to provide information to exporters as well as policymakers regarding livestock trade, trade potential, emerging opportunities from the perspective of CPEC.



INTRODUCTION

Trade is a very important factor for the development of any country; the export of goods from a country contributes towards foreign exchange reserves and imports of goods increase the variety of goods available for consumption. Economists have long ago said that “Trade Makes everyone better off” (Mankiw, 1998). World Bank has described the importance of trade as “Trade is central to ending global poverty. Countries that are open to international trade tend to grow faster, innovate, improve productivity, and provide higher income and more opportunities to their people.”

Historical evidence shows that countries open to trade grew faster than closed economies, trade drives economic growth, contributes to the development of local industries, and improves the standard of living of people. Though trade is very important, however, the trade deficit is not desirable always. It leads to severe economic worries especially in developing countries that have low foreign reserves. Since 1950, Pakistan’s imports have exceeded exports and had a trade deficit almost every year (except few years). Pakistan’s imports have grown from less than USD 20 billion in 2004 to USD 45 billion in 2013, on the other hand, exports have increased from 15 billion to 25 billion USD during the same period (Choudhri, 2017) .

¹Mankiw, NG. 2015. Principles of Economics, 7th edition, Cengage Learning.

²World Bank. 2018. Stronger Open Trade Policies Enable Economic Growth for All. Available at; <https://www.worldbank.org/en/results/2018/04/03/stronger-open-trade-policies-enables-economic-growth-for-all>

³Choudhri E, Marasco A, Nabi I. 2017. Pakistan’s international trade: The potential for expansion towards East and West. Available at: <https://www.theigc.org/wp-content/uploads/2017/05/Choudhri-et-al-2017-Final-report.pdf>

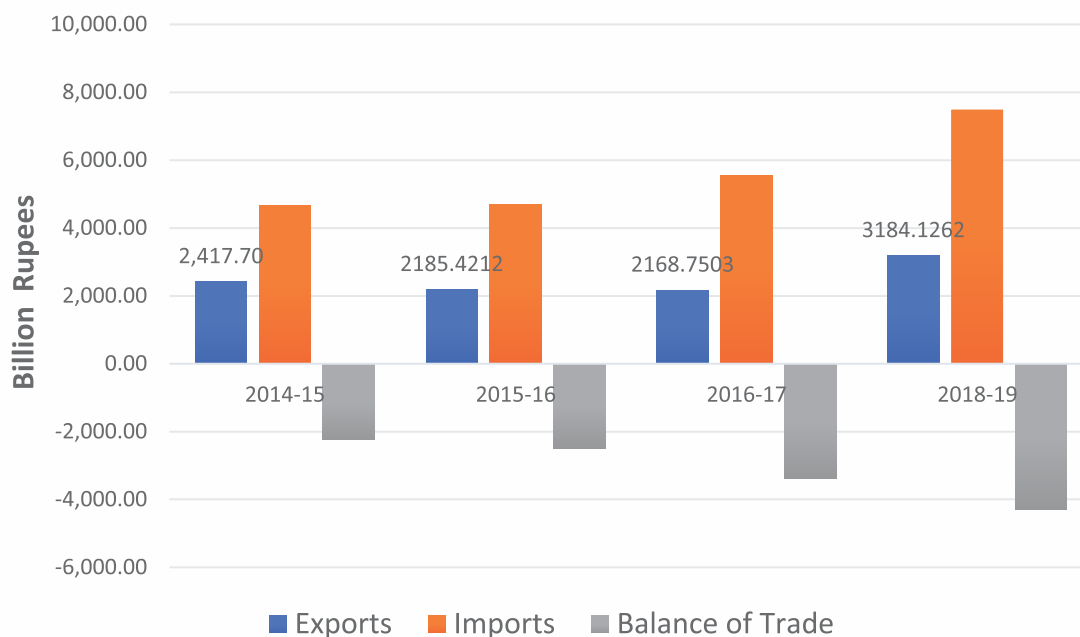


Figure 1 Balance of Trade of Pakistan in Billion PKR (2014-2019)

Source: Author's calculation based on data from Pakistan Bureau of Statistics

Analysis of the last five years reveals that the trend hasn't changed yet, and Pakistan is still facing a deficit in trade (Figure 1). The balance of trade is the largest component of any country's balance of Payment (BOP). Trade balance can be positive or negative, a positive trade balance occurs when a country's exports exceed its imports, and trade balance is negative when imports are higher than exports. The majority of the developing countries have an issue with the negative trade balance. Pakistan has a negative trade balance for consecutive many years, mainly due to high energy imports.

Pakistan and China's Trade relations

Pakistan and China are known as all-weather friends and iron brothers and share a friendly relationship. Few years after independence in 1950 Pakistan and China entered trade relations. However, it took 13 years for both countries to sign a formal trade agreement in 1963. After the establishment of the Pakistan-China joint Committee in 1982, trade relations turned more serious and formal. The main mandate of the Pakistan-China Joint Committee was to facilitate trade and technology. The participation of Pakistan in the United State led War against Russia, turned the relation between the two countries colder, as Pakistan and the US got warmer to each other. However, 21st Century dramatically changed the trade relations between two countries (Pakistan and China).

⁴SBP, 2020. State Bank of Pakistan, Govt. of Pakistan. <http://www.sbp.org.pk/publications/index2.asp>

The relationship once again turned cozier as both countries signed six Memorandum of Understanding (MOUs) in 2001. The relationship touched new peaks with established cooperation on Gwadar Seaport in 2002 and the signing of seven agreements in areas of energy, communication, and trade. These agreements have led to increased trade between both countries, the volume of trade between both countries expanded from USD 2.2 billion in 2005 to 13.8 billion in 2016. However, the trade balance has been skewed in favor of China since both countries started the trade. Pakistan's exports increased from USD 0.4 million in 2005 to USD 1700 million in 2016. On the other hand, China's export to Pakistan has grown rapidly, reaching from USD 1800 million in 2005 to 13900 million in 2016 (MG Link, 2017) .

In the past few years, China has replaced the United States of America and became the largest trade partner of Pakistan. After the launching of the China Pakistan Economic Corridor (CPEC) Pakistan has registered a surge in imports from China. Along with imports of machinery and equipment meant for CPEC projects, there has been an increased demand for Chinese industrial, agricultural, and consumer goods mainly due to relatively low prices. While China's export to Pakistan rose since the beginning of CPEC Pakistan couldn't increase the export to China, the highest volume of export to China was recorded in FY 2014. It is unfortunate that Pakistan's export not only stopped growing but began decreasing and never touched the level of FY 2014 again. A comparison of the last five fiscal years shows that exports to China decreased from 2015 to 2020. In FY 2019-20, Pakistan exported commodities worth 1,726 Million dollars to China and recorded a trade deficit of 6,529 Million dollars with China (Figure 2).

⁵MG Link. 2017. A Holistic View on Pakistan – China Trade Relations.

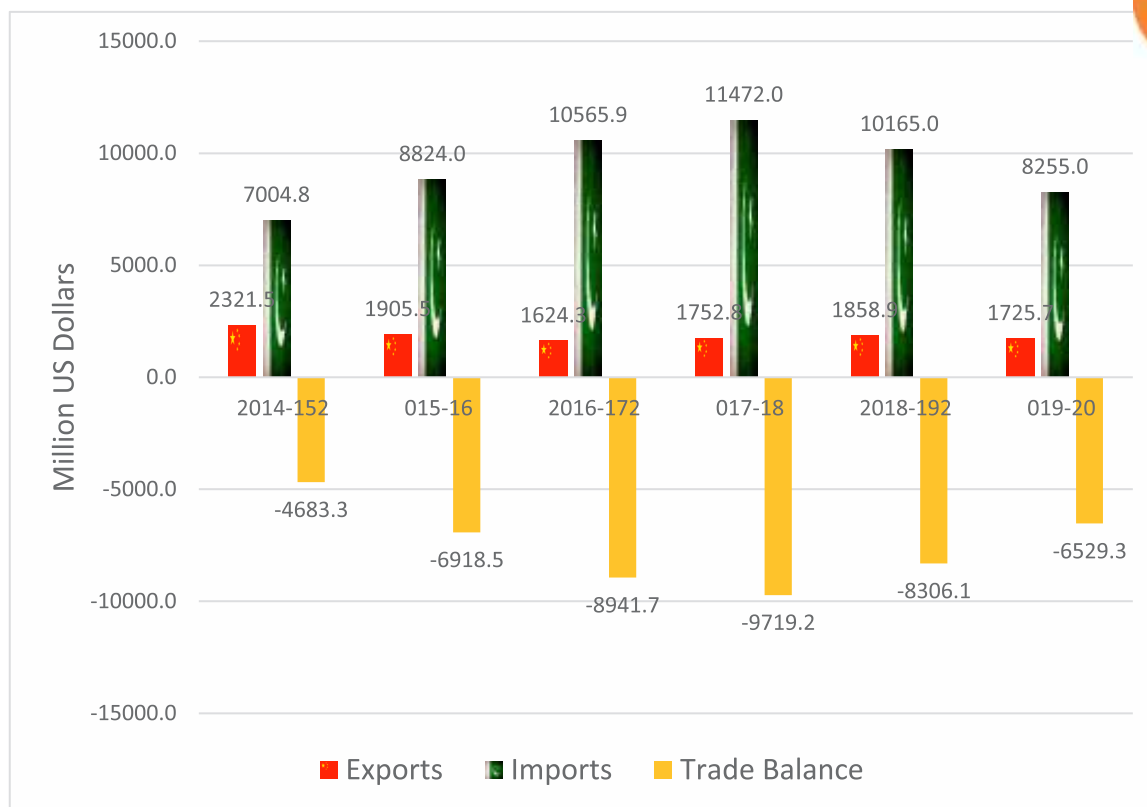


Figure 2 Pakistan's trade balance with China (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

China Pakistan Economic Corridor (CPEC) CPEC in General

The relationship between the two friendly countries has become stronger after Pakistan's involvement in the Belt and Road Initiative (BRI) of China. China Pakistan Economic Corridor (CPEC) which is a flagship project of China's Belt and Road initiative has brought two friendly countries closer. The geostrategic position of Pakistan has been one of the key reasons in selecting Pakistan as an optimal choice for developing an economic corridor with China (Nogales 2014)⁶. On one side of Pakistan are non-coastal countries and on the other side are oil-rich countries. Chinese huge investment in infrastructure, energy, and other sectors has helped develop robust economic ties with Pakistan. The inflow of foreign currency in Pakistan has helped to achieve higher economic growth and lessen the burden of the balance of payment. CPEC is a win-win situation for both countries, regardless of the criticism from some western media and governments, if it is executed successfully and with transparency, it will leave long-lasting impacts on the economy of Pakistan. However, Pakistan must understand that China is here to do business and the relationship between the two countries should be developed on basis of bilateral trade not unilateral.

⁶Nogales, E.G. 2014. Making economic corridors work for agricultural sector. Food and Agriculture Organization of The United Nations.

The CPEC was planned to be completed in three phases, “the first Phase of CPEC was planned to remove key economic bottlenecks namely energy and infrastructure” (Ministry of Planning and Development) which has been completed. Back in 2013, Pakistan was going through a severe energy crisis, so govt. of that time sought Chinese investment in energy projects to drove out the country from the darkness. Moreover, the completion of infrastructure projects like Lahore-Abdul Hakeem, Multan-Sukkur motorways, etc. have improved connectivity in the country, the movement of goods is cheaper and easier now. The second and current phase is “about industrialization, socio-economic and agricultural cooperation and promoting business and consolidating developments”.

