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RESEARCH ARTICLE

Trade Competitiveness of Pakistani Dates Sector in Global Market

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ABSTRACT

This study was aimed to provide insight into the trade competitiveness of Pakistani dates sector in global market. The study probed international competitiveness, trade balance and export unit value realization of dates fruit of Pakistan by applying several trade base indices over the period from 2001 to 2016. Analysis showed that Pakistan has trade competitiveness in date's fruit in world market as indicated by Revealed Comparative Advantages (RCA) 53.1 and Revealed Trade Advantages (RTA) index 48.8 average for the period under analysis. Trade Balance Index (TBI) index 0.80 showed that Pakistan is net-exporter of dates in the global market. However, Pakistan remained a regular importer of date's and faces decreasing import specialization disadvantages during the period under analysis with Revealed Import Advantages (RMA) index 4.4. Despite that Pakistan having revealed comparative advantage in dates export, Pakistan's export unit value realization was only (51%) of world average. This implicates that Dates exports fetched a low price subdivision in the world market. The export unit value realization is darned on processing technology which produces low-quality products. To reach the upper subdivision of the world market and to achieve the raised unit value realization quality up-gradation and access to high end markets are needed. To ensure the robust growth in export unit value realization future research should focus on the development of value added products of dates with access to high end markets of world.

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INTRODUCTION

Dates Palm (*Phoenix Dactylifera* L.) is third largest fruit crop after citrus and mango in Pakistan. Pakistan is the 7th largest producer of dates in world economy with 5.8 percent share of the global produce whereas Egypt was the top dates producer with 20 % of global produce followed by Iran, Algeria, Kingdom of Saudi Arabia (KSA) and United Arab Emirates(UAE). These five countries contribute about 64% to the global production of dates (Anonymous, 2018). Dates farming have social, ecological and economic importance for Pakistan. In Pakistan Dates have central place in fruits trade of Pakistan. Pakistan Dates sector is promising with fifth largest exporter of dates in global market with 15.5 % of world export in value term. Dates are

exported in two forms as either fresh dates or dried dates from Pakistan.

Globalization of markets have altered traditional construct of the comparative advantage (Ben-Amor et al., 2015). Trade between the nations plays a vital role in economic growth for participating nations. In Pakistan major portion of exports were consist of primary commodities of agriculture domain. In spite the fact that horticulture is emerging a promising sub-sector of the agriculture economy of Pakistan. Horticulture sub-sector has untapped potential to contribute in exports earning significantly by strengthening comparative and competitive advantages (Akhtar et al., 2013). The country is still low ability of value addition in commodities and still exporting low quality commodities. Post-harvest loss in the horticulture

produce ranges 30-40% in Pakistan (Parveen et al., 2014). Post-harvest management of date's fruits remained crucial issue which left a substantial amount with low quality and low market prices, resultantly lack of value addition and high post-harvest losses hindering sector potential to generate foreign exchange of the country. Developing countries facing balance of trade issues to mitigate this issue heightening competitiveness in agriculture and total exports are needed (Almodarra and Saghian, 2016). Presently Pakistan is facing serious issues of balance of payments and there is dire need to steep growth in exports earnings.

To reduce the imports and advance better export competitiveness of horticultural produces, it is important to increase invest in the research and development of horticulture sector of the country (Manzoor et al., 2020).

Pakistan acquired comparative advantage in dates as indicated by the index greater than one (Kousar et al., 2019).

An up dated measure of competitiveness in the exportable are important. The present study has examined international competitiveness, country's trade balance and export unit value realization. Ex post analysis is viable option of any international traded commodity to judges its future potential and performance in the international market. In globalization and trade liberalization context for developing countries trade competitiveness is an important issue which needs to be measures empirically for policy support for strengthening competitiveness and increase the export unit value. Reliable estimates of trade competitiveness are also crucial for future policy preparation. Therefore, this study was conducted with the objective to apply trade base indices to analyze the international competitiveness of an important tradable commodity of Pakistan.

