

COMPETITIVENESS IN AGRICULTURAL TRADE OF PAKISTAN WITH UNITED ARAB EMIRATES

Iqbal Javed^{1,*}, Ghulam Mustafa¹, Muhammad Ashfaq², Rizwana Yasmeen³, Abdul Ghafoor⁴, Mudassar Yasin⁵, Asad Abbas Jaffari⁶ and Muhammad Ali Imran²

¹Department of Economics, University of Lahore, Sargodha, Pakistan; ²Institute of Agricultural and Resource Economics, Faculty of Social Sciences, University of Agriculture, Faisalabad, Pakistan;

³School of International Business, South Western University of Finance and Economics, Chengdu, China;

⁴Institute of Business Management Sciences, Faculty of Social Sciences, University of Agriculture, Faisalabad, Pakistan; ⁵Institute of Agricultural Extension and Rural Development, Faculty of Social Sciences, University of Agriculture, Faisalabad, Pakistan; ⁶Department of Business Administration, Faculty of Management and Administrative Sciences, University of Sargodha, Sargodha, Pakistan

*Corresponding author's e-mail: iqbaljaved.uaf@gmail.com

United Arab Emirate is the trading partner of Pakistan with 10.9 percent share of total trade in 2012. Export share of Pakistan to United Arab Emirates was 8.5 percent and Import share of Pakistan from United Arab Emirates is about 12 percent in 2012. Major agricultural export products of Pakistan to UAE are rice, meat (beef & mutton), and cotton yarn. Major agricultural products, which are imported include dried vegetables, sugar and milk and cream. Objective of the study was to elaborate the trade of major agricultural products between Pakistan and United Arab Emirates, and their competitiveness. Competitiveness in agricultural trade was estimated by nominal protection coefficient (NPC). The results exhibited that Pakistan was losing its competitiveness in basmati export. NPC of beef remained less as compared to Mutton that means beef is more competitive as compared to mutton. It is concluded that Pakistan should focus more on beef for its exports growth as compared to mutton. Pakistan has competitiveness in the cotton yarn but it is not a strong as comparative to its products. Pakistan has strong competitiveness in milk and cream but still is not able to export milk and cream. There is need to make more growth in dairy sector and government should give more attention toward this sector. Value of NPC of sugar more than unity is showing that Pakistan has no competitiveness in sugar. Pakistan is an exporter of fresh vegetables but at the same time Pakistan is also importer of the dried vegetables. There is lack of value addition in vegetables.

Keywords: Agricultural imports, agricultural exports; nominal protection coefficient; United Arab Emirates; Pakistan.

INTRODUCTION

Agriculture has a very important role in the economy of Pakistan with a share of about 21.1 percent to GDP (GOP, 2014). It provides 43.7 percent employment to the total labor force of the country (GOP, 2014). About 60 percent rural populations depend on agriculture (GOP, 2012). Pakistan's export value was US\$ 23624 million during the fiscal year 2012-13 (ITC, 2013). The imports of Pakistan amounted to about US\$ 44912 million during 2012-13 (ITC, 2013). Pakistan generally has a negative trade balance. Major trading partners of Pakistan are China, Saudi Arabia, United Arab Emirates, United States, European Union, Kuwait, India and Malaysia. Trade share of Pakistan with United Arab Emirates was about 11 percent of its total trade with an export share of 8.5 percent and import share of 12.3 percent (ITC, 2014). Pakistan has a trade share of 9 percent with Saudi Arabia. Trade share of Pakistan with European Union is 13.0 percent (ITC, 2014). Trade flow between Pakistan and United States has been decreasing since last few years and in 2012-13 it was

only 6.7 percent with exports (13.3 percent) exceeding the imports (3.2 percent) (ITC, 2014). The other countries like Kuwait, India and Malaysia have a minor trade share with Pakistan which is 4.4, 3.2 and 2.9 percent respectively (ITC, 2014).

United Arab Emirates is the emerging trade partner of Pakistan while USA is losing its share in the total trade of Pakistan (GOP, 2013). More potential is present in the bilateral trade growth between Pakistan and United Arab Emirates. Trade balance of Pakistan is shown in figure 1 as shown below.

