Journal of Natural Science Review

Analysis of Export Potential and Trade Direction of Afghanistan Figs in Global Market

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ABSTRACT

The expansion of Afghanistan's share in the global market is critical for the country's development, particularly given its chronic trade deficit. Although Afghanistan is renowned for producing and exporting high-quality fruits, especially figs, it has not fully utilized its export potential. Based on secondary data from ITC and FAOSTAT, this study analyzed the export performance of Afghan figs from 2000 to 2019. An exponential growth function, the Cuddy-Della-Valle instability Index, Revealed Comparative Advantage indices, and Markov chain analysis was employed. The results showed that fig exports grew positively with a compound annual growth rate (CAGR) of 24.20%, exhibiting low instability. Afghanistan demonstrated significant export potential and maintained a strong and consistent comparative advantage in exporting figs, particularly to Pakistan, followed by India and the UAE. In 2019, the total export potential for Afghan figs was estimated at US$ 211.00 million, compared to an actual export value of US$ 91.60 million. The largest untapped export potential was identified in India, followed by the USA and Canada. While Afghanistan has retained its market share in some regions, it risks losing its share in others. The study recommends reorienting production and marketing systems to address these challenges and align them with global market demands. Additionally, progressive export promotion strategies should be implemented to diversify export destinations and minimize market risks.

INTRODUCTION

For many countries, international trade is a matter of life and death, and no country is self-sufficient in the world now, so the pooling of economic resources is urgently needed to address the problem of mass poverty. In the context of developing countries like Afghanistan, characterized by widespread unemployment, lack of entrepreneurial skills, and unbalanced growth, it would be needless to stress that the promotion and development of the agriculture sector, mainly export, need to be accorded a high priority. The trade performance of

individual countries tends to be a good indicator of economic performance since well-performing countries tend to record higher rates of GDP growth. Exporting firms tend to create more jobs, pay higher wages, and offer better working conditions than non-exporting firms (Verhoogen, 2008).

The agricultural sector is crucial to the economy of Afghanistan in several respects. About 70 percent of Afghans live and work in rural areas, mostly on farms. About 61 percent of all households derive their income from the agriculture sector, which employs nearly 40 percent of the workforce (Leao. e*t al.*, 2018). Afghanistan, with around 12 percent arable area, which includes irrigated, rain-fed, and temporary fallow land, tends to provide food for about 35 million people. Agriculture, the second-largest sector next to the service sector, is a pillar of development and food security in Afghanistan and contributes more than 27 percent to the gross domestic product (GDP). Over the period, this sector has played a leading role in the national exports and accounted for more than 80 percent of the country's exports in 2020.

The potential of agricultural exports has to be realized in full, and then more emphasis on efficient marketing and trade to incentivize producers to produce more has to be given. Studying export potential and comparative advantage of important commodities such as figs is essential to devise strategies for profitable clearance over time and space in domestic and foreign markets. Evaluation of figs export potential enables the assess the prospects of export growth and the possibilities of using export skills to enter new markets.

Afghanistan has one of the world's most suitable climates and ecological riches for producing excellent agricultural products, mainly fruits, spices, and medicinal plants. Afghanistan is known regionally for its variety of fruits, particularly dried fruits. The country's figs, raisins, almonds, pine-nut (Jalguza), pistachio, and dried apricots are famous export commodities, and figs alone constitute about 30 percent of the total dried fruit production of the country. In 2020, the total area under figs cultivation in Afghanistan was estimated to be 3219 ha. Mushair and Mohammadi reported that from 2010 to 2019, the compound growth rate in area, production, and productivity of figs was 0.64, 6.15, and 6.84 percent, respectively (Mushair & Mohammadi, 2022).

It is important that only increased production may not fulfill the requirements of the producers and consumers unless it is marketed efficiently. The performance of agricultural markets has a direct bearing on the prosperity of farmers. Therefore, foreign trade is a remarkable factor in expanding the market and encouraging producers to produce more goods of good quality. Thus, the export of agricultural commodities has been a process of significant attention for solving the socio-economic problems of people in general. Regarding the export potential of figs, Afghanistan is punching below its weight. Afghanistan has a comparative advantage in figs but fails to harness this advantage to its fullest potential in the world market. Considering this, the study analyses Afghanistan's figs' export potential, competitiveness, and trade direction. Therefore, the main objective of the analysis is to determine the export potential of figs and identify the best market based on export potential

to utilize the existing export opportunities of exportable commodities in the international market.

