



Assessment of impact, growth in trade of agricultural commodities, India, Afghanistan and export to major countries

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ABSTRACT

The major commodities traded from Afghan's country are asafoetida, fig, grapes, almond, walnut and apple, are having the major share in terms of quantity commodities are major exportable agricultural commodities of Afghanistan, the trade performance of selected major agricultural commodities of India and Afghanistan. The major selected agricultural commodities in India are sugarcane, groundnut, coconut, rice, cumin and cashew. While Afghanistan's crops are asafoetida, fig, grapes, almond, walnut and apple. The primary data regarding various constraints in trade are collected by selecting 30 Indian traders and 30 Afghan's traders. The trade data was collected from both the countries for 10 years from 2010 to 2019. Descriptive statistics, multiple regressions, Compound growth rate analysis, Cuddy- Della Valley index, Markov Chain Analysis. Among seven provinces out of thirty four provinces of Afghanistan showed a very high and significant growth in area and production of major six crops except in Balkh province and least in Badakhshan province. Compound annual growth rate analysis and descriptive statistics of growth rate analysis revealed that India was a stable importer of asafoetida which grew at the rate of 19.15 per cent, in case of fig growth rate was 17.17 per cent, almond growth rate was 20.92 per cent, grapes was 112.19 per cent, walnut growth rate was 16.24 per cent and apple growth rate was 51.62 per cent from Afghanistan. The results also revealed that export to Afghanistan was also stable in case of sugar, positive and significant growth rate of 14.93 per cent, groundnut growth rate was 51.70 per cent, while coconut had 50.30 per cent, rice showed growth rate of 1.56 per cent, cumin revealed rate of 28.90 per cent and cashew was positive and significant 23.88 per cent. The transitional probabilities matrix for India's sugar revealed that seven countries namely Srilanka, UAE, Sudan, Malaysia, Bangladesh, Saudi Arabia and Afghanistan were the major importers while UAE and Sudan were moderately stable markets for India's Sugar. NPC for the period 2019-20 revealed that asafoetida export had a high degree of comparative advantage in the world. Fig crop export from Afghanistan was also competitive. India's and Afghan's export to major countries. The India and Afghanistan countries have potential for agricultural products marketing in the globe and India is progressing past to emerge as one of the potential exporter in the world in the future days.

Keywords: CAGR, India, Afghanistan, agricultural commodities, Export to major countries.

Introduction

The countries in the world today are so interdependent that any significant development in one part of the world will have its repercussions in other countries either in small or in big measure. Trade between or among nations namely foreign trade is of paramount importance for all the countries for their economic growth and also for better quality of life to its citizens. In the previous decade there have been such a drastic and fundamental changes all over the world and particularly in India and Afghanistan that it has become almost impossible for a country to exist in isolation and without trade.

Global financial crisis is sweeping the world, and severely straining the economy and exports of all countries, in the course of last decade, the export scene in India and Afghanistan has undergone a tremendous change, which have been unprecedented, particularly political instability in Afghanistan and other neighbors countries has thrown up several challenges India's merchandise exports is on an increase over the previous decade. Now India has established the need for fast growing export trade. In today's context, the fast growing sectors in exports which India and Afghanistan needs to concentrate on Agril Exports, Engineering goods, chemicals, textiles rather than machines and weapons.

Trade in agro food products has been growing strongly over the last two decades reaching almost 7 per cent in real terms annually between 2001 -2019. Trade has always been considered as the most important component of economic development of the country.

1.1 Relationship between India and Afghanistan

India and Afghan have a strong relationship based on historical and cultural links, history reveals link to the both countries since ages and during Mahabharata period. India has been playing a significant role in the reconstruction and rehabilitation of Afghanistan. The strategic partnership agreement was signed during 2011 October by Afghan then President Hamid Karzai and Indian then president Abdul Kalam.

This strategic partnership reinforced the strong, vibrant and multi-faceted relations between the two countries and at the same time formalized a framework for cooperation in various areas between the two countries: political & security cooperation; trade & economic cooperation; capacity development and education; and social, cultural, civil society & people-to-people relations. This agreement gave a strong signal of our abiding commitment to peace, stability and prosperity in Afghanistan during the critical period of security and governance transition. The commitment is also reflected in our extensive developmental assistance programme, which now stands at around US \$2 billion, making India the 5th largest bilateral donor in Afghanistan after the US, UK, Japan and Germany. This, by any reckoning, is a substantial amount for a non-traditional donor like India.