United Arab Emirates is one of the biggest investors in the country and bilateral trade has been steadily growing over the years. Both countries have a strong commitment to further strengthen the bonds of friendship and want to expand the horizon of bilateral cooperation in diverse fields. About 1.4 million Pakistani expatriates are working in United Arab Emirates (Anonymous, 2013). United Arab Emirates has now become the 2nd major trading partner of Pakistan (GOP, 2013).

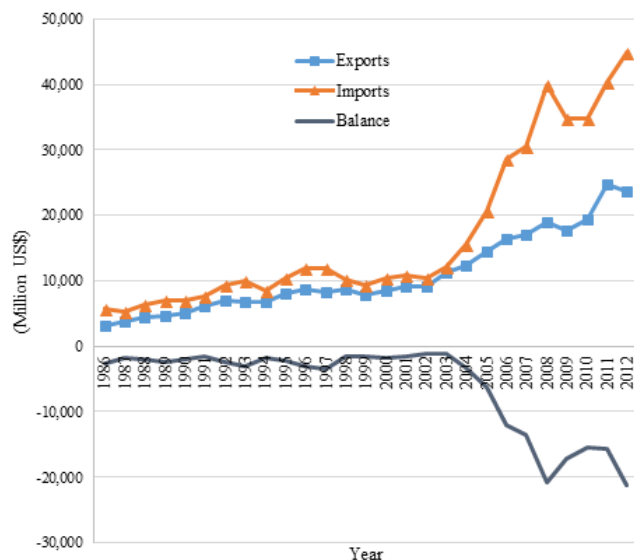


Figure 1. Trade Balance of Pakistan.

Source: International Trade Center

Pakistan's major export items to United Arab Emirates include, clothing of textile fabrics, hosiery, rice, cotton fabrics, cotton yarn, sports goods, fruits, vegetables, and footwear. Major imports of Pakistan from United Arab Emirates are petroleum products, precious stones, metals, plastic products, iron, steel, machinery, organic chemicals, and electrical equipment. Pakistan has been exporting agricultural products and importing non-agricultural products from United Arab Emirates (ITC, 2014). Major agricultural export products of Pakistan to United Arab Emirates, included in the study, are rice, meat (beef & mutton) and cotton yarn which were selected on the basis of export values. United Arab Emirates is the 1st leading importer of Pakistani basmati rice. The export value of Pakistani basmati to United Arab Emirates was about US\$ 146 million during 2012-13, which was about 23 percent of total basmati rice exports, leaving 77 percent to rest of the world. Second major agricultural export product from Pakistan to United Arab Emirates is meat, containing a major part of fresh and chilled meat of bovine animals which is 41.26 percent to total exports. The export share of frozen meat of bovine animals to United Arab Emirates, was about 8.5 percent to total export value. Also, about 12 percent exports of meat (sheep and goat) were sent from Pakistan to United Arab Emirates during the year 2012-13. United Arab Emirates is major market of Pakistani beef. Beef with a value of about US\$ 40 million exported to United Arab Emirates in 2012-13, constituting a share of about 41 percent to total exports from Pakistan. Export value of Pakistani mutton to United Arab Emirates was about US\$ 10 million in 2012-13 which was less than export value of beef from Pakistan to United Arab Emirates. Total export value of mutton from Pakistan was about US\$ 86 million that was less than total export value beef from Pakistan, during 2012-13.

Cotton yarn is also a major export item of Pakistan but its export share to United Arab Emirates is less as compared to other markets. Its export share to United Arab Emirates was only about 2.3 percent. Cotton industry of Pakistan is a major source of cotton exports therefore cotton products have a major share in total exports of Pakistan. Export value of cotton related items from Pakistan to United Arab Emirates was US\$ 39 million in 2012. (ITC, 2013). Major agricultural imports of Pakistan from United Arab Emirates are dried vegetables, sugar and milk and cream. These three products were selected on the basis of value of imports. Sugar imports from United Arab Emirates amounted to US\$ 1,179 thousand against total sugar imports of US\$ 6,627 thousand in 2012 constituting 17.7 percent of total sugar imports. Total Value of milk and cream imports of Pakistan was US\$ 102 million in 2012-13 whereas, in 2003, it was only about US\$ 7 million. In 2003 the value of imports of milk and cream from United Arab Emirates was only 61 thousands and 823 thousand in 2012. Total import value of dried vegetables of Pakistan was US\$ 407 million in 2012-13. The value of Imports of dried vegetables from United Arab Emirates was US\$ 1,349 thousand in 2012 (ITC, 2013).