- **CPEC as an opportunity:** CPEC has brought enormous opportunities for Pakistan to increase its exports and decrease imports. Chinese cooperation in the Agriculture sector can increase yield, decrease the cost of production, and make Pakistani products more competitive in the international market. As CPEC isn't the name of a single project rather it is the network of energy, infrastructure, communication, and research and development cooperation projects. Similarly, these different projects can have multidimensional impacts on the trade, some of them are discussed below.

- i. **Energy Projects:** For several years Pakistan has been facing the worst energy crises, which has badly hit all sectors of the economy. Completion of various energy projects under CPEC has solved the problem of energy shortage in Pakistan to a great extent. Export based manufacturing industry which faced negative consequences due to energy shortage is reviving recently and Pakistan is witnessing an increase in exports.

- ii. **Infrastructure Products (Motorways and Highways):** One of the main problems faced by the rural agriculture population of Pakistan has been easy access to big markets and urban centers. Development of highways and motorways under CPEC will provide easy, cheap, and fast access to a different market in the country, as a result, farmers will be able to sell their products to the processing industry which is currently mainly consumed at the household or village level. Additionally, cold storage and transportation will increase the movement of perishable products within and across the border.

- iii. **Railways:** The movement of goods in Pakistan is mainly through trucks, which is time-taking as well as costly. An improved railway network will decrease the cost of transportation significantly which will make transportation of products from one place to another cheaper. Hence, it will have a significant positive impact on marketing and trade.

- iv. **Fiber Networks:** The population of deprived districts will have improved connectivity with other parts of the country and world with access to the latest 4G broadband internet connections. With access to the internet, farmers will have better information about prices, production technologies, and disease control which may have a positive impact on production and exportable commodity.

- v. **Industrial Zones:** Development of the industrial zone is a long-term project under CPEC. The development of the industrial zone will bring large foreign direct investment as well as technology to Pakistan. Investment and establishment of industries in industrial zones by Chinese companies will help in import substitution as well as an opportunity to increase exports.

- vi. **Second China Pakistan Free Trade Agreement (CPFTA-II):** Though not too related to CPEC, improved trust between Pakistan and China (mainly due to cooperation on CPEC) has led both to sign CPFTA-II. In this agreement, China has eliminated tariffs on 313 most priority tariff lines

of Pakistan's export interest. Overall, China has granted concessions to products which include textiles and garments, seafood, meat, and other animal products, prepared foods, leather, chemicals, plastics, oilseeds, footwear as well as engineering goods including tractors, auto parts, home appliances, machinery, etc. (Ministry of Commerce). The elimination of tariffs on the export of meat and other animal products is a good opportunity for Pakistani exporters to explore the billion-dollar Chinese market. CPEC with Reference to Agriculture and Livestock

Pakistan being an agricultural country might have a comparative advantage in the production and export of agricultural products compared to manufacturing products. The export of manufactured goods or industrial goods to China is less likely. China has economies of scale in the production of manufactured goods, hence has a comparative advantage over Pakistan in the trade of manufactured goods. With the realization of the aforementioned reality, Prime Minister Imran Khan in his maiden visit to China in 2019 sought Chinese cooperation in the agriculture sector. Chinese President and Pakistani Prime Minister signed a Memorandum of understanding (MOU) on cooperation in the Agriculture sector. Latter another MOU on combating foot and mouth disease (FMD) in livestock was signed during President Xi's visit to Pakistan. FMD has hindered the export of meat and livestock from Pakistan. China agreed to help Pakistan in establishing an FMD free zone in Pakistan. This will help Pakistan to increase its livestock export to the world and explore the Chinese 12-15-billion-dollar meat market (Suleri and Ramay, 2020) .

Emerging Opportunities to Expand Bilateral Trade of Livestock Products

- Higher Production and Net Exporter: Pakistan is a net exporter of livestock and related products; however, Pakistan hasn't harnessed its full potential. Pakistan has a great potential to increase its production and exportable quantity of meat, milk, poultry, fish, etc.
- Import Substitution: Pakistan can decrease its import of livestock-related primary and manufactured goods by investing in the development of the local industry that can help in import substitution. Domestic demand for dairy products is increasing in Pakistan, and Pakistan is mainly dependent on other countries to meet domestic demand. The development of an industry which can produce concentrated milk and cream, whey, and milk products, will significantly decrease Pakistan's import of livestock products and resultantly will have a positive effect on the overall trade balance.
- Halal Market in China: China is a country of 1.45 billion people and has a 39 million Muslim population. Chinese Muslim community offers a huge market for halal products. Pakistan can take advantage of its land border with Muslim majority areas of China and capture the major share of the halal market.

⁷Suleri AQ, and Ramay SA. 2020. Pakistan's agriculture sector and CPEC. <https://sdpi.org/pakistans-agriculture-sector-and-cpec/>

- Chinese influx in Pakistan: Demand for locally produced products will increase as large numbers of Chinese are arriving for work in CPEC projects, and it is anticipated that flow of Chinese will increase in the coming days to establish a business or work in the industrial zone. This will prove to be a golden opportunity for the local livestock farmers to diversify their production and benefit from the increased demand for local products.
- Cooperation in Agriculture and Tourism: Chinese cooperation in agriculture on issues like breeding and genetics, controlling FMD, research, and development will increase the production of agricultural products. Increased production of agricultural products will contribute positively towards food security and exportable quantity. The development of the tourism industry will lead to an influx of Chinese and other international tourists. Demand for local livestock products will increase with the arrival of foreign tourists, this will help to earn foreign exchange as well as improve the lives of local farmers.
- Donkeys' Export: Donkeys carry significant importance in China from traditional Chinese medicine perspectives. A special kind of Gelatin made from donkey skin has been long considered to have medicinal properties in China. Demand for Donkeys has surged in China in recent years. Despite being the largest producer and government incentives to donkey farmers China can't keep with exploding demand. Pakistan is the third-largest producer of donkeys in the world with five million animals. Mostly Donkeys have been used as a means of transportation in agriculture in Pakistan, which to a large extent has been replaced by mechanic vehicles (loader rickshaw, etc.). So, Pakistan has a great potential to export Donkeys to China and earn foreign exchange.
- Energy, Infrastructure, and Communication Projects: Projects completed or planned under CPEC will have a multidimensional impact on the economy of Pakistan. Like other sectors of the economy, the livestock sector will see many opportunities in CPEC projects. A reliable and sustainable supply of electricity to the livestock-based export industry will have positive effects on an increase in exports. Improved infrastructure will improve connectivity and movement of livestock goods. Similarly, the development of industrial zones in the country will help in establishing the processing industry for livestock products. Pakistan will be able to export secondary and tertiary goods rather than primary goods (raw material).

Overview of Pakistan's Trade in Livestock Products

In Pakistan, Livestock is a very important subsector of Agriculture. Over the year's livestock subsector has shown Significant growth and became the largest contributor to value addition in agriculture by surpassing the crop subsector. In 2019-20, it contributed 60.6% to agriculture and 11.7% to the GDP (GOP, 2020) . The contribution of the livestock subsector ranges from an important source of food and fiber to a source of foreign exchange earnings. It contributed 3.15% of the total export of the country in 2019-20. The main export destination for Pakistani livestock products has been middle east countries. While a little attention has been paid to explore potential markets for export in Asia. China which is the largest importer in Asia and the world also could be one potential market for the export of livestock products. Keeping in view the concessions provided by China in the second phase of China Pakistan Free Trade Agreement (CPFTA) signed between China and Pakistan during the visit of the Prime Minister of Pakistan to China in 2019, there's an opportunity to capitalize on the potential to increase exports. Pakistan exports a variety of livestock products to the world, these include live animals, halal meat and related products, milk and related milk products, poultry products, etc.

Trade of meat and related products

Pakistan is a net exporter of halal meat and related products. In FY 2019-20, Pakistan exported halal meat and related products worth US \$ 266.03 million to the world and recorded a trade surplus of US \$ 265.93 million (Figure 3). The major export destination for Pakistani meat and related products has been middle eastern countries including Saudi Arabia, UAE, Kuwait, Oman, Qatar, etc. From 2015- 2020, Pakistan's export was lowest in 2017-18 and highest in 2019-20. It seems like the devaluation of the Pakistani rupee since 2018 has helped to increase the export of halal meat and related products. As it can be seen below figure Pakistan's exports of halal meat and related products has decreased from 2015 to 2018 and then started rising and touched the highest point in 2020.

⁸GOP, 2020. Economic Survey of Pakistan, Ministry of Finance, Govt. of Pakistan. http://www.finance.gov.pk/survey/chapter_20/02_Agriculture.pdf

⁹MOC. Ministry of Commerce, Govt. of Pakistan. <http://www.commerce.gov.pk/protocol-on-phase-ii-china-pakistan-fta/>



Figure 3 Trade balance in the trade of halal meat and related products with the world

Source: Author's calculation based on data from State Bank of Pakistan

Pakistan's trade of halal meat and related products with China has been insignificant over the years. In the tenure of the current government, export has significantly dropped, regardless of the size and potential of the Chinese market. The year 2019-2020 has been the worst from an export perspective might be due to a problem in supply and demand caused by COVID-19. Pakistan export which was US \$ 4.2 million dropped to the US \$ 0.1 million in 2020 (Figure 4). From the perspective of trade balance and export 2015 has been a good year for Pakistan, the level of exports in 2015 hasn't been achieved in succeeding years.



Figure 4 Trade balance in the trade of halal meat and related products with China

Source: Author's calculation based on data from State Bank of Pakistan

Being an Islamic country the consumption of the not halal product is lowest in Pakistan. However, the influx of Chinese working in CPEC increased the demand for not halal products and Pakistan's imports of meat and related products (not halal) also increased to meet the growing demand. Since 2015, the import of not halal products increased from US \$ 9.9 million to the US \$ 25.7 million in 2017. After 2018, export, as well as the import of not halal products, has decreased significantly. The trade deficit shrinks from the historic US \$ 23.8 million to the US \$ 1.4 million (Figure 5), which can be attributed to the rupee devaluation and trade policies of the current govt.

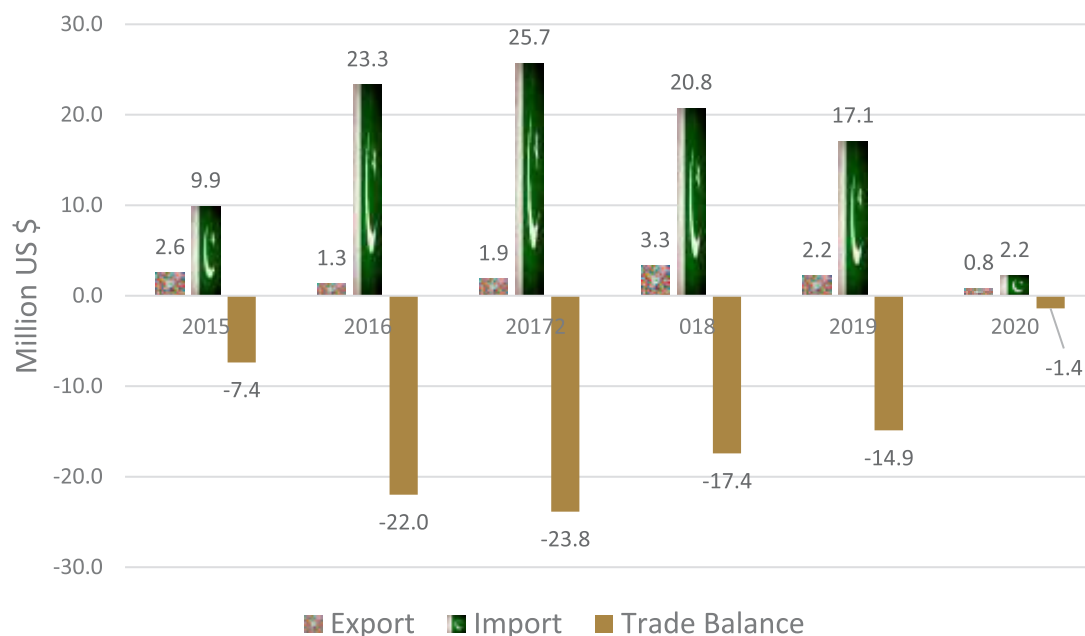


Figure 5 Trade balance in the trade of meat and related products not halal with world

Source: Author's calculation based on data from State Bank of Pakistan

To control the rising import bill, the current government has discouraged imports of unnecessary goods. As a result of import duties and high tariffs import of meat and related products has declined over the years. During peak import year (2017) Pakistan's imports from China were almost 29% of the total imports of meat and related products. As the Chinese were the main consumer of these products, hence, their demands were met by importing them from China. The import of meat and related products not halal from China was highest in 2017 (the US \$ 7.4 Million) and lowest in 2020 (the US \$ 0.6 million) (Figure 6). With the first phase of CPEC completing and a slowdown in activities demand for these products may also have declined. However, it is anticipated that with the beginning of the 2nd phase of CPEC import of these products will rise again contributing to the import bill of Pakistan.