1.2 Agriculture in Afghanistan

The total geographical area of the country is 6,52,864 square kilometers (2,52,072 sq mi) with estimated population by 2022 is 34, 161, 000 (3.41 crore) Afghanistan has three distinctive regions: The Northern plains are the major agricultural area while South Western plateau consists desert and semi arid landscape and the central highlands. Population density at 2022 was around 52.3 literacy level was 52 per cent for male and 23 per cent for female. And country's life expectancy at birth for male was 63.8 years while female 66.7 years. Nearly 80 per cent of population in the work force is engaged in agril sector indicating agriculture as a major industry in Afghan. Agricultural sector shares 23 per cent of country GDP in 2019 while industrial sector shares 21.10 per cent, service sector shares 55.90 per cent. Afghanistan is a landlocked country located in the center of Asia. Afghanistan is the country richest in the world in terms of mineral reserves. The country's natural resource remains intact and the Afghanistan Ministry of Mines and Petroleum has estimated that the country's reserves are estimated at \$ 3 trillion worth of mineral resources.

Afghanistan currently produces roughly 1.5 million tonnes of fresh fruits annually, which could be enhanced significantly. It is known for producing some of the finest products/ fruits especially apples, apricots, cherries, melons, sweet, mulberries, peaches and pomegranates. Wheat and cereal production in Afghanistan is traditional agricultural mainstay. Afghanistan is nearing self sufficiency in grain production.

Arable land is around 8 million and wheat production stands at only about 5 million tonnes, nurseries hold 1,19,000 hectares of land and grape production was at 61,500 tonnes, almond production around 56,000 tonnes.

In 2019 Afghans economy was shattered due to severe drought and corona endemic hence wheat and milk, production declined by 30 per cent. Afghanistan is officially Islamic state. Where 42 per cent people out of every 100 per cent belongs to Pashtuns ethnic group while 27 per cent belongs to Persian. Presently Taliban organization has formed the Government.

1.3 Agriculture in India

The Indian peninsula stands apart from the rest of Asia, bordered as it is by mountains and the sea, which gives the country a distinct geographical entity. India is one of the oldest civilizations in the world with rich cultural heritage. India has become self sufficient in agril production and has attained importance in the global economy. It covers an area of 3,287,263 sq kms extending from the snow covered Himalyan heights to the tropical rain forests of the South. India has achieved all around socio economic progress in the last 75 years of independence (attained independence in 1947)

India is a home to 1.4 billion people almost one-sixth of the world's population, which is with diverse ethnicities and religions. India's population growth compared to previous years was 0.97 per cent in 2021 and degree of urbanization was around 35.39 per cent.

1.4 Afghanistan export

Afghanistan traditionally exports items with low value, such as dry and fresh fruits, cereals, pulses, non-alcoholic beverages, medicinal plants, hand-woven carpets, rugs, wool, silk, cotton, leather, felt and coal, precious and semi-precious stone. According to Afghan authorities, their exports increased significantly from \$137.3 million in 2000 to \$885 million in 2018 and expected to be increased to \$1.5 and \$2 billion in 2019 and 2020 respectively. Exports in Afghanistan increased to \$885 million in 2018 from \$700 million in 2017 which show a growth of 26.43 per cent also exports in Afghanistan reached an average of \$411 million between 2000 and 2018, reaching an all-time high of \$885 million in 2018 and a record low of \$68 million in 2001.