METHODS & MATERIALS

This study is based on the secondary data collected from various sources such as ITC (International Trade Center), FAOSTAT, and NSIA (National Statistics and Information Authority) of Afghanistan, as well as related websites and published reports. Data was analyzed with the help of different software, including SPASS, Lingo, and Excel. The following analytical tools and techniques fulfilled the study objectives.

Analysis of Export and Import Performance, Growth, and Instability

The export performance, percentage change, compound annual growth rate, and instability in exports of Afghanistan's figs were analyzed using the following formula and models.

Growth Rate and Trend Analysis

The growth rate of exports in quantity and value terms, as well as the unit value of figs for a period of 20 years from the year 2000 to 2019, was analyzed by using the exponential growth function of the following form:

$$Y_t = ab^t e^{ut} \quad\text{.. (1)}$$

Where,

Y_t = Dependent variable *i.e.,* value (US$) and quantity (MT) and unit value (US$/MT) of export or import a = Intercept b = Regression coefficient t = Time in years 1, 2, 3 …N.

U_t = Disturbance term

N = Number of observations. (2000-2019)

The equation (1) could be transformed into log-linear and written as:

$log Y_t = log a + t log b + u_t$ .... (2) Equation (2) could be estimated by using OLS (ordinary least square) technique.

Assuming that $\log b = B$, then the equation (2) could be expressed as:

$$\log Y_t = \log a + Bt + u_t \quad\text{... (3)}$$

The standard error of the growth rate was estimated and tested for its significance using the student's test statistics, and the student's "t" test coefficients were worked out as follows.

$$t = \frac{b}{SE\ (b)} \quad\text{.. (4)}$$

Analysis of Export Potential

For the analysis and identification of important products for the export promotion of a country, the International Trade Center (ITC) has developed an export potential assessment methodology, which provides a systematic approach to spotting export potential. The International Trade Centre (ITC) is a joint agency of the World Trade Organization (WTO) and

the United Nations (UN). This methodology decomposes a country's potential product exports to a target market into supply, demand, and trade ease. Based on this methodology, a specific country commodity is counted as a potential export item; if its annual export value reaches at least US$ 200,000 below, it is considered a diversified potential product (ITC, 2020).

Afghanistan produces and exports a variety of agricultural commodities, including figs with great export potential and values above the defined limit, *i.e.,* US$ 200,000, which could be considered potential exports. Therefore, the present study was based on the EPI approach and deals with analyzing potential exports of major agricultural commodities of Afghanistan.

Analysis of Revealed Comparative Advantage (RCA)

The RCA measure was initially proposed by Balassa (Balassa, 1965, pp, 104), who defined the export performance of a specific product/industry of a country by the RCA index (Balassa & Noland, 1989). The index shows how a product is competitive in a country's exports compared to the product's share in another country or group of countries (Jagdambe, 2016). Researchers have suggested and used many RCA indices based on this basic methodology. In contrast, the present study is based on the RCA index adopted by Cai *et al.* 2009.

Comparative Advantage

Besides its size advantage, a country's market power in a specific market also depends on its "comparative advantage", which can be measured by its "Revealed Comparative Advantage" (RCA) index:

$$RCA_{ij,t} = \frac{S_{ij,t}}{S_{i,t}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (1)$$

Where,

$$s_{ij,t} = \frac{X_{ij,t}}{\sum_i X_{ij,t}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(2)$$

$$s_{i,t} = \frac{\sum_j X_{ij,t}}{\sum_i \sum_i X_{ij,t}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(3)$$

Where,

$RCA_{ij,t}$= Revealed comparative advantage of country i's in market j in time 't'

$S_{ij,t}$ = Share of ith country in j^{th} export market in time 't'

$S_{i,t}$ = Share of ith country in the world export market in time 't'

$X_{ij,t}$ = Export of a commodity by i^{th} country to j^{th} market in time 't'