MATERIALS AND METHODS

The study is based on secondary data collected from FAO statistical database and Ministry of National Food Security and Research data, Government of Pakistan (GOP). A number of studies in the field of trade specialization including Kilduff and Chi (2007), Fitzgerald and Hallak (2004) and Deardorff (1980) were drawn on Ricardian and Hecksher–Ohlin theory of comparative advantage (CA). Lack of internationally comparable data for empirical measurements of comparative advantage's indicators i.e. domestic resource cost and social cost benefit remained constrained and data availability on production cost or pre-trade relative prices remained an issue. So according to the theory comparative advantages (CA), relative factor abundance remained the base of trade between the nations. Trade base indices are being used

for comparative advantages analysis. Dowling and Cheang (2000) argued that RCA is an option to gauge comparative advantage of any traded commodity. This study used some trade base indices which are frequently used by researches in the recent past. The trade base indicators used in the analysis are explained as under.

Revealed Comparative Advantage (RCA)

RCA index was a common measure to revealed comparative advantage based on Balassa (1965) index. It is the measure of relative specification and quantifications of commodity-specific degree of CA (Balance et al., 1987 and Ginzburg and Simonazzi, 2005). It also measures pattern of trade and competitive advantage of trade (Rana, 1990). Mathematical form of RCA Balassa's index is as under

$$RCA_{ijt} = \frac{\left(\frac{X_{ijt}}{\sum X_{it}}\right)}{\left(\frac{X_{iwt}}{\sum X_{awt}}\right)} \dots \dots \dots (1)$$

Where:

X_{ijt} = Acts as country i's export of commodity j in year t

$\sum X_{it}$ = Acts as country i's total exports in year t

X_{iwt} = Acts as total world exports of commodity i in year t

$\sum X_{awt}$ = Acts as total world exports in year t.

$RCA_{ijt} > 1$, indicates that country j has a revealed comparative advantage in commodity i and $RCA_{ijt} < 1$, point outs that country j has a revealed comparative disadvantage in commodity i

Revealed Import Advantages Index (RMA)

Import specialization advantage and disadvantage is measured with RMA formula

$$RMA_{ijt} = \frac{\left(\frac{M_{ijt}}{\sum M_{it}}\right)}{\left(\frac{M_{iwt}}{\sum M_{awt}}\right)} \dots \dots \dots (2)$$

Where:

M_{ijt} = Acts as country i's imports of commodity j in year t

$\sum M_{it}$ = Acts as country i's total imports in year t

M_{iwt} = Acts as total world imports of commodity i in year t

$\sum M_{awt}$ = Acts as total world imports in year t.

The value of RMA indicator ranges from -1 to $+1$. A value of $RMA_{ijt} > 1$, indicates import specialization disadvantage and $RMA_{ijt} < 1$, point outs import specialization advantage in the commodity j

Revealed Trade Advantages (RTA) Index

RTA index is a measure of trade competitiveness (Vollrath, 1991). It combines both exports and imports of commodity/products under consideration.

$$RTA_{ijt} = RCA_{ijt} - RMA_{ijt} \dots \dots \dots (3)$$

The value of RTA ranges from -1 to $+1$. $RTA_{ijt} > 0$ indicates that country i is the net exporter of product j while $RTA_{ijt} < 0$ signifies that country i is the net importer of product j