1.5 Trade in India

Agriculture is contributing a major portion to our national income. In 1950-51, agriculture and allied activities contributed about 59 per cent of the total national income. Although the share of agriculture has been declining gradually with the growth of other sectors but the share still remained very high as compared to that of the developed countries of the world. Over two-thirds of our working population are engaged directly on agriculture and also similarly depend for their livelihood. According to an estimate, about 66 per cent of our working population is engaged in agriculture. This is the only major source of food supply. About 60 per cent of household consumption is met by agricultural products. Agriculture in India has been the major source of supply of raw materials to various important industries of our country. Cotton and jute textiles, sugar, vanaspati, edible oil plantation industries (*viz.* tea, coffee, rubber) and agro-based cottage industries. About 50 per cent of income generated in the manufacturing sector comes from all these agro-based industries in India. Agricultural products like tea, coffee, sugar, tobacco, spices, cashew-nuts *etc.* are the main items of our exports and constitute about 50 per cent of our total exports. Besides manufactured jute, cotton textiles and sugar also contribute another 20 per cent of the total exports of the country. Thus nearly 70 per cent of India's exports are originated from agricultural sector. Further, import.

Methodology

The data on required for the study of growth rate and instability were collected from sources like Customs Offices, Ministry of Finance, Ministry of Commerce & Industries (MOCI) and Central Statistics Organization of Afghanistan for the year 2010-11 to 2019-20. The data collected were analysed through CAGR, instability and

presented through tabular presentation technique for easy comparisons. The Study area quantity and value: India and Afghanistan are selected for the study of major six Agricultural Commodities to export major countries. The data six major crops from Afghanistan and six major crops from India and export of asafetida, fig, grapes, almond, walnut and apple. The major commodities in India are sugarcane, groundnut, coconut, rice, cumin and cashew, were collected from sources like Customs Offices, Ministry of Finance, Ministry of Commerce & Industries (MOCI) and Central Statistics Organization of Afghanistan for the year 2010-11 to 2019-20. The data collected were analysed through CAGR and presented through tabular presentation technique for easy comparisons. The data were summarised with the aid of statistical tools like averages, percentages. Growth rate and instability analysis were calculated through compound growth rates using the following model.

$$Y_t = ab^te^u$$

Where,

Y_t = dependent variable (export/ import agricultural commodities)

a = intercept

$b = (1+r)$

$r = (b - 1)$

‘ r ’ is the compound annual growth rate per cent per annum,

t = time period

u = error term

The above model in the Logarithmic form is expressed as, $\log Y = \log a + t \log b + \log u$

We can, thus, calculate the compound growth rates (r) as under:

CAGR in per cent (r) = (Antilog of $\log b - 1$) $\times 100$

The coefficient of variation (CV) was calculated by using the equation given below:

$$CV(\%) = \frac{\text{Standard deviation (sd)}}{\text{Mean}} \times 100$$

Results and Discussion

Export of six major crops grown in Afghanistan and their trades with major countries of the world are asafoetida, fig, grapes, almond, walnut and apple. Among major, grape, asafoetida is demanded worldwide. Table

1. Revealed that at 2010-11 around 393 tonnes of asafoetida was exported to the world major countries worth of 12,234,589 \$ which grew over the years quantity almost 5 times *i.e.*, 1,918 tonnes while value 131,962,828 \$. Asafoetida's export over a decade grew at the CAGR of 19.29 per cent and was significant and Cuddy Della Valley index was 7.60 per cent. The export of fig in 2010-11 was around 3,344 tonnes which continuously increased over a decade and in 2019-20 it was 16,133 tonnes with a CAGR of 20.18 per cent and it was significant with Cuddy Della Valley index of 11.23 per cent. The Fig value rise export also increased from 13,458,108 \$ to 102,008,151 \$ in 2019-20 with a CAGR of 27.95 per cent. While Cuddy Della Valley index was 7.77 per cent. The grape export from Afghanistan was around 3,535 tonnes in 2010-11 increased to 15,753 tonnes in 2019-20, with CAGR of 11.95 per cent and was significant while in value terms it was also almost same growth rate 11.74 per cent, Cuddy Della Valley index was 18.02 per cent for quantity and 17.46 per cent for value. Over a decade almost quantity has grown more than four times while also in value terms it was more than four times. The total quantity of almond export to major countries in 2010-11 was 43,649 tonnes while in value 5,556,660 \$ which rose to 66845 tonnes, in 2019-20 while in value terms it was 12,078,708 \$. The CAGR of almond during the last decade showed positive 1.37 per cent and was significant while in value terms it was negative -0.70 per cent. The Cuddy Della Valley index was 15.56 for almond quantity while it was high 36.08 per cent value terms. Afghan's walnut export in 2010-11 was 1,663 tonnes (6,124,896 \$ in value terms) increased to 7,342 tonnes (26,025,297 \$ value) almost four times increase over the decade. CAGR indicates 15.96 per cent in quantity and 15.61 per cent for value and were significant. And Cuddy Della Valley index was 6.76 per cent and 7.11 for quantity and value terms respectively. Afghan's apple export to major countries of the world in 2010-11 was 13,028 tonnes and around 3,894,000 \$ in value which rose to 103,794 tonnes and in value terms 31,326,753 \$ in 2019-20. The apple export grew with little high CAGR of 26.54 per cent and in value terms it was 27.63 per cent, both were significant and Cuddy Della Valley value of apple over a decade.