$\sum_i X_{ij,t}$ = Total exports of a commodity to j^{th} market from the world in time 't'

$$\sum_j X_{ij,t} = \text{Total export of a commodity by } i^{th} \text{ country to the world market in time 't'}$$

$$\sum_i \sum_j X_{ij,t} = \text{Total export of a commodity by world market}$$

As a result, dividing the country $i's$ share in j^{th} market of a commodity by its share in the world market of that commodity shows its RCA. According to equation (3), RCA_{ij} essentially compares a country $i's$ share in j^{th} export market to its share in the entire world market, and it reflects a country's degree of dominance in a specific market as compared to its general dominance in the world market. In other words, RCA_{ij} measures i^{th} country's comparative advantage in a specific commodity by comparing its competitiveness in j^{th} market (measured by its share in the market) to the competitiveness of it in the world market (measured by its share in the entire world market). In order to examine whether a country has a comparative advantage in a particular market, it is judged that the country exports a specific product to a particular country more than to the rest of the world; if so, it is judged to have a comparative advantage in that particular market.

Therefore, according to equation (3), $RCA_{ij} > 1$ implies that the share of ith country in j^{th} market is greater than its share in the world market, that is, $s_{ij} > s_i$, which indicate that the ith country's degree of dominance in market j is greater than that in the world market; namely, country i has a strong comparative advantage in market j. This is often taken as evidence that i^{th} country has a "revealed comparative advantage" in exporting to the jth market. Conversely, $RCA_{ij} < 1$ would indicate that i^{th} country's degree of dominance in j^{th} market falls short of its dominance in the world market, which implies that the ith country is weak competitive in j^{th} market than in other markets, which is often taken as evidence that the ith country "revealed comparative disadvantage" in exporting to j^{th} market.

The RCA index ranges from zero to infinity ($0 < RCA < \infty$), with one as the break-even point. It should be noted that the RCA index is not symmetrical bacouse, and one cannot compare both sides of the break-even point. The RCA approach compares countries' competitiveness patterns to reveal their comparative advantage patterns. A country with a relatively high competitiveness in an activity is assumed to have a strong comparative advantage.

Analysis of Structural Changes and Trade Direction

In order to understand the pattern of exports of Afghanistan's figs, the structural changes and trade direction of agricultural commodities were examined using a stochastic model of Markov chain analysis.

Markov Chain Analysis

The trade direction of exports was analyzed using the first-order Markov chain approach. The structural changes were treated as a random process with selected importing countries in the current application context. The assumption is that the average export of selected commodities from Afghanistan amongst importing countries depends only on the exports in

the previous period. This dependence will be the same throughout the period. This can be denoted algebraically as:

$$E_{jt} = \sum_{i=1}^{n} [E_{it-1}] \times P_{ij} + e_{jt}$$

Where,

E_{jt} = Export from Afghanistan to j^{th} country during the year 't' ,

E_{it-1} = Export to i^{th} country during the previous year t-1,

P_{ij} = Probability that the exports will shift from i^{th} country to j^{th} country, e_{jt} = The error term which is statistically independent of E_{it-1}, t = Number of years to be considered for the analysis, n = Number of importing countries.

The transitional probabilities P_{ij} which can be arranged in a ($c \times n$) matrix have the following properties,

$$0 \le P_{ij} \le 1$$

$$\sum_{ii=1}^{n} P_{ij} = 1, \quad i.e., \forall i$$

Thus, the expected export share of each country during the period 't' was obtained by multiplying the exports to these countries in the previous period (t-1) with a transitional probability matrix. Likewise, the future export shares of each selected import could be estimated.

Estimation of The P_{ij}

Central to Markov chain analysis is the estimation of the transitional probability matrix,

'P'. The matrix element 'Pij' indicates the probability that export will switch from country ' i' to country' j' over time. The diagonal elements (P_{ij}) of the matrix measure the probability that the export share of a country will be retained. Hence, an examination of diagonal elements indicates the loyalty of an importing country to a particular country's export (Sericola, 2013). In other words, the diagonal elements of matrix P indicate the probability that the export share of a particular country will remain the same from one period to another. The off-diagonal or transfer probabilities indicate the probability that the export share of a particular country will shift to other countries over time. Thus, the export share of a country during the period 't' can be obtained by multiplying the actual export in the previous period (t-1) with the transition probability matrix. A particular country's export value was considered a random variable that depended only on its previous exports, and this dependence was the same for all periods. A process satisfying these conditions is called a first-order stationary Markov chain. With these assumptions, the unknown transitional probabilities were computed using the following matrix notation *Min* oP^*+*Ie*