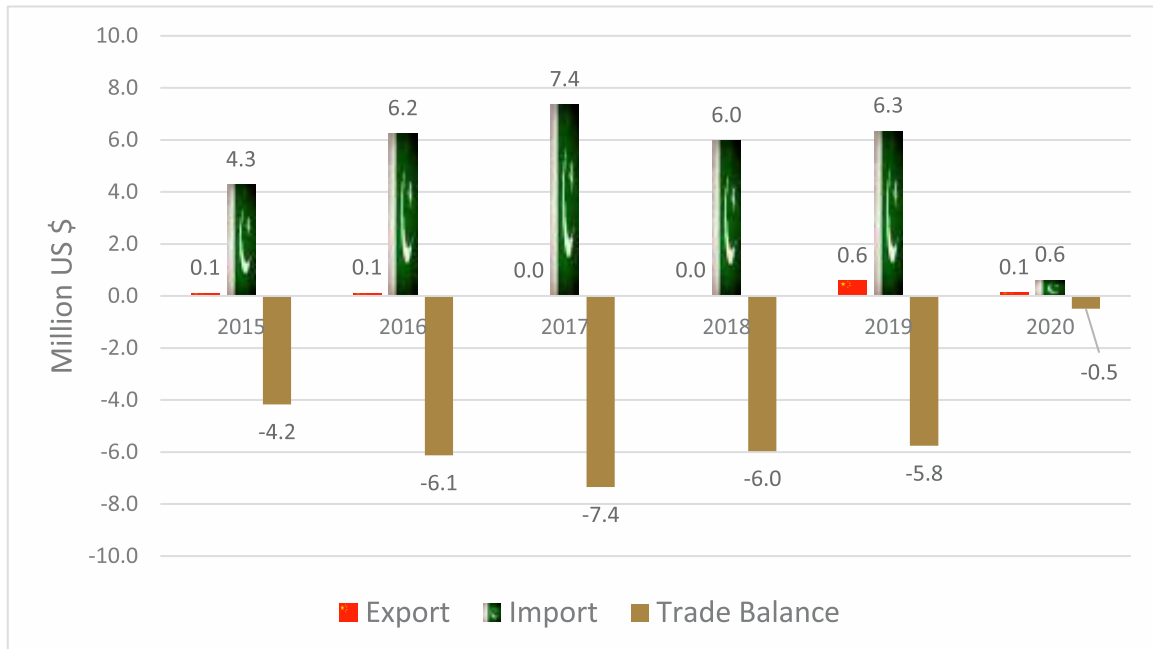


Figure 6 Trade Balance in the trade of meat and related products not halal with China

Source: Author's calculation based on data from State Bank of Pakistan

Trade of byproducts of Livestock

Industrial byproducts which include hides, skins, and leather were one of the major export commodities in livestock products. Unfortunately, over the years share of industrial byproducts in the total export of livestock products has declined. In 2014-15, Pakistan exported industrial byproducts worth the US \$ 531.55 million which dropped to US \$ 199 million in 2019-20 (Figure 7). It is evident from the figure given below that, trade in byproducts of livestock is declining with every passing year. Pakistan earned a trade surplus of US \$ 61.4 million from the trade of byproducts which declined to US \$ 28.2 million in 2020. There's a need to investigate this declining trend.



Figure 7 Trade balance in the trade of industrial byproducts with world

Source: Author's calculation based on data from State Bank of Pakistan

Export performance with China hasn't been very different, export of industrial byproducts to China was highest in 2015 (the US \$ 46.97 million) and declined afterward. The trade balance hasn't been greatly in favor of either side; however, Pakistan has maintained a trade surplus in the trade of byproducts over the years. The trade surplus was highest in 2018 (the US \$ 2.2 million) and lowest in 2016 (the US \$ 0.4 million). From 2018 onwards trade surplus in the trade of byproducts of livestock with China has declined (Figure 8).

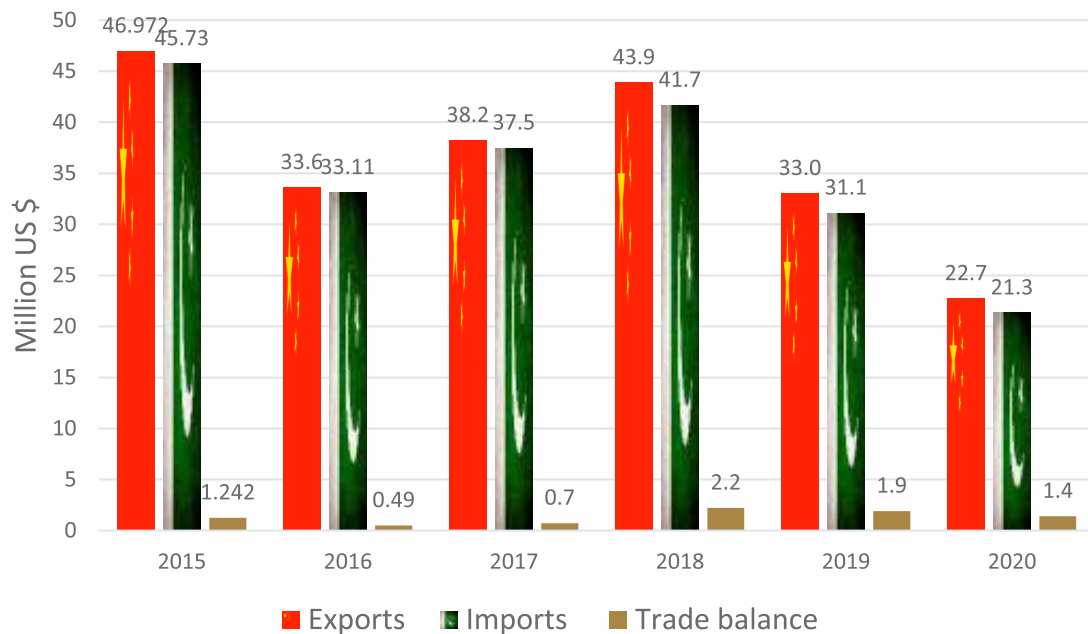


Figure 8 Trade balance in the trade of industrial byproducts with China

Source: Author's calculation based on data from State Bank of Pakistan

In byproducts, the second most important category is inedible by-products. The consumption of inedible byproducts in Pakistan is negligible, hence Pakistan has always recorded a trade surplus in the trade of inedible by-products (Figure 8). Careful analysis of the last 5 years' trade data reveals that Pakistan's export of inedible byproducts has been stable with few variations. The year 2015 has been the best year from export as well as trade surplus perspectives, Pakistan recorded a surplus of US \$ 86.5 million in the trade of inedible products with the world in 2015 (Figure 9).

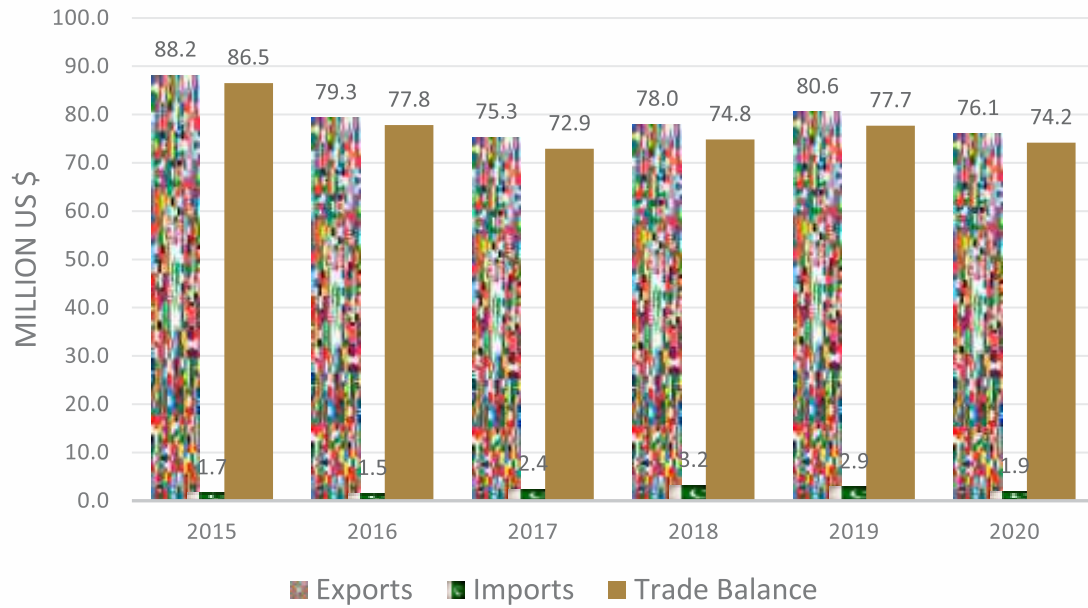


Figure 9 Trade balance in the trade of inedible byproducts with world

Source: Author's calculation based on data from State Bank of Pakistan

China has become a major export destination for the export of inedible by-products. Almost 34% of the total export of inedible byproducts from Pakistan goes to China. From 2015-2020, the export of inedible byproducts to China has increased by 50%. In 2015, Pakistan exported inedible products worth the US \$ 15.3 million which rose to US \$ 27.7 million in 2020. Thankfully, the trade surplus has also risen with exports (Figure 10).