Table 2. Revealed that all the six commodities selected for export from Afghanistan to major countries of the world is also exported to India. The total asafoetida exported from Afghanistan to India was 323 MT in 2010-11 value (\$ 9,467,089) rose to 1,441 MT and in value (113,357,828 \$) in 2019-20. The CAGR was 19.15 per cent and 28.16 per cent for quantity and value respectively. The Cuddy Della Valley index was 12 and 7.56 per cent for quantity and value respectively. The total fig exported in 2010-11 was 1,455 MT which rose to 11,677 MT IN 2019-20. The value increased during the period from 5,950,365 \$ to 84,294,180 \$ with CAGR of 39.44 per cent and was significant while fig in quantity almost 7 times increase and growth rate was 27.166 per cent with significance. The Cuddy Della Valley index was 15.61 per cent and 10.82 per cent for quantity and value of fig respectively. The total grape export from Afghanistan to India showed fluctuating trend, initially it in 2010-11 was only 11 MT value of 4,880 \$ which increased much in 2014 and around 7,667 tonnes of grapes worth of 2,125,852 \$ and it had fallen sharply and later increased in 2016-17. The CAGR indicates continuous and annual growth of grape export to India was around 11.19 per cent and in value terms 12.15 per cent were positive and significant and Cuddy Della Valley index was 56.78 per cent was and 54.68 per cent in terms of quantity and value respectively. Almond export to

India also showed a fluctuating trend at 2010-11 it was only 930 MT (value 8,027,946) which rose to 1,656 MT in 2014-15 and finally reached 3,381 MT in 2019-20 (21,116,582 \$ in value). The CAGR of almond revealed 20.91 per cent and was significant while Cuddy Della Valley index was also more than 24 per cent. Walnut export to India was only 8 tonnes in 2010-11 (value 22,996\$) which sharply declined in next year 2011 only to 1 tonnes (7,501 \$). Later 2012 -13 around walnut export to India sharply increased to 637 MT (value \$ 212,546). Thus over a decade walnut export to India increased many fold from 8MT to 363 MT. The CAGR was 16.24 per cent while Cuddy Della Valley index was 60.33 per cent. Apple export to India from Afghanistan was low in 2010-11, 17 MT which increased to 6,324 MT IN 2018-19 and suddenly decreased to 307 MT UB 2019-20. The CAGR revealed 51.61 per cent and 71.43 per cent for apple quantity and value respectively, while Cuddy Della Valley index was 46.14 per cent and 50.59 per cent for quantity and value respectively.