Subject to,

$$Y = XP^* + U$$

$$GP^* = 1$$

$$P^*e \geq 0$$

Where,

0 = Null vector

P^* = Vector in which probabilities P_{ij} are arranged, i.e., a matrix of unknown transition parameters to be estimated

I = Appropriate dimensioned identity matrix (i.e., column vector of units), e = Vector of absolute error ($|U|$),

Y = Vector of export to each country,

X = Block diagonal matrix of lagged of Y, i.e., matrix of proportion of export of ith country in time t-1

U = Vector of errors,

G = Grouping matrix to add row elements of P as arranged in P^* to unity.

The linear programming (LP) framework estimated the transitional probabilities matrix and Lingo Software was used to do this. In the present study, the probability matrix was estimated for 12 years from 2008 to 2019, using the Minimum Absolute Deviation (MAD) estimation procedure to estimate the transitional probability, which minimizes the sum of absolute deviation. The conventional linear programming technique was used as this satisfies the properties of transitional probabilities on non-negative metrication and row sum constraint in estimation. The values of the transitional probability matrix have different interpretations. The value of diagonal elements reveals the probability of retention of the previous year's value. In contrast, values in columns indicate the probability of gain of a particular country from other countries. Values in rows represent probabilities that a country might lose to other countries regarding specific commodity exports.

RESULTS AND DISCUSSION

Growth in Agricultural Exports and Imports of Afghanistan

In order to estimate the growth in exports of fig of Afghanistan – which plays an important role in the agricultural trade basket – the time series data was collected for 20 years from 2000 to 2019. The compound annual growth rates (CGAR) were estimated by fitting the exponential form of growth function to the time series data of exports in quantity and value terms as well as the unit value of exports of Afghanistan, and the estimated functions pertained to various commodities have been presented in Table 1.

Results showed that during the period, the CGAR of Afghanistan's figs exports was the highest in the case of value terms (24.20%), followed by quantitative export (15.01%) and unit value (7.99%), respectively. The trend in export in quantity terms, value terms, and unit value is shown in Figure 1 and Figure 3, respectively.

Table 1: Compound annual growth rates of figs exports from Afghanistan over the period from 2000 to 2019

Unit	Initial Year	End Year	Constant (b_0)	Trend coefficient (b_1)	R^2	CAGR (%)
Q	1115.00	11778.00	795.94	1.15* (1.04)	0.396	15.01 (4.81)
V	1565.00	85734.00	1330.30	1.24* (1.04)	0.635	24.20 (5.01)
P	1.40	7.28	1.67	1.08* (1.02)	0.446	7.99 (2.24)

(Q=Quantity in MT, V=Value in 000'US$ and P=Unit Value in 000'US$/MT)
Source: Authors finding based on ITC Data (2019)
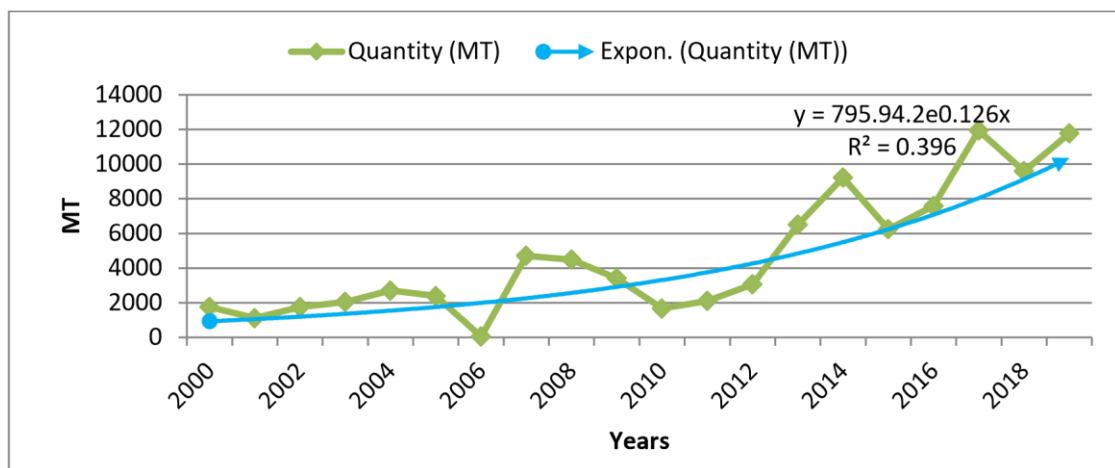