Many analysts of the Pakistan economy in the agriculture sector are in particular believe that the country is punching below its weight as far as agricultural export performance is concerned (Riaz and Jansen, 2012). The world economic scenario is set for change under free trade regime, increasing competition and relative competitiveness of different countries. The study of competitiveness is of major importance to know the extent and potential for trade of agricultural commodities. The study undertaken was aimed at analyzing the changing agricultural competitiveness over time for United Arab Emirates and its implications for trade development. The first objective of the study was to identify the major agricultural products traded between Pakistan and United Arab Emirates. Second objective was to measure competitiveness of these agricultural products.

Mustafa (2003) has pointed out that, the ability of the country to maintain or expand its world market share depends upon its ability to meet the demands of the world trading system in terms of competitiveness. Mahmood (2004) analyzed comparative advantage for Pakistan's non-agricultural sector. Sharif *et al.* (2006) calculated export margins of kinnow for the markets of Middle East, Far East, Europe and Russia. Hanif and Jafri (2008) studied competitiveness for Pakistan textile sector. Only a few studies have attempted to analyze actual comparative advantage for Pakistan's agricultural exports. For example, Akhtar *et al.* (2009) conducted a study on exports of Pakistan. Samaratunga *et al.* (2007) and CARIS (2008) considered the country's comparative advantage for a few broad categories of agricultural products. Riaz (2009) estimated comparative advantages for a fairly wide range of agricultural products, using world market for each product as reference market. However, to better understand Pakistan's

agricultural trade potential with its individual trading partner, there was need to identify specific markets and products where the country enjoys demonstrated comparative advantage. Quddus and Usman (2011) calculated nominal protection coefficient (NPC) of major crops including paddy, sugarcane and cotton for the period of 2001-2005. They did not calculate nominal protection coefficient (NPC) for a specific targeted market. Mustafa and Quddus (2012) calculated nominal protection coefficient (NPC) of agricultural products for a period of 2001-2009. Riaz and Jansen (2012) analyzed revealed comparative advantages of Pakistan's agricultural exports with regions of SARC, ASEAN, GCC, sub Saharan Africa and North Africa for Dairy products, cereals, vegetables and fruits during 1999-2008. Akhtar *et al.* (2013) calculated RCA of combined group of fruit and vegetables as a single commodity. They used data for the duration 1990 to 2009.

There was no study made by keeping only one market for better analysis of the products exported to that particular country. Pakistani exports of major Agricultural products to United Arab Emirates, are basmati rice, mutton, beef and cotton yarn. By keeping in mind the United Arab Emirates as a trading partner the competitiveness of these export products were estimated by using the nominal protection coefficient (NPC) approach. By the definition offered by Latruffe (2010), competitiveness is the ability to sell products that meet demand requirements (price, quality, quantity) and at the same time, ensure profits over time. Competition does occur either in the local markets or in the international markets. There was need of analysis with respect to each individual market for that purpose and to make policy suggestions for a single target country. After this study there is need to conduct such research on agricultural trade with other international markets individually. In existing literature there were many studies conducted overall but this study undertaken explores the competitiveness for a target market for knowing the existing practices in trade has been according to comparative advantage and competitiveness or not. The study helps to policymakers for changing preferences and directions of their exports and imports on the basis of competitiveness.

MATERIALS AND METHODS

Data Collection and Sources: Time series Data about prices of agricultural products is taken from statistical year books of Pakistan and Agricultural Price Institution, Islamabad, Pakistan.

Exports of Major Agricultural Products to United Arab Emirates: On the basis of amount of previous 10 years three major export products of agriculture are selected that are exported to United Arab Emirates. These agricultural products are basmati rice, meat (mutton & beef) and cotton yarn. Analyses of these three major agricultural export

products are conducted to check out the competitiveness and comparative advantage.