Table 3. Revealed that six commodities namely sugar, groundnut, coconut, rice, cumin and cashew were exported to major countries of the world during 2010 to 2019 from India. The total sugar exported from India in 2010 was 1,662,727 MT worth of 6,074,638 \$ which rose to 2,854,438 MT worth of 61,730,619 \$. The CAGR for sugar was 3.70 per cent and 24.89 per cent for value and Cuddy Della Valley index was 28.84 per cent and 51.65 per cent for quantity and value respectively. The groundnut quantity exported from India during 2010 was 814 MT worth of 651,200\$ which rose to 15,176 MT worth of 12,581,574 \$. The CAGR for groundnut quantity was 51.70 per cent and value 50.22 per cent both were significant, Cuddy Della Valley index was almost 76.46 per cent and 84.70 per cent for quantity and value respectively. The coconut quantity exported from India in 2010 was 768 MT worth of \$ 79,440 which sharply increased to 10,568 MT worth of 16,186,527 \$ in 2019. The CAGR was 36.32 per cent for quantity and 69.81 per cent for value respectively while Cuddy Della Valley index was 70.26 per cent for quantity and 156.54 per cent for value. The total rice exported from India to various countries was 140,401 MT in 2010 worth of \$ 597, 589 which increased to 77,060,932 MT with a value of 9,250,290 \$. The CAGR revealed quantity grew at the rate of 65.07 per cent and value grew at the rate of 3.46 per cent respectively, Cuddy Della Valley index was 142.11 per cent for quantity and 38.98 per cent for value respectively. The cumin export from India was 22,539 MT in 2010 (worth of 2,390,335 \$). It increased to 134,863 MT in 2019 worth of 3,699,970 \$. The quantity growth rate CAGR was high 17.10 per cent and was significant while for value it was only 3.46 per cent. The Cuddy Della Valley index was 28.31 per cent for quantity and 38.98 per cent for value respectively. The cashew nut export from India was 92,049 MT in 2010 worth 996,319 \$. It was fluctuating and declining during later years during 2019. The total quantity exported was only 80,132 MT worth of 20,570,511 \$, registering negative growth rate of -0.37 per cent for quantity and positive growth rate of 37.15 per cent. The Cuddy Della Valley index was 51.29 per cent for quantity while 63.64 per cent for value.

Table 4. the growth and instability were worked out separately for sugar, groundnut, coconut, rice, cumin and cashew export. The growth rate of selected agricultural commodities export was measured using exponential function. It is evident from Table 4. that, overall growth of sugar export was 14.93 per cent in terms of quantity also

found to be significant and 24.89 per cent was in terms of value which was found to be significant. In order to examine the extent of variability in export of selected agricultural commodity and stability was measured using Cuddy Della Valley index was worked out for sugar in terms of quantity and value of export of sugar was 73.80 and 31.80 respectively. Overall growth of groundnut export was 271.69 per cent in terms of quantity which was found to be non significant and 31.22 per cent was in terms of value which was found to be non significant. In order to examine the extent of variability in export of selected agricultural commodity and stability was measured using Cuddy Della Valley index was worked out for ground nut in terms of quantity and value of export of ground nut was 41.94 and 48.20 respectively. Growth rate of coconut export was 50.30 per cent in terms of quantity which was found to be highly significant and 50.56 per cent was in terms of value which was found to be highly significant. In order to examine the extent of variability in export of selected agricultural commodity and stability was measured using Cuddy Della Valley index was worked out for coconut in terms of quantity and value of export of coconut was 14.99 and 15.63 respectively. Overall growth of rice export was 1.56 per cent in terms of quantity which was found to be significant and 3.43 per cent was in terms of value which was found to be significant. In order to examine the extent of variability in export of selected agricultural commodity and stability was measured using Cuddy Della Valley index was worked out for rice in terms of quantity and value of export of rice was 47.55 and 38.56 respectively. Overall growth of cumin export was 28.89 per cent in terms of quantity which was found to be highly significant and 29.57 per cent was in terms of value which was found to be highly significant. In order to examine the extent of variability in export of selected agricultural commodity and stability was measured using Cuddy Della Valley index was worked out for cumin in terms of quantity and value of export of cumin was 31.11 and 30.49 respectively. Growth rate of cashew export was 23.87 per cent in terms of quantity which was found to be highly significant and 37.18 per cent was in terms of value which was found to be highly significant. In order to examine the extent of variability in export of selected agricultural commodity and stability was measured using Cuddy Della Valley index was worked out for coco nut in terms of quantity and value of export of coconut was 10.74 and 34.27 respectively.