Table 1: Trade competitiveness indicators of Pakistani dates 2001-2016

Year/ Indicators	Export unit vale realization		Trade base indices			
	Pakistan (US \$/tons)	World (US \$/tons)	TBI	RXA= RCA	RMA	RTA
2001	324	462	0.69	71.2	10.8	60.4
2002	356	471	0.65	67.2	12.8	54.4
2003	353	553	0.77	44.9	6.0	38.9
2004	348	797	0.41	45.7	13.6	32.1
2005	354	553	0.82	43.0	2.9	40.1
2006	363	927	0.66	47.0	5.5	41.5
2007	368	714	0.76	43.3	3.9	39.5
2008	388	733	0.88	44.5	1.3	43.2
2009	398	920	0.85	67.1	2.3	64.9
2010	409	1164	0.96	41.4	0.6	40.8
2011	480	1270	0.82	36.9	2.7	34.2
2012	543	1145	0.86	69.4	3.3	66.1
2013	487	1203	0.94	57.6	1.1	56.6
2014	526	1002	0.95	55.3	0.8	54.5
2015	711	1018	0.91	55.1	1.2	53.9
2016	639	1042	0.88	60.5	1.5	59.0
Average	440	873	0.80	53.1	4.4	48.8

Source: Authors analysis based on data from FAO Statistical data base and Agricultural Statistics of Pakistan.

Trade Balance Index (TBI)

The TBI is an indicator of specialization in export, as (net exporter) or in import, as (net importer) for products under consideration.

The TBI is simply formulated as follows:

$$TBI_{ij} = \frac{(X_{ij} - M_{ij})}{(X_{ij} + M_{ij})} \tag{4}$$

The value of this index ranges from -1 to +1. $TBI_{ij} > 0$ indicates that country i is the net exporter of product j while $TBI_{ij} < 0$ signifies that country i is the net importer of product j (Widodo 2009; Lafay 1992).

Unit Value Realization

Unit Value Realization was estimated by the ratio of total export value to export quantity which gives the value realization. Unit value realization is an indicator of determining the economic value of a particular commodity exported to the world market.

RESULTS AND DISCUSSION

The trade base analysis has provided useful indications important shifts and movements in competitiveness of date’s trade of Pakistan. The results revealed increasing competitiveness of date’s exports. This results is consistent with a comparative study (Akhtar et al., 2009) disclosed that Pakistan’s dates has higher competitive advantage relative to its competitors. Pilinekeine (2014) argued that lots of research studies conducted recently demonstrated that export competitiveness power a country depends on its trade specialization in their economies. Although the RCA is reasonably high showing a high revealed comparative advantage but fluctuating RCA index is a concern unless it is taken care of by suitable policy measures. In attainment of export growth the trade commodities i.e dates need to play a role in reduced the trade deficit of

the country. The relative trade advantage (RTA) reflects the real competitiveness and efficiency dates trade by incorporates both exports and imports. The heightening of TBI, RCA, RMA and RTA indices proved the existence of comparative advantages in relation to world market.

The relative unit value realization through exports of dates is less than the world average indicating that the country is probably is not catering to niche market and exporting low quality products. The Pakistan export unit vale realization was US\$440 /tonnes against the word average export price US\$873/tonnes period under analysis. This situation calls for a rethinking at the policy level to enhance the ability to generate added value and access to high ends market of the world. The TBI result revealed that Pakistan remained a net-exporter in dates. TBI is positive in spite the fact that Pakistan was also a regular importer of dates from the world market. RMA index implies that Pakistan has import specialization disadvantage in date’s imports. The trend of import specialization disadvantage of is decreasing over time.

Conclusion

The paper evaluates Pakistan’s date’s trade competitiveness with respect to world market. The study identified that although Pakistan has revealed trade advantages for dates in the world market but dates sector is performing far below its actual potential. The study empirically identified that unit value realization through exports of dates was about half of the world average export unit value and for below average of major exporters i.e Tunisia’s unit value realization for dates exports was 3.4 times more than the world average (Ben-Amor et al., 2015). This indicates low ability of the sector to generate value for products in international market. With appropriate interventions

and improved quality and market access this sector can flourish manifold. Policy should focus on explore avenues of high end market access that may enhance date's unit value realization to increase the international competitiveness.

Authors' Contributions

WA conceived the idea, overall management of the article, initiated and finalized the article. AJ, provide technical input, contributed and in write-up of the manuscript. MQ and AH made Significant contribution in acquisition and interpretation of data. MZA and RS, contributed in literature review and in data analysis and interpretation of the results. All the authors read and approved the final draft.

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