Figure 1: *Actual and estimated export quantity of fig from Afghanistan for the period from 2000 to 2019*
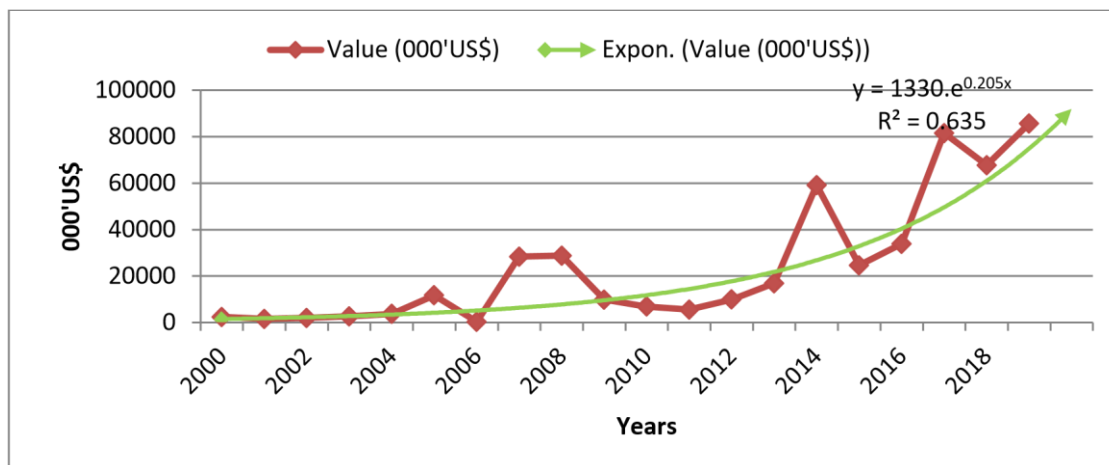*Source:Authors finding based on ITC Data (2019)*

Figure 2: *Actual and estimated export value of fig from Afghanistan from 2000 to 2019 for the period from 2000 to 2019*
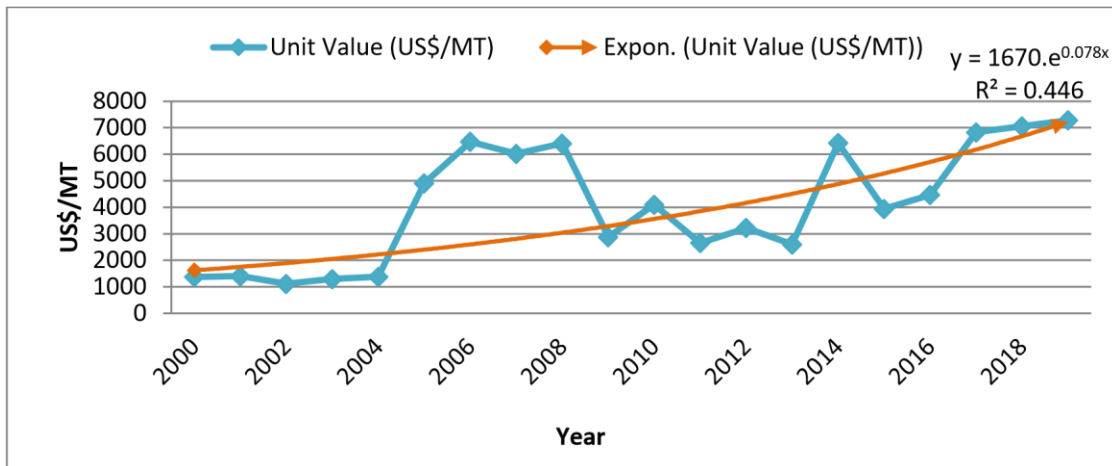*Source: Authors finding based on ITC Data (2019)*

Figure 3: *Actual and estimated unit value of export of fig from Afghanistan for the period from 2000 to 2019*
Source: Authors finding based on ITC Data (2019)

Destination Market-wise Export Potential of Figs of Afghanistan

A key factor in any export business is a clear understanding and detailed knowledge of the products to be exported. The products or items must be in demand in the countries where these are to be exported, i.e., in the importing countries. This section introduces a spatial dimension into the analysis by calculating the export potential of figs of Afghanistan along with important destination markets. In order to identify the best destination market for figs, different destination markets (countries) were arranged based on potential exports (in value terms) in descending order. The top nine individual destination markets and the remaining markets were taken together; thus, ten destination markets were selected for the analysis, and the results are presented in Table 2.