Imports of Major Agricultural Products from United Arab Emirates: On the basis of data of flow of agricultural products from United Arab Emirates to Pakistan, major three agricultural products with respect to value are selected for the analysis to check out the competitiveness. These three agricultural products are milk and cream, sugar and dried vegetables.

Nominal Protection Coefficient (NPC): Conceptually, competitiveness is defined as the ability of a country to offer products and services that meet local and international quality standards, worth domestic and global market prices, and provide adequate returns on the resources used in producing them. Competitiveness can also be defined as the ability to face and to be successful when facing competition (Latruffe, 2010). Nominal protection coefficient was estimated for the export of agricultural commodities exported to United Arab Emirates. Among numerous methods applied to estimate competitiveness, Nominal Protection Coefficient (NPC) is widely used (Balassa and Achydlowsky, 1972; Gulati *et al.*, 1990; Taylor and Philips, 1991; Chand, 1999; Kumar *et al.*, 2001; Rakotoarisoa and Gulati, 2006). It is defined as the ratio of a commodity's domestic price to its international reference price and that is computed as per Equation;

$$NPC_i = P_{id} / P_{ib} * ER \quad (1)$$

NPC_i is nominal protection coefficient for the i th commodity
 P_{id} is domestic price for the i th commodity in domestic currency

P_{ib} is border price in foreign currency adjusted for the transportation, marketing and other costs. ER is the exchange rate.

The NPC fundamentally helps in measuring the divergence of domestic price from the international price and determines the degree of export competitiveness for a commodity. A ratio which is less than the unity implies a competitive advantage and if greater than unity it shows lack of competitive advantage. The assumption of NPC under an importable hypothesis is that an imported commodity competes with the domestic commodity in port or city in Pakistan. The equation 1 was estimated by using the data of three major agricultural exports and imports of Pakistan, included in the trade between Pakistan and United Arab Emirates. These agricultural products were basmati, meat (beef & mutton), cotton yarn, milk and cream, sugar, and dried vegetables.

RESULTS AND DISCUSSION

Pakistan is blessed with diverse agro-climatic conditions, which are conducive for growing various crops around the year with one of the best irrigation systems in the world (Akhter, 1998). Rapidly changing international trade scenario led by WTO rules and regulations, competition in international market is getting more intensified specially with

the emergence of new foreign trade players. As Mustafa (2003) has pointed out that, the ability of the country to maintain or expand its world market share depends upon its ability to meet the demands of the world trading system, not only in terms of competitive price but also quality of exportable products and their safety standards. Pakistan has to restructure its foreign trade policies by keeping in view the Agreement on Agriculture under WTO (Mustafa, 2003). Pakistani exports of major Agricultural products to United Arab Emirates, are basmati rice, mutton, beef and cotton yarn. By keeping in mind the United Arab Emirates as a trading partner the competitiveness of these export products were estimated by using the nominal protection coefficient (NPC) approach.

Basmati Rice: The NPC values of basmati rice were calculated for the years of 2003-2012 to check the competitiveness trend of Pakistani basmati rice as shown in Table 1. In 2003, the value of NPC was 0.57 that was less competitive as compared to 2004 and 2005 (NPC= 0.40). Throughout time period under consideration, basmati remained more competitive in 2007 as shown by the value of its NPC which is 0.26. The value of NPC in 2012 was 0.91 which is showing that Pakistan have little competitiveness in basmati exports. Basmati rice of Pakistan has competitiveness in international markets whereas before a decade it had more competitiveness.

Table 1. Nominal Protection Coefficient (NPC) of Pakistani Basmati Rice.