Conclusion

The best quality of crops is being produced in Afghan region and wide range of opportunities are available for Afghan to increase the production and export to various countries India is a stable importer of agricultural commodities since it is widely accepted in India. Increased the agricultural commodities production not only pave the way for the strengthening the economy but also increases the farmers income and foreign exchange reserves of the country by utilising potential natural reserves for optimising the benefits. We strongly recommend that the Government of Afghanistan, especially Ministry of Agriculture, needs consider agricultural commodities for its crop development plan and provide incentives for farmers to increase their production of asafoetida, fig, almond,

grapes, walnut and apple. The government of Afghanistan promotes agricultural commodities production as a means to achieve economic development while reducing the widely spread crops cultivation in the country by providing necessary support to its farmers via crops farmer service centers. India, with its large population and increasing urban and rural incomes, increases demand. Foreign demand causes exports from the agricultural sector. India has been the best trading partner of Afghanistan in the past decades, India's trade with Afghanistan increased rapidly in 2010-2019. India's export items to Afghanistan such as: sugar, groundnut, coconut, rice, cumin and cashew. Agricultural commodity is the largest commercial product in India; with great efforts it was able to get the second rank in the world.

References

- Anonymous, 2020, Islamic Republic of Afghanistan, Ministry of Agriculture, Irrigation & Livestock, November 2020.
- Anonymous, 2013, Customs Offices, Ministry of Finance, and Central Statistics, Afghanistan Statistical yearbook, 2018-19
- Anonymous, 2020, Islamic Republic of Afghanistan, Ministry of Commerce & Industries (MOCI)
- Adhikari A, Sekhon M K, Nanda M K and Phule S, 2016, Export of rice from India: performance and determinants. *Agricultural Economics Research Review*, 29 (1): 135-140.
- Ashok D, Khatkar R K, Subersingh and Luhaeh M S, 2003, Extent and Export potential of major flowers grown in Haryana and other parts of India. *National Journal of Agricultural Marketing*, 46(2): 27-29.
- Agarwal P, Pandey D, Yadav P and Singh O, 2014, Trends of area, production and productivity of soyabean crop in Madhya Pradesh. *International Journal of Tropical Agriculture*, 32(1):797-800.
- Chandra M M 2017, Trends in area, production and productivity of ground nut in India issues and challenges. *Journal of Research Agriculture Animal Science*, 4(7): 01-06.
- Gayathri J, 2018, A trend analysis of area, production and yield of groundnut in India. *Shanlax International Journal of Economics*, 6(3), 15-21.
- Jagdambe S, 2016, Analysis of export competitiveness of Indian agricultural products with ASEAN countries. Working paper 356, The Institute for Social and Economic Change, Bangalore.
- Krishnadas M, 2010, Production and export performance of major Indian spices – An economic analysis. *M. Sc.(Agri.) Thesis*, University of Agricultural Sciences, Dharwad. Karnataka (India).
- Lathika M and Kumar C E, 2005, Growth trends in area, production and productivity of coconut in India. *Indian Journal of Agricultural Economics*, 60 (4): 686-697.

- Mokashi P and Hosamani S B, 2014, Growth and instability analysis of Indian grapes export. *Hind Agricultural Research Training Institute*, 9(1): 132-135.
- Manohar Y, Jainuddin, S M, Dinesh T M and Pannala Divakar Reddy, 2017, Growth and instability of rice production in India. *Indian Journal of Economics and Development*, 13(1): 17-145.
- Nida Beel and Fazlur Rahman, 2020, Growth Rate of Area, Production and Productivity of Sugarcane Crop in India. *International Journal of Environmental and Agriculture Research*, 6(4): 14-19.
- Patil S N, Sonnad J S, Mahajanashetti S B, Kiresur V R and Hosamani R M, 2020, Growth and instability in area, production and export of flowers in India. *International Journal of Current Microbiological Applied Sciences*, 9(8): 2429-2441.
- Tewari H, Singh H P and Tripathi U, 2017, Growth and instability in wheat production: A region wise analysis of Uttar Pradesh, India. *International Journal of Current Microbiology and Applied Sciences*, 6(9): 2537-2544.