It is evident from Table 2 that during 2019, the total export potential of fig was estimated at US$ 211.00 million with an actual export of US$ 91.60 million. The gap between potential and actual export, i.e., untapped export potential, was estimated at US$ 119.40 million, 43.41 percent of the total potential for the commodity.

Table 2 also shows that amongst the selected markets, the export potential for Afghanistan's fig in 2019 was the highest in the case of India (US$ 188.10 million), followed by the USA (US$ 5.80 million) and UAE (US$ 2.70 million), which accounted for 89.15 percent, 2.75 percent and 1.28 percent of the total potential for all selected destination markets, respectively. The actual export was also highest in the case of India (US$ 89.60 million) followed by UAE (US$ 1.2 million) and France (US$ 0.33 million), which accounted for 97.82 percent, 1.31 percent and 0.36 percent of total actual exports to all selected destination markets. It may be noted that the actual export of figs from Afghanistan in 2019 to Switzerland and Saudi Arabia was zero. However, potential exports were estimated to be US$ 1.20 million and US$ 0.89 million, respectively, indicating that the unrealized export potential of these countries was 100 percent. During the same year, the untapped export potential too was found to be the highest in the case of India (US$ 98.50 million), followed by the USA (US$ 5.65 million) and Canada (US$ 1.79 million), which accounted for 82.50 percent,

4.73 percent and 1.50 percent of total untapped export potential to selected destination markets, respectively.

Table 2: Destination market-wise export potential of fig of Afghanistan (2019) (Value in Million US$)

Country	Potential Export		Actual Exports			Untapped Potential Export		
	Value	Share (%)	Value	Share (%)	Rrealized potential export	Value	Share (%)	Unrealized potential export
1. India	**188.10**	89.15	**89.60**	97.82	47.63	**98.50**	82.50	52.37
2. USA	**5.80**	2.75	**0.15**	0.16	2.54	**5.65**	4.73	97.46
3. UAE	**2.70**	1.28	**1.20**	1.31	44.44	**1.50**	1.26	55.56
4. France	**2.00**	0.95	**0.33**	0.36	16.65	**1.67**	1.40	83.35
5. Canada	**2.00**	0.95	**0.21**	0.23	10.32	**1.79**	1.50	89.68
6. Germany	**1.60**	0.76	**0.04**	0.05	2.64	**1.56**	1.30	97.36
7. China	**1.40**	0.66	**0.04**	0.05	3.00	**1.36**	1.14	97.00
8. Switzerland	**1.20**	0.57	**0.00**	0.00	0.00	**1.20**	1.01	100.00
9. Saudi Arabia	**0.89**	0.42	**0.00**	0.00	0.00	**0.89**	0.75	100.00
10. Others	**5.31**	2.51	**0.03**	0.03	0.65	**5.28**	4.42	99.35
Total	**211.00**	100.00	**91.60**	100.00	-	**119.40**	100.00	-

Source: Authors finding based on ITC Data (2019)

It can be drawn from the above that among selected destination markets, India was the most important destination market for Afghanistan's fig in terms of export potential, actual export, or untapped export potential. In contrast, Saudi Arabia was the least important destination market in terms of export potential and actual exports.

Revealed Comparative Advantage (RCA) of Figs Exports of Afghanistan

To determine the degree of competitiveness of the country in a specific market for Afghanistan's figs, top-ten destination markets were chosen based on the size of demand to compare the RCA over the period. This section discussed the pattern of revealed comparative advantage of selected commodity and top-ten destination markets, including principle neighboring and other potential markets. Results have been presented under the following sub-sections.