Year	NPC
2003	0.57
2004	0.40
2005	0.40
2006	0.34
2007	0.26
2008	0.38
2009	0.37
2010	0.36
2011	0.89
2012	0.91
2013	0.76

Source: Author's calculations

Throughout the duration under the consideration, basmati was less competitive in 2012. It was due to the reason that Pakistani basmati exports were suffering from problems and exporters worried about that situation when domestic prices increased but there was no as much increase in the international prices of basmati, hence Pakistan was not performing well as compared to its other competitors especially India (Javed *et al.*, 2015). United Arab Emirates exports basmati at high prices in international markets so that's why Pakistan is losing its competitiveness in United Arab Emirates. Pakistan should try to search other markets to

sell its basmati where the prices are more as compared to United Arab Emirates. Pakistan should not concentrate on only the market of United Arab Emirates, because throughout time under consideration, NPC value showed that basmati is losing its competitiveness in United Arab Emirates.

Meat (Beef & Mutton): Pakistan has more competitiveness in beef as compared to mutton for the time under consideration for 2003-2012. In 2003 NPC of Pakistani beef was 0.56 which was showing more competitiveness as compared to the years of 2004, 2005 and 2006. Again in 2008 the NPC value decreased to 0.51 showing more competitiveness. In 2012 beef became less competitive with a NPC value of 0.87 as shown in Table 2.

Table 2. Nominal Protection Coefficient (NPC) of Meat (Beef & Mutton).

Year	NPC of Beef	NPC of Mutton
2003	0.56	0.79
2004	0.70	0.87
2005	0.86	0.98
2006	0.74	0.97
2007	0.67	0.87
2008	0.51	0.60
2009	0.64	0.82
2010	0.59	0.72
2011	0.67	0.89
2012	0.87	0.95

Source: Author's calculations

NPC of beef of Pakistan remained less as compared to mutton showing that Pakistani Beef is more competitive as compared to mutton. The comparison of both NPCs of mutton and beef for the period of 2003-2012, indicated that Pakistani beef is more competitive as compared to mutton. Pakistan should try to focus more on beef as compared to mutton because the NPC values shows that the Pakistani beef is more competitive as compared to mutton. For mutton Pakistan should try to find other markets of the world where the NPC values are less as compared to the United Arab Emirates.

Cotton Yarn: Throughout the duration under study for the period of 2003-2012, Pakistan has competitiveness in cotton yarn as shown in the Table 3. Pakistan has value of NPC less than 0.5 for the year 2008, while for all other years under the study the values of NPC were more than the 0.5. For the year 2011 and 2012, NPC values were 0.98 and 0.90, respectively, showing less competitiveness. It means Pakistan has competitiveness in the cotton yarn but it is not strong competitiveness which indicated presence of potential in this sector. Pakistani cotton industry is emerging with time, since the exports of value added products of cotton has been increasing and it is more profitable as compared to exports raw products.

Table 3. Nominal Protection Coefficient (NPC) of Cotton Yarn.

Year	NPC
2003	0.60
2004	0.61
2005	0.58
2006	0.51
2007	0.52
2008	0.40
2009	0.51
2010	0.65
2011	0.98
2012	0.90

Source: Author's calculations

Since 2011 Pakistan is not performing well in the exports of cotton yarn to United Arab Emirates, which is shown from the estimated values of NPC indices. There is need to shift toward the value addition in this sector. If Pakistan lose its competitiveness in cotton yarn than it should no need to worry about it and should try to find the other markets where it can enjoy its competitiveness.

Agricultural products which are the major imports of Pakistan from United Arab Emirates, included in the study were milk and cream, sugar and dried vegetables. These agricultural products were selected for the study on the basic of import values. Being a country of agriculture, why Pakistan is importing these agricultural products from United Arab Emirates which is not directly producer of these products? That's why there is need to explore this area and to make analysis about these products of agriculture that are being imported by Pakistan from United Arab Emirates.

Milk and Cream: Pakistan has strong competitiveness in milk and cream as exhibited by the values of NPC of milk and cream for the years 2003-2012. For the year 2004 and 2005 the competitiveness was more as shown by the NPC value that is less than the 0.20 as compared to the years 2009-2012 (NPC > 0.30). Pakistan is a larger producer of milk but with high consumption (GOP, 2014). Due to high domestic demand of milk and cream, Pakistan imports a large quantity of milk and cream. There is only the way that Pakistan should increase its domestic production of milk and cream.