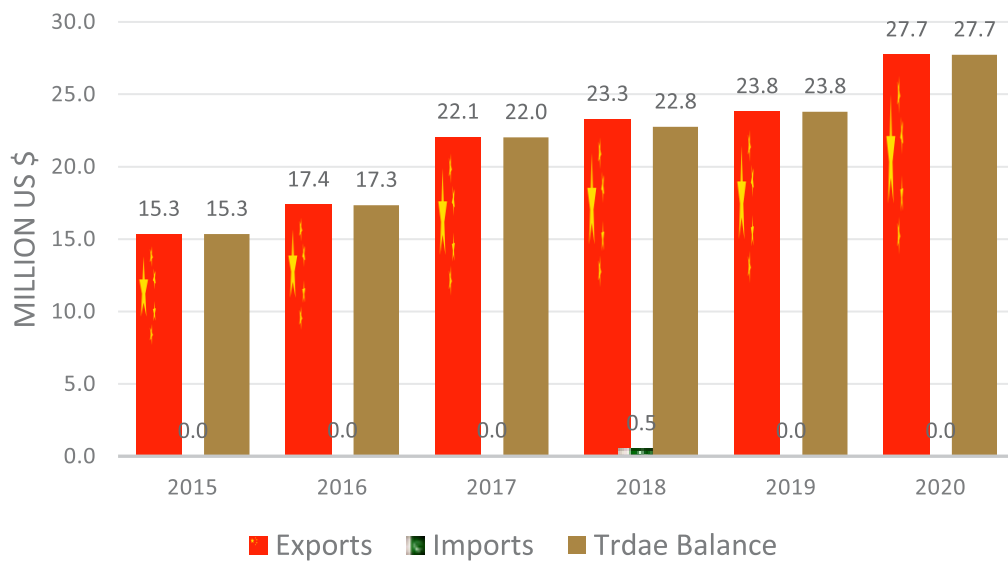


Figure 10 Trade Balance in the trade of inedible byproducts with China

Source: Author's calculation based on data from State Bank of Pakistan

Edible by-products which include edible offal, the edible product of animal origin, and guts and bladders are the third important subcategory in the byproducts category. From 2015-2020, Pakistan had been mostly net importer of edible byproducts except 2016-17 and 2019-20. Imports of edible products were highest in 2017-18 and decline afterward. Import tariffs and import substitution policy of the current govt. (2018- till now) has negatively impacted the import of edible by-products and helped in converting trade deficit to surplus. This all has been done with the help of decreasing imports, on the other hand, there has been no increase in export rather exports have also declined. Exports of edible products were US \$ 34.8 million in 2015 which lowest point in 2020 (US \$ 25.1 million). On the other hand, imports of edible products have been highest in 2018 (US \$ 45.5 million). After 2018, imports have significantly declined and reached US \$ 22.5 million in 2020, which helped to turn the trade deficit into a trade surplus (Figure 11).

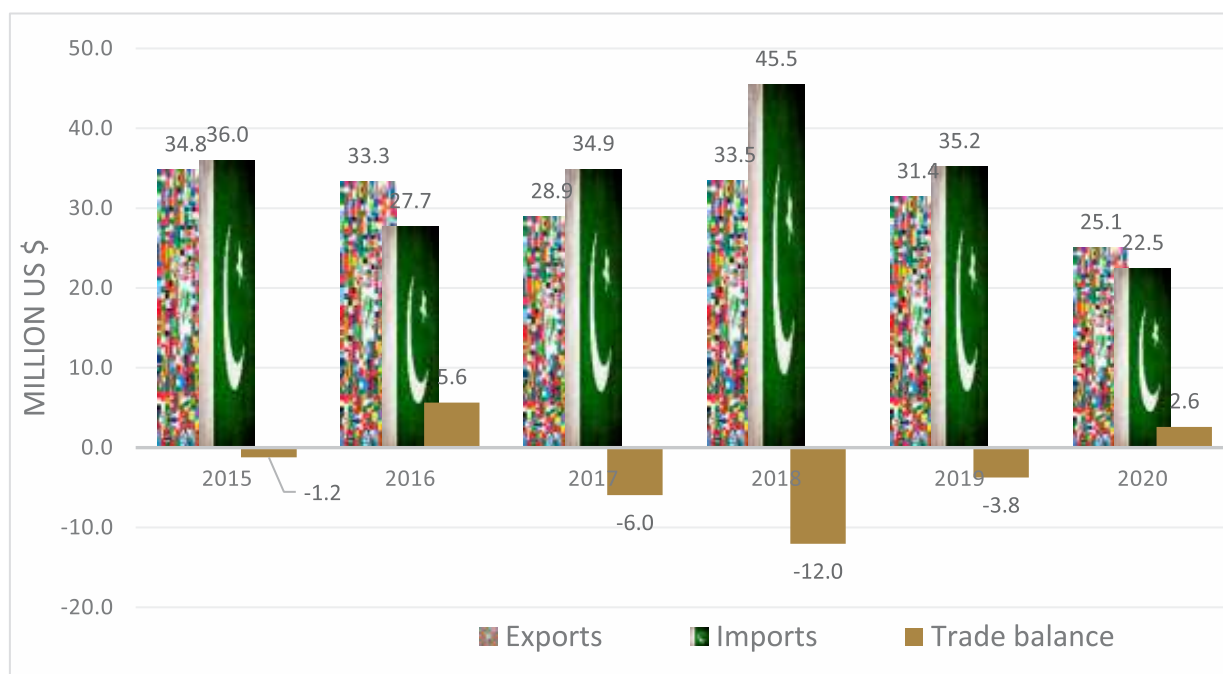


Figure 11 Trade balance in the trade of edible byproducts with the world in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

In 2015, Pakistan had a positive trade balance with China in the trade of edible products. However, in 2018 a sudden surge in imports was recorded which converted positive trade balance to negative. In 2019-20, there hasn't been significant trade of edible byproducts with China possibly due to Covid-19. Pakistan has a trade surplus of US \$ 3.9 million in 2017 and recorded the highest trade deficit of US \$ 8.2 million in 2019 (Figure 12).

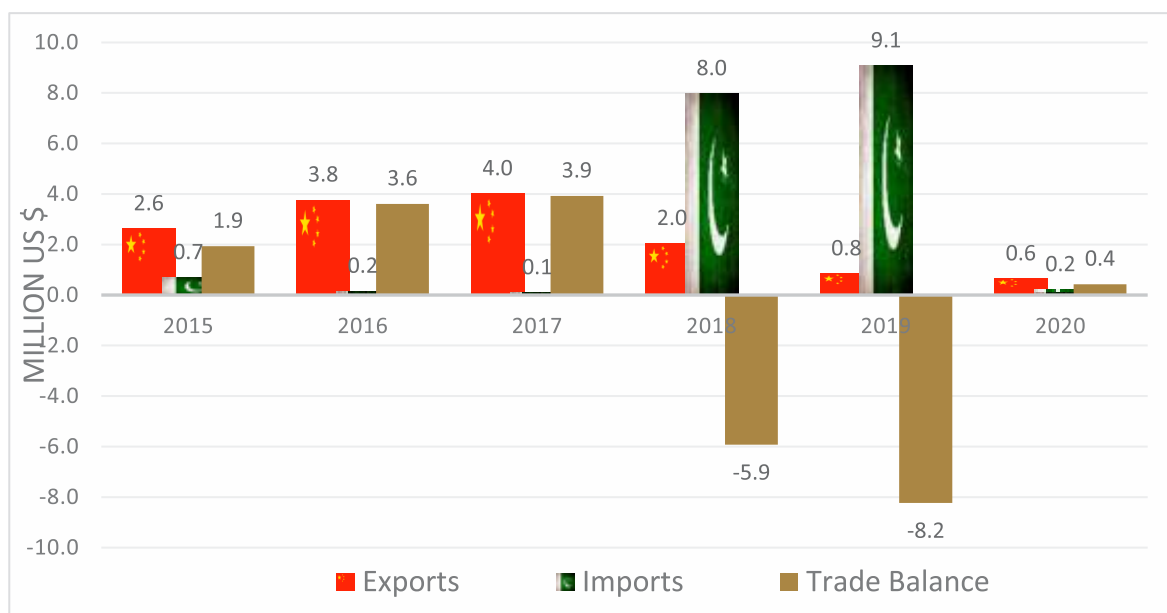


Figure 12 Trade balance in the trade of edible byproducts with China in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

Trade of live animals (Halal)

Another important category of livestock product is live animals (halal), the export of live animals (halal) has been highest in 2019-20. The devalued rupee as a result of the current Government's policy of floating exchange rate has helped to increase the export of live animals (halal). In the same way, imports have also declined after 2018 because of the discouragement of imports at the government level. Both devaluation and import tariff policies have helped in reducing the trade deficit in the trade of live animals (halal). Pakistan's import of live Animals halal was highest in 2015 (US \$ 22.6 million) which reduced to the US \$ 11.9 million in 2020. Declining imports and rising exports have improved trad balance from -19.5 USD million in 2015 to -6.5 USD million in 2020 (Figure 13)

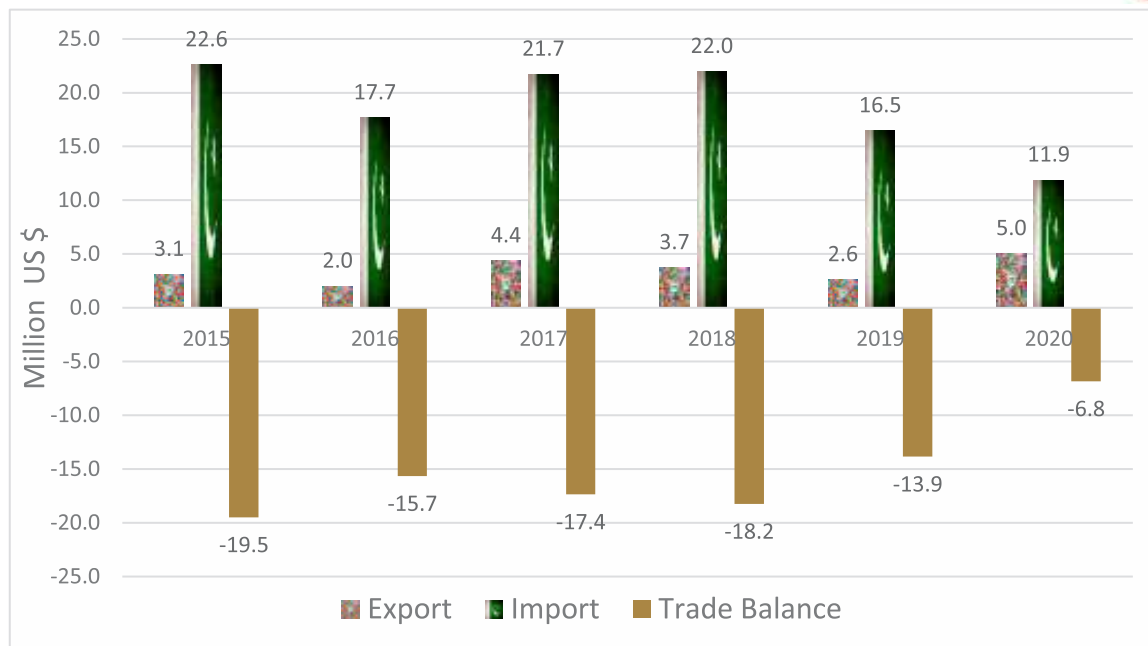


Figure 13 Trade balance in the trade of edible byproducts with China in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

Pakistan has been a historically net importer of live animals (halal) from China. Pakistan mainly imports bovine animals from China, import of bovine animals was highest in 2017 and, it declined afterward and was only 0.002 USD in 2019-20 (Figure 14). Pakistan recorded the highest trade deficit in the trade of live animals halal in 2017 which has improved after then mainly due to declining imports.