The revealed comparative advantage of Afghanistan in fig (Table 3) shows that during the period of 12 years from 2008 to 2019, Afghanistan enjoyed a revealed comparative advantage in the export of fig with an overall RCA index of 14.38. Analysis of average indices of all top ten destination markets across the years shows that the country had the strongest RCA in figs in 2011 with a magnitude of 220.57, while the lowest index was found to be in 2019

with an RCA of 0.89. Over the period the average RCA indices were above 1, except in 2019, when the same was below 1.

Again, the analysis of RCA indices for various destination markets reveals that over the period, Afghanistan's fig exhibited the strongest RCA in the case of Pakistan, where Afghanistan enjoyed a transportation cost advantage and strong demand translated into a high revealed comparative advantage, as evident the mean RCA index was 63.86, with the highest index (441) in 2011. However, over the period, the RCA indices of figs declined in the case of Pakistan as Afghanistan expanded its exports to other destination markets.

Further, the analysis shows that India also exhibited a strong comparative advantage over Pakistan. It was observed that over the past 12 years, the RCA index for figs was consistently high, with an average RCA index of 8.55, which ranged from 5.06 in 2009 to 25.04 in 2012. The magnitude of the RCA index indicates a strong comparative advantage and more excellent prospects for Afghanistan fig to the Indian market.

Table 3: RCA of fig (dried or fresh) of Afghanistan in different markets over the period from 2008 to 2019

Years/ Countries	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Mean RCA
Canada	-	-	0.01	0.19	-	-	-	0.04	0.004	0.03	0.01	0.02	**0.04**
China	-	-	1.97	-	-	-	-	-	-	-	-	-	**-**
France	-	-	-	-	-	-	-	-	-	-	-	0.005	**-**
Germany	-	-	0.01	-	-	-	-	0.001	0.001	0.001	0.003	0.002	**0.003**
India	6.86	5.06	8.01	-	25.04	7.11	7.94	6.33	8.36	5.85	7.29	6.19	**8.55**
Pakistan	23.13	36.93	54.12	440.95	36.73	-	19.19	16.66	10.57	-	0.21	0.14	**63.86**
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	**0.00**
Switzerland	-	-	-	-	-	-	-	-	-	-	-	0.001	**-**
UAE	2.20	-	-	-	0.87	-	1.82	1.49	0.55	0.52	0.72	0.78	**1.12**
USA	-	3.82	0.05	-	0.01	-	-	0.02	-	0.001	0.002	0.004	**0.56**
Country Average	10.73	15.27	10.70	220.57	15.66	7.11	9.65	4.09	3.90	1.28	1.37	0.89	**14.38**

The analysis further shows that the next important market for Afghanistan fig was UAE, where the average RCA index was found to be 1.12, and over the period, the RCA indices ranged from 2.20 in 2008 to 0.52 in 2017. However, during the period under investigation Afghanistan's fig was exported to China only in 2010. It showed a strong revealed comparative advantage (1.97), but no export was recorded to China thereafter. Similarly, over the period under study, no export was reported in the case of Saudi Arabia. Further, the destination market-wise RCA analysis shows that during the period under study for relatively distant destination markets, particularly for Switzerland, Germany, France, Canada, and the

USA, the revealed comparative disadvantage was observed, with an average RCA index of 0.001, 0.003, 0.005, 0.04, and 0.56, respectively.

It can be drawn from the above that Pakistan and India had been traditionally attractive and competitive destination markets for Afghanistan's fig. In contrast, the UAEhas emerged as a competitive destination market in recent years. The RCA indices of figs for Switzerland, Germany, France, Canada, and the USA were found to be relatively low, indicating a comparative disadvantage to the country, which may be due to transportation cost disadvantage and the short shelf life of fresh figs.

Structural Change and Direction of Trade of Figs of Afghanistan

The structural changes and trade direction of Afghanistan fig to different destination markets in terms of the transitional probability matrix presented in Table 4 reveals that during the period under study, India was the most stable market amongst the selected importing countries of Afghanistan fig, as reflected by the probability of retention (0.9820). The retention probability indicates that India retained 98.20 percent of its original market share in Afghanistan's fig export market in the current period. In comparison, the remaining 1.80 percent was shifted to other countries, with 1.08% to UAE, 0.65% to Pakistan, 0.05% to Canada, 0.01% to Germany and 0.01% to others, respectively.