NPC values of the milk and cream showing that Pakistan can produce milk and cream at low cost and can export to get high margin, but due to domestic demand it is not possible. Competitiveness of milk and cream showed suggest to make more growth in milk production to fulfill the domestic demand and to export the milk and other milk products to the United Arab Emirates.

Sugar: Value of NPC more than one is showing that international prices were less than domestic prices and Pakistan has no competitiveness in sugar. When international prices went up in 2008, Pakistan became competitive in sugar for the market of United Arab Emirates, as shown in Table 5.

In 2012, Pakistan has competitiveness in sugar shown by the value of NPC that was 0.74. The NPC values of sugar showing that sugar was not competitive in 2003-2007 and again in 2011. So there is a problem in sugar industry because Pakistan is not competitive in sugar then why it is not importing sugar at low prices from United Arab Emirates to fulfill domestic demand at low cost.

Table 4. Nominal Protection Coefficient (NPC) of Milk and Cream.

Year	NPC
2003	0.21
2004	0.18
2005	0.17
2006	0.21
2007	0.23
2008	0.21
2009	0.30
2010	0.33
2011	0.32
2012	0.32

Source: Author's calculations

Table 5. Nominal Protection Coefficient (NPC) of Sugar.

Year	NPC
2003	1.11
2004	1.00
2005	1.09
2006	1.08
2007	1.09
2008	0.75
2009	0.86
2010	0.98
2011	1.02
2012	0.74

Source: Author's calculations

Dried Vegetables: NPC values of the dried vegetables for the time duration of 2003-2012 is given in the table 6 remained more than unity. It is due to the fact that the domestic prices of dried vegetables were taken for the products imported into Pakistan and then circulated in the country. Pakistan is an exporter of fresh vegetables but at the same time Pakistan also imports dried vegetables.

The value of Imports of dried vegetables from United Arab Emirates was US\$ 1,349 thousand in 2012 (ITC, 2013). There is demand of dried vegetables in Pakistan but Pakistan is unable to fulfil its demand by domestic production. Dried vegetables are being imported by Pakistan forcing domestic consumers to pay more for these products. Pakistan can produce these dried vegetables by its own, but unfortunately there is lack of interest of food technologists and special planning in this sector. So an effort is required by policy

makers to fulfill this gap of value addition for target domestic consumers.

Table 6. Nominal Protection Coefficient (NPC) of Dried Vegetables.

Year	NPC
2003	1.38
2004	1.38
2005	1.37
2006	1.19
2007	1.30
2008	1.25
2009	1.18
2010	1.33
2011	1.35
2012	1.49

Source: Author's calculations

Performance of Pakistan in agricultural trade with its trading partner considering the competitiveness all these products are summarized in a table 7 as shown.

Table 7. Performance According to Competitiveness.

Sr. No	Agricultural products	Export / Import	Competitive ness	Performance
1	Basmati Rice	Export	Yes	Positive
2	Beef	Export	yes	Positive
3	Mutton	Export	yes	Positive
4	Cotton Yarn	Export	yes	Positive
5	Milk and Cream	Import	yes	Negative
6	Sugar	Import	no	Negative
7	Dried Vegetable	Import	yes	Negative

Source: Author's calculations

Conclusions: Although Pakistani Basmati rice has competitiveness in international markets whereas before a decade it had more competitiveness comparatively. Concerning the international markets, Pakistani basmati is losing its competitiveness in United Arab Emirates. Pakistan should not concentrate on only the market of United Arab Emirates because according to the findings of the study under hand basmati is losing its competitiveness in United Arab Emirates. Pakistani exporters should try to search other markets to sell basmati where it has more competitiveness as compared to United Arab Emirates. NPC of beef of Pakistan remained less as compared to mutton showing that Pakistani Beef is more competitive as compared to mutton. The comparison of both NPCs of mutton and beef for the period of 2003-2012, indicated that Pakistani beef is more competitive as compared to mutton. Pakistan should try to focus more on beef as compared to mutton because the NPC values shows that the Pakistani beef is more competitive as