Table 1. Afghan's export of selected agricultural commodities to major countries**(Quantity in tonnes & Value in \$)**

Years	Asafoetida		Fig		Grapes		Almond		Walnut		Apple	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2010-11	393	12,234,589	3,344	13,458,108	3,535	29,765,946	43,649	5,556,660	1,663	6,124,896	13,028	3,894,000
2011-12	576	28,391,811	4,016	13,501,432	17,581	142,001,480	41,941	4,793,599	2,246	8,242,001	18,763	5,601,551
2012-13	519	25,467,768	5,185	18,735,877	4,508	36,869,011	80,433	12,094,426	3,575	11,793,746	27,599	8,304,813
2013-14	695	38,565,626	9,053	27,285,061	5,882	49,108,135	37,108	3,593,392	4,098	16,733,619	41,084	13,588,963
2014-15	567	43,314,525	9,964	36,178,354	8,361	72,372,276	32,689	1,716,260	4,488	17,335,334	72,039	21,686,700
2015-16	1,012	57,201,023	8,827	35,497,362	9,667	80,926,551	35,980	1,990,906	4,618	16,688,392	61,986	19,346,198
2016-17	1,174	70,997,869	10,679	44,786,607	10,138	82,899,890	43,618	3,619,229	6,321	22,164,876	85,852	27,354,670
2017-18	1,234	80,980,958	22,365	97,181,885	12,486	103,901,621	43,272	3,076,040	5,796	20,967,714	92,612	29,314,029
2018-19	1,899	115,278,203	13,484	83,389,324	13,791	115,225,675	47,926	3,887,346	6,395	23,136,854	104,882	36,905,211
2019-20	1,918	131,962,828	16,133	102,008,151	15,753	125,029,582	66,845	12,078,708	7,342	26,025,297	103,794	31,326,753
CAGR (%)	19.29**	26.74*	20.18**	27.95*	11.95**	11.74*	1.37**	-0.70	15.96*	15.61**	26.54*	27.63*
CDV Index (%)	7.60	6.90	11.23	7.77	18.02	17.46	15.56	36.08	6.76	7.11	9.05	9.49

Note: *Significance at 1 per cent level

**Significance at 5 per cent level

Source: Afghanistan Ministry of Commerce & Industries (2010- 2020),(MOCI),

Table 2. Afghan's export of selected agricultural commodities to India**(Quantity in tonnes & Value in \$)**

Years	Asafoetida		Fig		Grapes		Almond		Walnut		Apple	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2010-11	323	9,467,089	1,455	5,950,365	11	4,880	930	8,027,946	8	22,996	17	8,500
2011-12	442	23,337,811	1,864	4,944,381	6	1,699	1,597	12,831,480	1	7,501	28	8,251
2012-13	356	19,199,268	2,749	9,052,195	40	23,806	245	1,037,011	637	212,546	811	274,513
2013-14	493	30,810,626	6,329	16,456,447	7,667	2,125,852	207	1,576,135	563	2,966,919	4,307	2,544,863
2014-15	331	34,199,525	6,961	24,242,037	12	14,400	1,656	16,145,476	359	1,419,134	100	80,000
2015-16	734	46,303,023	5,533	22,403,623	67	54,726	1,940	16,103,951	16	77,092	3,073	1,631,628
2016-17	856	58,578,869	7,094	30,536,305	4,470	1,448,729	1,376	9,325,890	1,125	3,400,476	1,946	2,125,070
2017-18	875	66,981,958	18,490	81,778,030	888	671,220	2,703	21,715,621	6	50,214	1,638	1,948,329
2018-19	1,487	99,158,203	9,318	66,825,037	2,307	1,248,206	2,084	17,101,675	11	66,254	6,324	7,248,611
2019-20	1,441	113,357,828	11,677	84,294,180	17,991	9,205,248	3,382	21,116,582	363	801,597	307	218,553
CAGR (%)	19.15**	28.16*	27.16*	39.44*	11.19	12.15**	20.91**	20.85*	16.24	25.51**	51.61**	71.43**
CDV Index (%)	12.00	7.56	15.61	10.82	56.78	54.68	24.75	24.92	60.33	67.52	46.14	50.59

Note: *Significance at 1 per cent level

**Significance at 5 per cent level

Source: Afghanistan Ministry of Commerce & Industries (2010- 2020),(MOCI),

Table 3. India's export of selected agricultural commodities to major countries**(Quantity in tonnes & Value in \$)**