Also, the transitional probability pertained to UAE (0.1746), which indicates that during the period under study, UAE retained only 17.46 percent of its previous year's export share. This implies that the UAE lost 82.54 percent of its market share to other importing countries. The maximum market share (81.25%) was shifted to India, while the remaining (1.29%) to the USA. Further, the magnitude of the transitional probability pertained to Pakistan (0.0811), which indicates that Pakistan retained only 8.11 percent of its export share and lost the remaining market share (91.89%) to India.

Table 4: *Transitional probability matrix of Afghanistan fig export over the period from 2008 to 2019*

Importing Country	India	Canada	China	France	Germany	UAE	USA	Pakistan	Others
India	**0.9820**	0.0005	0	0	0.0001	0.0108	0	0.0065	0.0001
Canada	1.0000	**0.0000**	0	0	0	0	0	0	0
China	0	1.0000	**0.0000**	0	0	0	0	0	0
France	0	0	0	**0.0000**	0	0	0	0	1.0000
Germany	0	0	0	0	**0.0000**	0	0	0	1.0000
UAE	0.8125	0	0	0	0	**0.1746**	0.0129	0	0
USA	0.3882	0.0022	0.0079	0	0.0074	0	**0.0122**	0.5779	0.0042
Pakistan	0.9189	0	0	0	0	0	0	**0.0811**	0
Others	1.0000	0	0	0	0	0	0	0	**0.0000**

The diagonal element of the matrix shows that during the period under investigation, the USA had shown poor stability with a retention probability of 0.0122, indicating that only 1.22 percent of its original market share was retained. This implies that the USA had lost most (98.88 percent) of its original market share to other importing countries. Of which, the maximum share (57.79 percent) was shifted to Pakistan, followed by India (38.82%), China (0.79%), Germany (0.74 %) and others (0.42%), respectively. Further, Canada, China, France, Germany, and others could not retain their market share. Thus, they were the most unstable markets for Afghanistan figs.

On the other hand, over the period, the major gainer among the Afghanistan fig market importing countries was India, which gained 100 percent of the market shares of Canada and others, as evidenced by the magnitudes of their transitional probabilities of 1.000. Further, the transitional probabilities of Pakistan (0.9189), UAE (0.8125), and USA (0.3882) indicate that over the period, India gained a maximum share of the Afghanistan fig market from Pakistan (91.89 percent), followed by UAE (81.25 percent) and USA (38.82 percent) from the export of figs. This is a reflection of the demand for Afghanistan figs in India. Thus, India was the most stable market destination market for Afghanistan figs.

It can be seen that India was the most stable destination market for Afghanistan fig, despite potential markets like Pakistan and China's proximity to Afghanistan. This may be attributed to the consumers' preference and high demand for Afghanistan fig in the Indian market and a long-established trade relationship. Further, UAE, Pakistan, and the USA were relatively unstable markets, and more unstable markets were found in distant countries such as Canada, Germany, France, etc.

CONCLUSION

It can be concluded from the forgoing analysis that Pakistan and India had been traditionally attractive and competitive destination markets for Afghanistan's fig. In contrast, the UAE has emerged as a competitive destination market in recent years. The RCA indices of fig for Switzerland, Germany, France, Canada, and the USA were found to be relatively low, indicating a comparative disadvantage to the country, which may be due to transportation cost disadvantage and the short shelf life of fresh figs. The analysis reveals that over the period, though, in most of the cases, the country had managed to retain its original market. However, the country cannot depend excessively on one or a few markets, given the trade risk in the long run. Therefore, new markets also need to be explored, and more stress needs to be placed on the countries where Afghanistan was likely to lose its original market shares for certain commodities. Therefore, appropriate export promotion policy packages and strategies must be envisaged to diversify the geographical concentration of figs exports and minimize market risks. Moreover, the efficiency at the production level needs to be improved to make the product price competitive. Afghanistan, for figs, retained its export shares in more than one market and was able to penetrate more distant markets. The country maintained its original market share for this commodity. It is, therefore, important to take measures to retain the market share in those countries where Afghanistan was likely to lose

the original share. In the changing economic scenario, where competition is more intense in the agricultural products trade, government policy should be aimed at increasing productivity, reducing the unit cost of production, improving trade standards, and reconciling all the trade-related barriers concerning the importing countries. This can enhance Afghanistan's competitiveness in the world market and regain.

Conflict of Interest: The author(s) declared no conflict of interest.

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