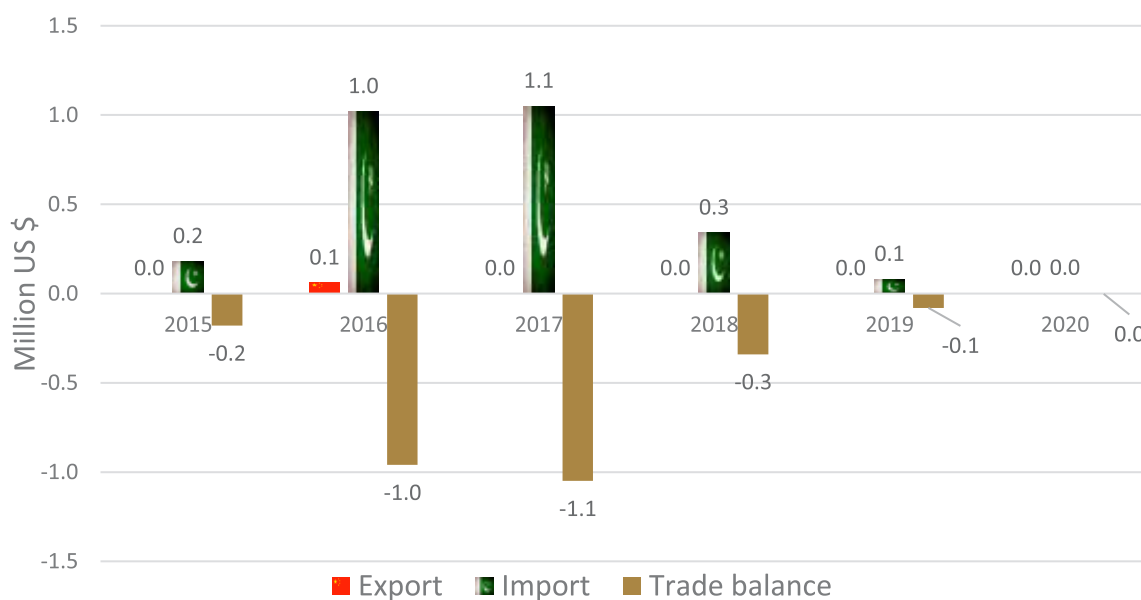


Figure 14 Trade balance in the trade of live animals (halal) with China in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

Trade of live animals NES (Primates, Whales/dolphins, mammals, reptiles, etc.) has significantly declined after 2017. Pakistan has always been a net exporter of live animals NES with the world as well as with China (Figure 15 & 16). However, over the years exports have declined. Pakistan exports were US \$ 2.5 million in 2015 which declined to the US \$ 0.9 million in 2020. Similarly, the trade surplus has also shrunk from the US \$ 2.5 million in 2015 to 0.8 million in 2020 (Figure 15).



Figure 15 Trade balance in the trade of live animals NES with World in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

Analysis of five years of trade data reveals that Pakistan has only a considerable amount of exports to China in 2016 (Figure 16). Except that, trade in live animals NES with china has been nothing or negligible.

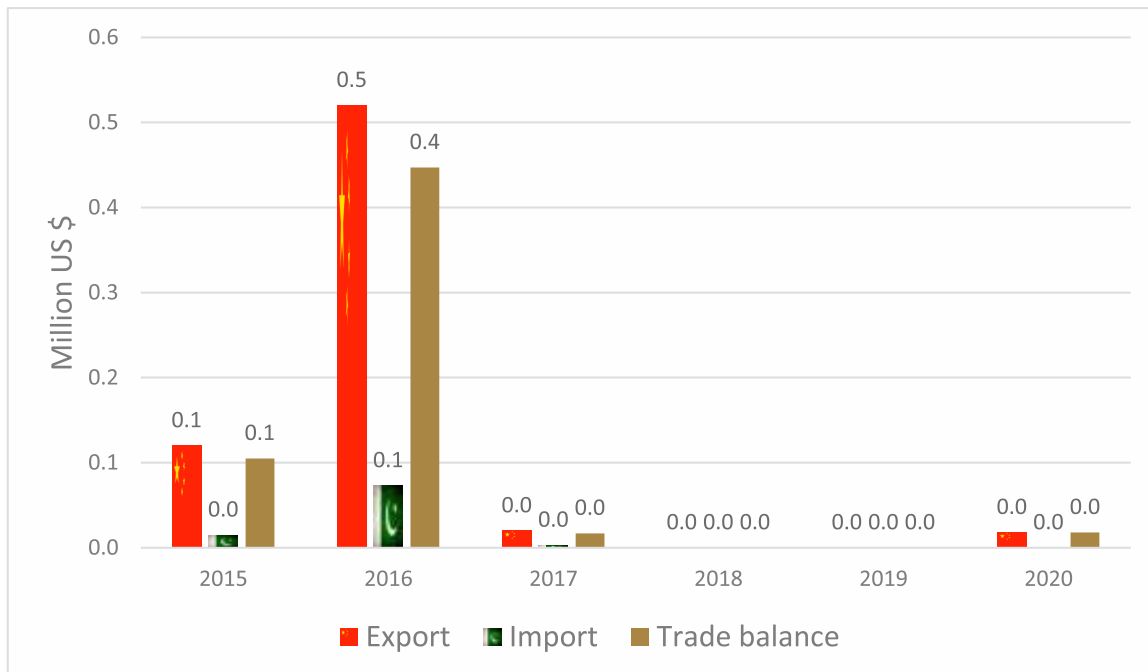


Figure 16 Trade balance in the trade of live animals NES with China in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

Trade of milk and related products

Despite being the 4th largest producer of milk, Pakistan is, unfortunately, a net importer of milk and related products. The export of milk and milk-related products has declined from 2015 to onwards and was negligible in 2020. A possible reason could be increased domestic demand, which decreased the exportable commodity. On the other hand, after the current govt. imports have also declined and, there's been an improvement in the trade balance. The trade deficit was USD 130 million in 2017-18 and has declined to USD 79.81 million in 2019-20 (Figure 17). The devaluation of the rupee has made imports expensive and discouraged the import of milk and related products.

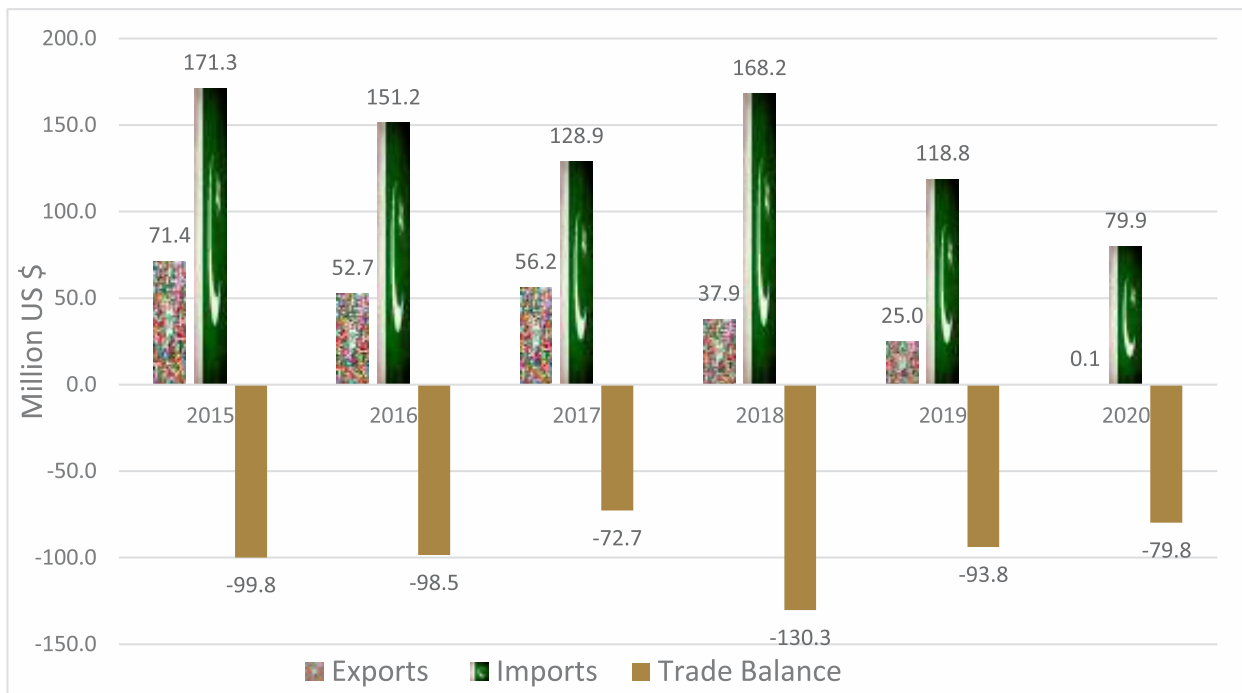


Figure 17 Trade balance in the trade of milk and related products with the world in Million USD (2015-2019)

Source: Author's calculation based on data from State Bank of Pakistan

The trade balance in the trade of milk and related products with China has been negative from 2015 to 2020. It was only 2017-18 and 2018-19 when Pakistan exported milk and related products to China otherwise export has been zero in other years. Imports of milk and related products from China which was USD 2.0 million have declined to USD 0.8 million in 2020 (Figure 18).

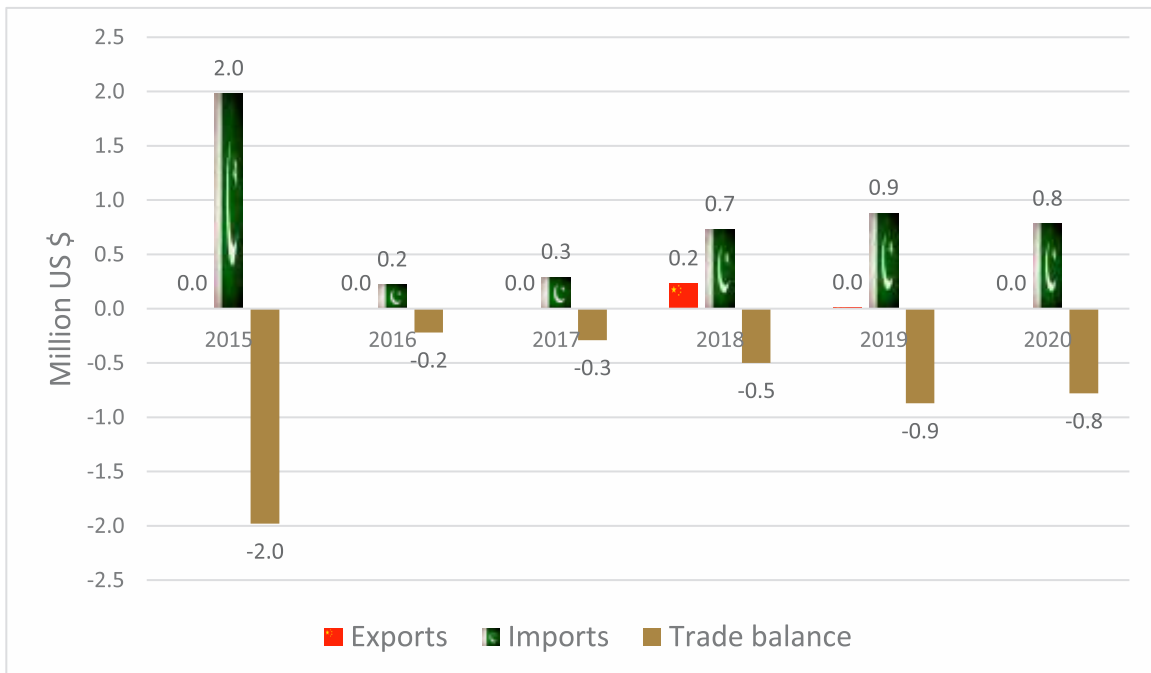


Figure 18 Trade balance in the trade of milk and related products with China in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

Trade of poultry products

Pakistan is the 11th largest producer of poultry, and the poultry sector provides jobs to over 1.5 million people. Hence its contribution to the economy is significant. Pakistan has been a net exporter of poultry products historically and recorded a trade surplus between 2015-2020. Export of poultry products (meat and edible offal) increased from 2015-19 and significantly decreased during 2019 and 2020, mainly due to supply and demand issues caused by the Pandemic (GOP, 2020) . From 2015 to 2019, Pakistani exports of poultry products increased from USD 2.4 million to USD 5.5 million. Similarly, trade surplus also increased during this period and Pakistan recorded USD 5.2 million surplus in the trade of poultry products with the world in 2019 (Figure 19).