Years	Sugar		Ground-nuts		Coconuts		Rice		Cumin		Cashew nut	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2010-11	1,662,727	6,074,638	814	651,200	768	79,440	140,401	597,589	22,539	2,390,335	92,049	996,319
2011-12	2,780,518	12,568,337	843	724,980	1,090	94,120	59,593	2,664,010	44,472	10,656,038	87,212	1,364,868
2012-13	2,824,882	12,692,473	1,000	820,000	847	32,596	4,003,985	4,674,574	73,859	18,698,181	78,722	1,826,166
2013-14	2,509,785	13,149,006	1,125	945,000	2,200	501,600	6,817,966	6,453,557	115,379	25,814,067	78,568	1,907,767
2014-15	1,985,795	14,110,645	2,466	2,096,100	986	326,708	6,690,081	1,731,430	144,218	6,925,560	1,147	2,730,575
2015-16	3,852,048	15,393,381	4,530	3,171,000	1,365	248,830	6,691,335	2,847,158	88,911	11,388,472	1,360	2,905,312
2016-17	2,571,200	18,058,901	4,766	3,264,710	2,500	674,000	8,277,725	3,132,802	108,440	12,530,995	92,689	3,990,801
2017-18	1,772,714	26,783,784	10,205	6,680,348	7,421	289,421	6,469,182	3,859,781	143,670	15,438,967	88,152	5,360,072
2018-19	4,099,962	60,801,137	33,977	29,220,813	10,666	5,125,196	1,580,900	4,929,519	126,055	19,717,919	80,017	15,971,864
2019-20	2,854,438	61,730,619	15,176	12,581,574	10,568	16,186,52	77,060,95	925,029	134,863	3,699,970	80,132	20,570,511
CAGR (%)	3.70	24.89**	51.70*	50.22*	36.32**	69.81**	65.07**	3.46**	17.10**	3.46	-0.37	37.15*
CDV Index (%)	28.84	51.65	76.46	84.73	70.26	156.54	142.11	38.98	28.31	38.98	51.29	63.64

Note: *Significance at 1 per cent level

**Significance at 5 per cent level

Source: Afghanistan Ministry of Commerce & Industries (2010- 2020),(MOCI),

Table 3. India's export of selected agricultural commodities to Afghanistan**(Quantity in tonnes & Value in \$)**

Years	Sugar		Groundnut		Coconut		Rice		Cumin		Cashew	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2010-11	14,751	6,072,560	814	651,200	568	379,440	861	597,512	1,300	780,000	310	992,000
2011-12	31,091	12,565,420	843	724,980	590	394,120	3,572	2,663,959	1,389	833,400	321	1,364,250
2012-13	31,103	12,690,024	1,000	820,000	947	632,596	6,266	4,674,170	1,450	884,500	545	1,825,750
2013-14	32,145	13,147,305	1,125	945,000	1,200	801,600	7,819	6,450,914	1,700	1,037,000	561	1,907,400
2014-15	31,354	14,109,300	2,466	2,096,100	1,986	1,326,708	2,090	1,728,778	1,865	1,156,300	780	2,730,000
2015-16	26,537	15,391,460	4,530	3,171,000	3,365	2,248,830	3,344	2,844,506	2083	1,291,460	785	2,904,500
2016-17	25,833	18,057,267	4,766	3,264,710	5,500	3,674,000	3679	3,129,467	5,001	3,127,540	950	3,990,000
2017-18	14,678	26,782,573	10,205	6,680,348	6,421	4,289,421	4,612	3,857,412	5561	3,477,755	1261	5,359,250
2018-19	113,220	60,799,140	33,977	29,220,813	10,666	7,125,196	5891	4,927,150	6,619	4,139,493	1840	15,971,200
2019-20	115,161	61,727,744	15,176	12,581,574	20,568	14,186,527	1,121	921,300	13,238	8,278,987	2125	20,570,000
CAGR (%)	14.93**	24.89**	271.69	31.22	50.30*	50.56*	1.56**	3.43**	28.89**	29.57**	23.87*	37.18**
CDV Index (%)	73.80	31.80	41.94	48.20	14.99	15.63	47.55	38.56	31.11	30.49	10.74	34.27

Note: *Significance at 1 per cent level

**Significance at 5 per cent level

Source: Afghanistan Ministry of Commerce & Industries (2010- 2020),(MOCI),