Imports were highest in 2018 (USD 0.3 million). In the rest of the years, the trend has been mixed (Figure 20).



Figure 19 Trade balance in the trade of poultry products with the world in Million USD (2015-2020)

Source: Authors' calculation based on data from State Bank of Pakistan

Pakistan has also a positive trade balance with China in the trade of poultry products in the last five years. However, exports of poultry products to China significantly decreased from 2018 to 2019, and the factors responsible are unknown. Exports of poultry products to China were highest in 2018 (USD 0.5 million). In the rest of the years, the trend has been mixed (Figure 20).

¹⁰GOP, 2020. *Economic Survey of Pakistan, Ministry of Finance, Govt. of Pakistan.* http://www.finance.gov.pk/survey/chapter_20/02_Agriculture.pdf



Figure 20 Trade balance in the trade of poultry products with China in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

Trade of fish

Although the share of Fisheries in the National GDP is small (0.4%), this subsector contributes substantially to national income through export earnings (GOP, 2020). In 2015, Pakistan exported fish and related products worth the US \$ 667.88 Million to the world. However, afterward, exports didn't touch the level of 2015. If we look at the imports side, Pakistan's imports of fish and related products from the world have been declining since 2018 and reached the lowest level (USD 7.9 million) in 2020 (figure 21).

¹¹GOP, 2020. *Economic Survey of Pakistan, Ministry of Finance, Govt. of Pakistan.* http://www.finance.gov.pk/survey/chapter_20/02_Agriculture.pdf

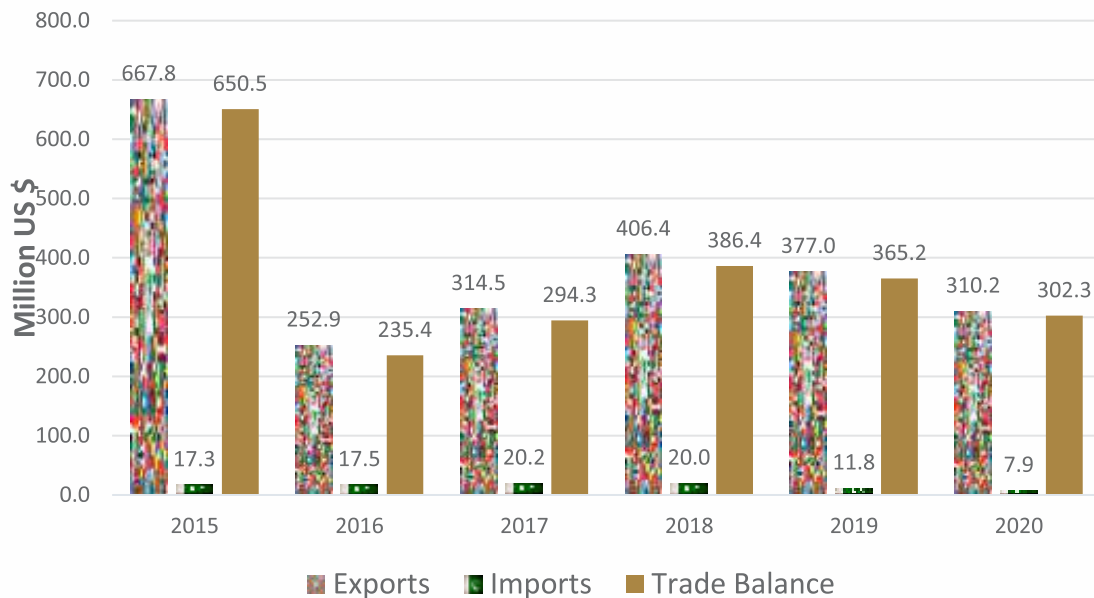


Figure 21 Trade balance in the trade of fish with the world in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

The export of fish to China has increased in the last five years (2015 to 2020). CPEC and Chinese involvement in Gawadar (coastal areas of Pakistan) seem to be having a positive impact on the export of Fish to China. In 2020, the export of fish to China was at an all-time high, it was 38% of the total export of fish. Exports of fish to China have increased from USD 54.4 million to USD 117.1 million in 2020 (Figure 22). This is an encouraging trend and the Government should support local industry to further enhance the exports.

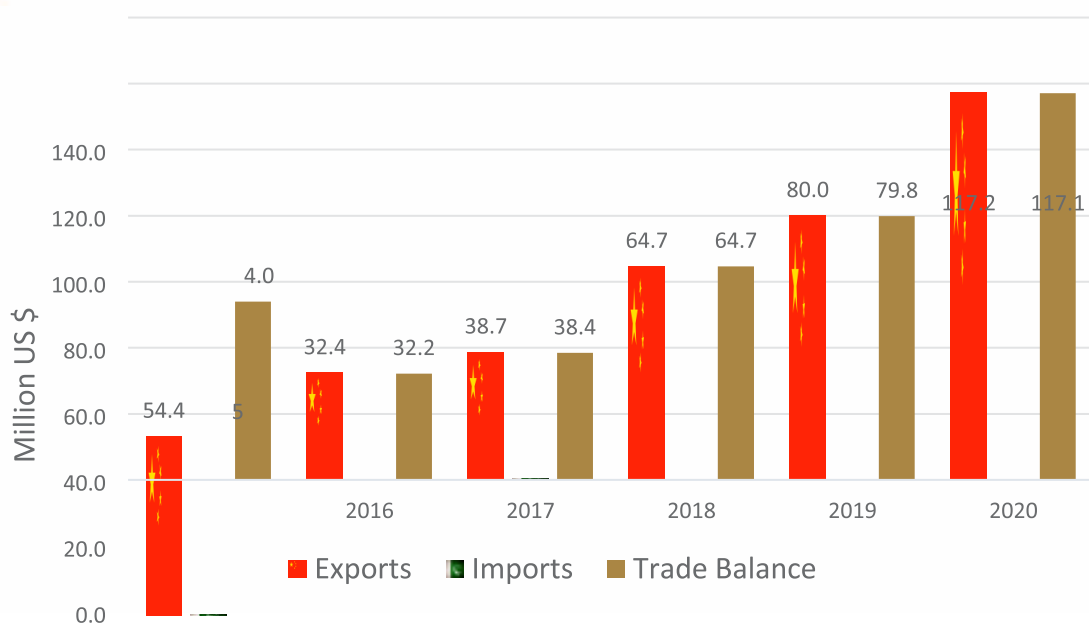


Figure 22 Trade balance in the trade of fish with China in Million USD (2015-2020)

Source: Author's calculation based on data from State Bank of Pakistan

Changing Trade Trends under Current Government Since 2018

The transition of government from the Pakistan Muslim League which ruled the country from (2013-18) to Pakistan Tehreek-e-Insaf (PTI) happened after the general election of 2018. Before coming to power, PTI made claims about changing the structure of the economy and improving the lives of common people. The majority of the population of Pakistan lives in rural areas and earns their livelihood from agriculture. The growth rate of agriculture was 4% in FY-2017-18, which dropped to 0.58% in the first year of the current govt. and then rose to 2.67% in the current year. The agriculture sector has shown a decline in growth after the incumbent govt. despite the government's claim of providing a record relief package to farmers. Another area where PTI was ambitious to work was the improvement in the trade balance. Before this PTI-led government, Pakistan's exports were USD 24.7 billion which fell to USD 24.2 billion in 2018-2019 and further decreased to USD 22.5 billion in 2019-2020. Despite rupee devaluation which was aimed at expanding exports, the export remained low. However, the government has been successful in reducing imports which led to an improved trade balance.

The livestock sector's contribution to the economic growth of the country has been significant, over the years it has compassed crop subsector and became the biggest contributor in agriculture value additions. It contributes 60.6 percent to the overall agriculture and 11.7 percent to the GDP during 2019-20 (MOF,2020). More than 8 million rural families earn their livelihood from livestock, which makes it one of the important economic sectors. Poverty eradication would remain a dream without investing and making livestock a profitable business. The manifesto of PTI states that it will "boost the livestock sector, make Pakistan self-sufficient in milk and milk-based products, and [also] expand meat production for domestic consumption and exports". To some extent the current govt. has been successful in reducing the trade deficit of milk and milk-related products. On the other hand, imports of milk and related products, as well as exports, have declined in two years of the current govt. Pakistan exported milk and related products worth USD 37.86 million in 2017-18, which decreased to USD 25.01 million in 2018-19. It is a positive sign for the country that, current govt.'s policies helped in increasing the export of live animal halal and related products and reducing the imports of the same. The trade deficit in live animal halal has declined from USD 18.24 million in 2017-18 to USD 6.84 million in 2018-19. However, keeping in view the availability of livestock resources Pakistan needs much more to turn the deficit into a surplus.

The careful analysis of the livestock trade performance in the time of previous and current govt. reveals a mixed trend, few things have improved and few worsened. Since the 2nd quarter of the last financial year (2019-2020), Global trade has been adversely impacted by COVID-19. Trade of Pakistan with the world has also been impacted by the Pandemic, so be it trade deficit or surplus in the last financial year it's not going to be permanent, as soon as World comes out of this crisis many things will change. So, we need to be very careful when making any comparison of the trade performance of previous and current govt. at this stage.

Needed Measures to Improve Trade Balance

i. The export potential of livestock products remains untapped for the last many years, with the expectation of improved trade and investment conditions (tied to Pakistan's coming out of the FATF grey list) there will be several opportunities for Pakistan to increase its export of different types of products. Trust of foreign investors will increase which will bring foreign

direct investment in many sectors of the economy, improved bilateral relationships with neighboring countries (China, Iran, Bangladesh, etc.) especially, and other livestock importing countries generally has opened a new window of opportunities for Pakistan livestock exporting industry. It's high time for the Pakistan government and livestock-based export industry to seize these opportunities.

ii. The influx of Chinese in Pakistan has increased after the initiation of CPEC projects, every society has different dietary needs and every religion has different opinions on the prohibition of certain foods/diets. Pakistan as a majority Muslim country has a certain consumption pattern that is met through domestic production or export from different countries after due verification about the halal and haram nature of the products. On the other hand, Chinese people consume those products/commodities often considered as prohibited (haram) in the Islamic religion. If Pakistani farmers want to benefit from this opportunity (CPEC and Chinese arrival) they need to align their production pattern with the demand of the Chinese. Otherwise, we will be relying on imports from other countries to meet the dietary needs of the Chinese.

iii. Every country has a specific set of rules/regulation regarding food and other items which they want their citizens to consume. Similarly, China has different quality standards and any country that want to export to china needs to fulfill those quality criteria. There are numerous quality issues in Pakistan's production sector, same is the case with the livestock industry at every level. To increase our exports to China we need to make our product suitable for the Chinese consumer. Therefore, there is a need for legislation after carefully considering the Chinese market.

iv. One of the main issues in trade with China is the complex banking system in China. Due to differences in the banking system of both countries and difficulties in transferring money from China to Pakistan, the exporters feel insecure and less interested in exporting to China. The banking sector of Pakistan should cooperate with Chinese banks and facilitate Exporter.

v. WTO bilateral agreements related to the export of livestock products should be expedited. The government can encourage exporters by providing them a legal cover. Currently, there are many issues related to the export of livestock products to China which is hindering harness export potential.

vi. Pakistan's government and investors have a golden opportunity to facilitate Chinese investment in Industrial zones being established in

different parts of the country. The government should encourage Chinese investors to invest in the agriculture sector generally and livestock sector specifically keeping in view the largely untapped potential of this sector. Domestic investors should start joint ventures with Chinese investors in the sector/product important for export to the whole world, not just China.

vii. In recent years, China has emerged as the largest importer in the world, estimates show that China imports meat worth of USD12-14 billion per year. Rising per capita income and decreasing arable area are some of the contributing factors to the growing demand. However, Pakistan's share in this multibillion market is almost negligible. China mainly imports beef and mutton from Australia, Zealand, Uruguay, Argentina, Brazil, and Vietnam. Despite having a historic friendly relationship and land border with China, Pakistani exporters are facing difficulties in exporting meat directly to China. Due to stringent Quarantine standards and registration process in China, a large grey market for foreign meat has developed in China. It has been revealed from some sources that, Pakistan is supplying meat to China indirectly through Vietnam. A large quantity of meat is smuggled to China through Vietnam and Hong Kong. A large quantity of frozen beef is exported to Vietnam, it has been seen in some reports that, Chinese buyers directly buy meat from Pakistan which is destined for ports in Vietnam, and after offloading, it is smuggled to the neighboring Chinese province of Guangxi. Indirect exports have many disadvantages such as lower prices and uneven order placement. There's a need to comply with Chinese standards and increase exports through a direct route. Pakistan has already got a tariff concession on the export of meat to China in the 2nd CPFTA. However, without access to the market, these concessions are of no use. Resultantly, major stakeholders such as the Ministry of National Food Security and Research, Meat Processor Association, Meat Exporters Association, and Pakistan Embassy in China should join hands to improve standards and quality of meat in Pakistan according to the requirement of the Chinese side.

Impediments

Though Pakistan and China enjoy friendly diplomatic and bilateral relations and China's market has a significant potential for Pakistan to increase its export, however, there are certain types of barriers which are impeding exports to China. Differences in values of Pakistanis and Chinese people (specifically Halal and not halal things), Quality standards of China, WTO bilateral agreements, and Complex banking System are an important barrier in expanding exports

from Pakistan. Some of the barriers have been discussed by Ayyub et al. (2018) in their Market Analysis Report regarding China:

- i.** Documentation of shipment- for the majority of imported perishable commodities China has a complex and strict documentation procedure. Before the arrival of a shipment, importers are required to submit documents of shipment's quality, origin, quarantine, and import control, along with commercial documents.
- ii.** Pre-import licensing- Food items subject to import tariff quotas such as Meat (chilled and frozen), wheat, rice, and sugar are required to obtain the Agricultural Products import Tariff Quotas Certificates.
- iii.** Labelling Compliance-Every food Product imported in China must be labeled in simplified Chinese Characters for custom clearance. Moreover, all labels must be approved by the Chinese Inspection and Quarantine Service (CIQS)
- iv.** Food Sanitary Inspection and Customs Clearance – Once the shipment arrives in China, the food products are inspected by Customs officials for a review of labeling requirements and relevant shipping documentation. The CIQ sanitary certificate is issued only if the documents are complete. This certificate is issued for every shipment.

Recommendations

Following are recommendations through which Pakistan can improve its trade with China.

Government

- a.** Policymakers should be vigilant to emerging opportunities and take maximum benefits from these opportunities, such as CPEC, changing tastes and preferences, trade relations between China and other countries, etc.
- b.** The Government should work relentlessly to remove the bottlenecks in bilateral trade agreements under WTO.
- c.** The Government should expedite its effort in the eradication of Foot and Mouth Disease (FMD) as China prefers to import from FMD free zones.
- d.** The government should engage with stakeholders to organize trade shows, so that, they are made aware of the requirements.

¹²Ayyub RM, Tahir AT, Ali E. 2018. Market Analysis report regarding china. Livestock and Poultry Export Guide. Export facilitation Center of Livestock and poultry (EFCLP), University of Veterinary and Animal Sciences, Lahore.

Farming Community

- e.** The local farming community should align their production with the demands of Chinese nationals living in Pakistan, like donkey farming, etc.
- l.** Industry (Banking, Chamber of commerce, processing)
- f.** The processing industry should take into consideration China's quality and standard criteria regarding livestock products and attain the required certification for export like HACCP, ISO2200, and Halal, etc.
- g.** Different logistic modes (land, freight, air) should be carefully considered to make transportation of goods from Pakistan to China, safe, fast, and cheap.
- h.** The Banking sector should facilitate exporters in transferring their money from China securely and legally.
- i.** Chambers of commerce should start joint ventures with Chinese investors in the livestock sector.

General

- j.** Export of meat and meat products to China has substantially increased by indirect trade through Vietnam. If appropriate measures are taken and products are exported through direct trade, it can bring great benefit to Pakistan through exchange earnings.

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Annexure-I: Description of Categories (For the convenience of the reader the products are categorized in the following groups based on the relevancy to a product category)

Category	Goods	HS Code
Byproducts (Industrial Products)	Raw Hides and Skins of Bovine or Equine Animals	4101
	Raw Skins of Sheep or Lambs NES	4102
	Raw Hides and Skins NES	4103
	Bovine or Equine Leather, No Hair NES	4104
	Sheep or Lamb Skin Leather, No Wool NES	4105
	Goat or Kidskin Leather, No Hair NES	4106
	Leather of Animals NES, No Hair NES	4107
	Leather further prepared after tanning (sheep, lamb)	4112
	Leather further prepared after tanning (other animal)	4113
Milk and Milk related Products	Butter and other Fats and Oils Derived from Milk,	0405
	Milk and Cream, Not Concentrated or Sweetened	0401
	Milk and Cream, Concentrated or Sweetened	0402
	Butter milk, Yogurt, Kephiretc, Flavored Not	0403
	Whey and Milk Products NES, Flavored etc. or	0404
	Cheese and Curd	0406
Byproducts (inedible)	Crustaceans; Live, Fresh etc, and Cooked etc.	0306
	Bones & Horn - Cores, Unworked, Defatted, Simply	0506
	Ivory, Tortoise-Shell, Whalebone etc	0507
	Coral, Shell of Molluscs etc. unworked or Simply	0508
	Ambergris, Castoreum, Civet and Musk	0510
	Animal Products NES, Inedible Dead Animals	0511
Fish	Fish, Live	0301
	Fish, Fresh or Chilled (Not Fish Fillets & other Fish	0302
	Fish Frozen (Not Fish Fillets & other Fish Meat)	0303
	Fish Fillets and other Fish Meat, Fresh, Chilled or	0304
	Fish Dried, Salted or in Brine; Smoked etc; Ed	0305
	Fats and Oils and their Fractions of Fish and Marine	1504
	Prepared or Preserved Fish, Caviar and Caviar	1604
Byproducts (edible)	Edible Offal of Bovine Animals; Swine, Sheep	0206
	Other Meat & Edible Offal ; Fresh, Chilled or	0208
	Edible Products of Animal Origin, NES	0410
	Guts, Bladders, Stomachs of Animals (Not Fish)	0504
	Fats of Bovine Animals	1502
	Other Animal Fats and Oil and their Fractions	1506
	Margarine; Edible Mixtures of Animals or Vegetable Fats	1517
	Extracts Etc. of Meat, Fish, Crustaceans etc.	1603

Poultry Products	Meat and Edible Offal of Poultry, Fresh, Chilled or	0207
Live Animals (halal)	Live Bovine Animals	0102
	Live Sheep and Goats	0104
	Live Chickens, Ducks, Geese, Turkeys, and	0105
	Meat of Bovine Animals, Fresh or Chilled	0201
	Meat of Bovine Animals, Frozen	0202
	Meat of Sheep or Goats, Fresh, Chilled or Frozen	0204
Live Animals (not halal)	Live Horses, Asses, Mules and Hinnies	0101
	Meat of Horses, Asses, Mules, Hinnies; Fresh	0205
Live Animals NES	Live Primates,	
	Live whales/dolphins & porpoises (order Cetacea)/manatees & dugongs (order Sirenia)	
	Live mammals, n.e.s	
	Live reptiles, incl. snakes & turtles	
	Live birds of prey	
	Live birds (order Psittaciformes), incl. parrots/parakeets/macaws/cockatoos	

Annexure-II: Export to World and China (in million USD)

Commodity	Export Destination	2015	2016	2017	2018	2019	2020
Raw Hides and Skins of Bovine or Equine Animals	World	3.373	1.199	0.983	0.163	0	0.036
	China	1.217	0.595	0.258	0	0.022	0
Raw Skins of Sheep or Lambs NES	World	0.941	0.191	0.046	0.053	0	0.012
	China	0.029	0	0	0	0.031	0
Raw Hides and Skins NES	World	0.468	0.339	0.625	0.204	0.066	0.108
	China	0.002	0.002	0.007	0.001	0.002	0.03
Bovine or Equine Leather, No Hair NES	World	19.598	12.159	17.279	1.337	9.367	6.285
	China	4.503	2.38	2.38	1.515	0.845	1.221
Sheep or Lamb Skin Leather, No Wool NES	World	1.578	0.656	0.592	0.927	1.624	0.715
	China	0.043	0.147	0.014	0.208	0.007	0.049
Goat or Kidskin Leather, No Hair NES	World	21.87	8.445	5.122	2.264	1.024	0.473
	China	0.18	0.013	0.007	0.2	0.109	0.004
Leather of Animals NES, No Hair NES	World	186.677	150.388	150.419	179.403	125.611	82.517
	China	10.576	10.276	15.993	21.893	17.917	11.626
Leather further prepared after tanning (sheep, lamb)	World	41.21	25.673	29.272	32.302	17.313	17.569
	China	10.071	5.94	6.647	8.766	3.87	2.174
Leather further prepared after tanning (other animal)	World	255.836	221.486	176.123	126.321	64.487	91.565
	China	20.351	14.247	12.91	11.3	10.224	7.624
Butter and other Fats and Oils Derived from Milk,	World	0.74	1.729	0.091	0.111	0.033	0.133
	China	0	0	0	0.006	0.008	0
Milk and Cream, Not Concentrated or Sweetened	World	66.872	50.104	43.55	33.977	14.853	0
	China	0	0	0	0.232	0	0
Milk and Cream, Concentrated or Sweetened	World	2.073	0.692	1.257	3.054	3.729	0
	China	0	0	0	0	0	0
Butter milk,	World	1.749	0.11	11.291	0.705	6.376	0

Yogurt, Kephiretc, Flavored Not	China	0	0	0	0	0	0
Whey and Milk Products NES, Flavored etc. or	World	0.003	0.095	0.004	0.013	0.023	0
	China	0	0	0	0	0	0
Crustaceans; Live, Fresh etc, and Cooked etc.	World	76.906	70.346	67.664	69.18	68.504	61.796
	China	15.299	17.198	21.66	21.247	18.554	19.562
Bones & Horn - Cores, Unworked, Defatted, Simply	World	5.103	4.601	4.024	5.016	9.843	13.248
	China	0.01	0.047	0.123	1.127	4.655	8.1
Ivory, Tortoise-Shell, Whalebone etc	World	3.223	3.164	2.338	3.02	1.632	0.716
	China	0	0.02	0.185	0.823	0.396	0.014
Coral, Shell of Molluscs etc. unworked or Simply	World	0.008	0.115	0.082	0.123	0.283	0.082
	China	0.008	0.033	0.081	0.091	0.161	0.06
Ambergris, Castoreum, Civet and Musk	World	0.355	0.32	0.429	0.274	0.221	0.232
	China	0.015	0.077	0	0	0	0
Animal Products NES, Inedible Dead Animals	World	2.587	0.788	0.774	0.389	0.09	0.002
	China	0.016	0	0.003	0	0.016	0
Fish, Live	World	1.796	1.572	1.007	1.372	1.583	0.89
	China	0.116	0.167	0.066	0.54	0.007	0.05
Fish, Fresh or Chilled (Not Fish Fillets & other Fish	World	2.19	1.096	1.268	1.739	4.002	4.708
	China	0.02	0.017	0.008	0.775	0.589	0.013
Fish Frozen (Not Fish Fillets & other Fish Meat)	World	225.663	218.748	277.255	355.313	343.978	276.892
	China	41.411	24.811	28.346	45.864	71.062	105.972
Fish Fillets and other Fish Meat, Fresh, Chilled or	World	32.807	17.1	15.796	22.001	19.24	21.319
	China	4.555	2.436	0.566	2.164	3.241	6.235
Fish Dried, Salted or in Brine; Smoked etc; Ed	World	391.49	8.999	14.544	23.146	8.184	5.31
	China	6.166	4.712	9.194	14.886	4.383	4.352
Fats and Oils	World	0	0	0.148	0.2	0	0

and their Fractions of Fish and Marine	China	0	0.035	0.039	0	0	0
Prepared or Preserved Fish, Caviar and Caviar	World	13.887	5.399	4.515	2.651	0	1.082
	China	2.094	0.27	0.496	0.457	0.749	0.553
Edible Offal of Bovine Animals; Swine, Sheep	World	9.346	13.202	11.918	15.079	11.11	7.447
	China	0.561	0.27	0.565	1.14	0.784	0.648
Other Meat & Edible Offal ; Fresh, Chilled or	World	0.207	1.522	2.404	0.499	0.231	0.304
	China	0	0	0.109	0	0	0
Edible Products of Animal Origin, NES	World	0.394	0.13	0.284	0.556	0.05	0
	China	0.029	0	0	0	0	0
Guts, Bladders, Stomachs of Animals (Not Fish)	World	24.86	18.482	14.327	17.333	20.052	17.31
	China	2.032	3.498	3.345	0.905	0.065	0
Meat and Edible Offal of Poultry, Fresh, Chilled or	World	2.395	2.326	4.513	5.426	5.505	0.288
	China	0.298	0.105	0.35	0.548	0.181	0.245
Live Bovine Animals	World	0.902	0.138	0.845	0.916	0.044	0.169
	China	0	0.061	0	0	0	0
Live Sheep and Goats	World	0.043	0	0.027	0.217	0.049	0.012
	China	0	0	0	0	0	0
Live Chickens, Ducks, Geese, Turkeys, and	World	2.157	1.878	3.497	2.606	2.519	4.859
	China	0	0	0	0	0	0
Live Horses, Asses, Mules and Hinnies	World	2.093	1.245	1.253	3.295	2.214	0.833
	China	0	0.017	0	0.006	0.576	0.122
Meat of Horses, Asses, Mules, Hinnies; Fresh	World	0.459	0.094	0.624	0.028	0	0
	China	0.104	0.094	0	0	0	0
Meat of Bovine Animals, Fresh or Chilled	World	74.414	77.019	105.899	129.143	177.921	221.904
	China	0.109	0.562	0.133	0.005	0.015	0.047
Meat of Bovine Animals,	World	64.396	80.661	50.85	38.695	21.117	16.646
	China	2.874	1.33	0.503	1.27	0.748	0.08

Frozen							
Meat of Sheep or Goats, Fresh, Chilled or Frozen	World	113.761	86.094	49.897	23.818	21.917	27.48
	China	1.186	1.33	0.936	2.067	0	0
Live Animals NES	World	2.481	2.228	2.396	1.299	0.929	0.896
	China	0.121	0.523	0.021	0	0	0.018

Annexure-III: Import from world and China (in million USD)

Commodity	Import source	2015	2016	2017	2018	2019	2020
Raw Hides and Skins of Bovine or Equine Animals	World	3.833	1.582	0.983	2.086	1.494	0.629
	China	0.103	0.045	0.115	0.088	0.016	0.017
Raw Skins of Sheep or Lambs NES	World	20.674	13.453	13.959	20.806	16.291	9.665
	China	0.005	0.095	0.243	0.002	0.004	0.27
Raw Hides and Skins NES	World	10.269	8.541	5.793	5.969	4.679	2.829
	China	0.06	0	0	0.016	0.005	0
Bovine or Equine Leather, No Hair NES	World	1.58	2.026	1.195	0.45	1.158	1.353
	China	0.032	0	0	0	0.051	0.029
Sheep or Lamb Skin Leather, No Wool NES	World	13.324	6.157	10.716	9.32	7.418	7.701
	China	0.064	0.024	0.037	0.017	0.016	0.526
Goat or Kidskin Leather, No Hair NES	World	4.128	3.257	5.913	2.539	2.95	2.357
	China	0.581	0.113	0.051	0	0.006	0
Leather of Animals NES, No Hair NES	World	5.049	4.709	4.474	7.362	4.998	2.245
	China	0.111	0.16	0.218	1.361	1.529	0.497
Leather further prepared after tanning (sheep, lamb)	World	0.502	0.512	0.203	0.522	0.848	1.126
	China	0	0.001	0.024	0.019	0.003	0
Leather further prepared after tanning (other animal)	World	1.839	0.764	2.322	1.814	0.49	0.318
	China	0.261	0.047	0.043	0.703	0	0.15
Chamois	World	0.222	0.071	0.045	0.027	0.468	0.014
	China	0.024	0.001	0	0	0.284	0
Butter and other Fats and Oils Derived from Milk,	World	0.641	1.539	7.143	1.982	1.119	0.664
	China	0	0	0	0	0	0

Milk and Cream, Not Concentrated or Sweetened	World	9.102	1.993	1.641	0.85	1.257	0.186
	China	0.282	0.119	0.049	0.223	0.037	0.027
Milk and Cream, Concentrated or Sweetened	World	132.081	127.015	96.461	141.414	95.359	57.797
	China	1.652	0.066	0.108	0.446	0.716	0.552
Butter milk, Yogurt, Kephiretc, Flavored Not	World	0.251	0.52	0.116	0.106	0.1	0.025
	China	0	0	0	0	0	0
Whey and Milk Products NES, Flavored etc. or	World	25.938	20.172	23.549	23.783	20.911	21.106
	China	0.013	0.043	0.122	0.041	0.064	0.033
Cheese and Curd	World	3.25	5.125	8.38	11.342	9.057	5.924
	China	0.042	0	0.019	0.027	0.064	0.168
Crustaceans; Live, Fresh etc, and Cooked etc.	World	0.241	0	0.024	0.598	0.042	0.044
	China	0	0	0	0.493	0	0
Bones & Horn - Cores, Unworked, Defatted, Simply	World	0.673	0.671	0.385	0.709	1.125	0.644
	China	0	0.015	0.007	0.002	0.008	0
Ivory, Tortoise Shell, Whalebone etc	World	0	0.106	0.166	0.084	0.006	0
	China	0	0.019	0.019	0	0	0
Coral, Shell of Molluscs etc. unworked or Simply	World	0	0	0.019	0.03	0.004	0.006
	China	0	0	0.004	0.023	0	0
Ambergris, Castoreum, Civet and Musk	World	0	0	0.419	0	0	0.001
	China	0	0	0.001	0	0	0
Animal Products NES, Inedible Dead Animals	World	0.743	0.747	1.401	1.76	1.707	1.221
	China	0	0.005	0	0.017	0	0.001
Fish, Live	World	0.201	0.037	0.246	0.125	0.112	0.109
	China	0.077	0.021	0.001	0	0	0.003
Fish, Fresh or Chilled (Not Fish Fillets & other Fish	World	0.298	0.36	0.038	0.066	0.023	0.209
	China	0	0.059	0	0	0	0.01
Fish Frozen (Not Fish Fillets & other Fish Meat)	World	11.119	13.014	11.183	8.757	1.58	0
	China	0.251	0.092	0.152	0.001	0.044	0
Fish Fillets and other Fish Meat, Fresh, Chilled or	World	2.661	1.757	5.607	6.768	8.117	7.483
	China	0	0	0.115	0	0.115	0
Fish Dried, Salted or in Brine; Smoked etc; Ed	World	0.127	0.174	0.241	0.054	0.117	0.034
	China	0.041	0	0	0	0	0
Fats and Oils and their Fractions of Fish and Marine	World	1.119	0.076	0.037	0.064	0.479	0.067
	China	0	0.009	0.001	0.006	0.04	0.027
Prepared or Preserved Fish, Caviar and Caviar	World	1.777	2.112	2.855	4.182	1.379	0
	China	0	0.056	0.002	0.007	0.002	0
Edible Offal of Bovine Animals; Swine, Sheep	World	2.101	2.319	4.136	6.048	6.42	0.741
	China	0.279	0.068	0.022	0.042	0	0.004
Other Meat & Edible Offal ; Fresh, Chilled or	World	0.04	0.078	0.043	0	0	0.001
	China	0.04	0.019	0	0	0	0

Edible Products of Animal Origin, NES	World	0.128	0.147	0.114	0.743	0.112	0
	China	0	0	0.002	0	0.007	0
Guts, Bladders, Stomachs of Animals (Not Fish)	World	0.026	0.03	0.038	0	0	0.042
	China	0.026	0	0	0	0	0
Fats of Bovine Animals	World	18.153	10.502	13.782	15.323	11.775	1.511
	China	0	0.008	0	7.875	9.068	0
Other Animal Fats and Oil and their Fractions	World	0.034	0.067	0.04	0.063	0.365	0.069
	China	0	0	0	0	0	0
Margarine; Edible Mixtures of Animals or Vegetable Fats	World	14.675	14.176	16.172	22.208	16.42	20.101
	China	0.291	0	0.073	0.052	0	0.207
Extracts Etc. of Meat, Fish, Crustaceans etc.	World	0.854	0.377	0.564	1.12	0.114	0
	China	0.061	0.056	0.002	0.004	0	0
Meat and Edible Offal of Poultry, Fresh, Chilled or	World	0.014	0.117	0.136	0.343	0.353	0.011
	China	0.014	0.01	0.014	0.02	0.02	0
Live Bovine Animals	World	13.576	8.827	12.037	11.547	5.543	7.25
	China	0.171	0.986	1.047	0.349	0.05	0.002
Live Sheep and Goats	World	0.02	0.02	0.074	0.126	0.053	0
	China	0.011	0	0.004	0	0.035	0
Live Chickens, Ducks, Geese, Turkeys, and	World	8.997	8.813	9.617	10.298	10.871	4.633
	China	0	0.034	0	0	0	0
Live Horses, Asses, Mules and Hinnies	World	9.884	23.272	25.69	20.758	17.104	2.238
	China	4.269	6.233	7.351	5.972	6.345	0.608
Meat of Horses, Asses, Mules, Hinnies; Fresh	World	0.029	0.041	0.029	0	0	0
	China	0	0.005	0	0	0	0
Meat of Bovine Animals, Fresh or Chilled	World	0.036	0.255	0.12	0.25	1.536	0.0025
	China	0	0	0.001	0	0	0
Meat of Bovine Animals, Frozen	World	3.029	2.036	2.85	2.159	0.811	0.0916
	China	0.148	0	0	0	0	0
Meat of Sheep or Goats, Fresh, Chilled or Frozen	World	0.248	0.242	0.056	0.346	0.055	0.0085
	China	0.001	0	0	0	0	0
Live Animals NES	World	0.022	0.228	0.199	1.097	0.104	0.078
	China	0.015	0.073	0.003	0	0	0

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