compared to mutton. Concerning the exports of mutton Pakistan should try to find other international markets where the NPC values are less as compared to the United Arab Emirates. Throughout the duration under study it was found that Pakistan has competitiveness in cotton yarn. The results reveal that Pakistan has competitiveness in the cotton yarn but it is not strong competitiveness which indicated presence of potential in this sector. Pakistani cotton industry is emerging with time, since the exports of value added products of cotton has been increasing and it is more profitable as compared to exports raw products. Since 2011 Pakistan is not performing well in the exports of cotton yarn to United Arab Emirates, which is shown from the estimated values of NPC indices. There is need to shift toward the value addition in this sector. Decreasing the competitiveness in cotton yarn suggests to find other markets where it can enjoy its competitiveness. On the other side Pakistan should focus more on other cotton products which have more competitiveness. Pakistan has strong competitiveness in milk and cream as exhibited by the values of NPC of milk and cream for the years 2003-2012. Pakistan is a larger producer of milk but due to high consumption, milk and cream is not being exported by Pakistan. Due to high domestic demand of milk and cream, Pakistan imports a large quantity of milk and cream. There is only the way that Pakistan should increase its domestic production of milk and cream. NPC values of the milk and cream showing that Pakistan can produce milk and cream at low cost and can export to get high margin, but due to domestic demand it is not possible. So there is need to make more growth in milk production to fulfill the demand of milk and other milk products. The results of the study reveal that Pakistan has no competitiveness in sugar. So there is a problem in sugar industry because Pakistan is not competitive in sugar then why it is not importing sugar at low prices from United Arab Emirates to fulfill domestic demand at low cost. NPC values of the dried vegetables for the time duration of 2003-2012 remained more than unity. Pakistan is an exporter of fresh vegetables but at the same time Pakistan also imports dried vegetables. There is demand of dried vegetables in Pakistan but Pakistan is unable to fulfil its demand by domestic production. Dried vegetables are being imported by Pakistan forcing domestic consumers to pay more for these products. Pakistan can produce these dried vegetables by its own, but unfortunately there is lack of interest of food technologists and special planning in this sector. So an effort is required by policy makers to fulfill this gap of value addition for target domestic consumers.

Acknowledgement: Authors highly acknowledge the Higher Education Commission, Govt. of Pakistan, for providing financial support for conducting the current valuable research.

REFERENCES

- Akhtar, W., N. Akmal, H. Shah, M.A. Niazi and A. Tahir. 2013. Export competitiveness of Pakistani horticultural products. *Pak. J. Agric. Res.* 26:87-96.
- Anonymous. 2013. Bilateral Relations. PAK-UAE Relations. Taken from the website on 03-06-2013. <http://uae-embassy.ae/Embassies/pk/Content/3489>
- Akhtar, W., M. Sharif, and H. Shah. 2009. Competitiveness of Pakistani fruits in the World Market. *Lahore J. Econ.* 14:25-133.
- Akhter, M.R. 1998. Effects of trade liberalization on agriculture in Pakistan: Institutional and structural aspects. Working Paper 33/1998, the CGPRT Centre, Bogor, Indonesia. pp.10-56
- Balassa, B. and D.M. Achydlowsky. 1972. Domestic resource costs and effective protection once again. *J. Polit. Econ.* 80:63-69.
- CARIS. 2008. The impact of trade policies on Pakistan's Preferential access to the European Union. Report TRADE08/C3/C18. Prepared in Association with Chishti, A., M. Zulfiqar and Z. Naqvi at Centre for the Analysis of Regional Integration at Sussex, Department of Economics, University of Sussex, United Kingdom. pp. 26-284.
- Chand, R. 1999. Are disparities in Indian agriculture growing? Policy Brief 8. National Centre for Agricultural Economics and Policy Research (NCAP), New Delhi, India. pp.10-53.
- Government of Pakistan (GOP). 2012. Economic Survey of Pakistan 2011-12. Economic Advisor's Wing, Finance Division, Government of Pakistan, Islamabad, Pakistan.
- Government of Pakistan (GOP). 2013. Economic Survey of Pakistan 2012-13. Economic Advisor's Wing, Finance Division, Government of Pakistan, Islamabad, Pakistan.
- Government of Pakistan (GOP). 2014. Economic Survey of Pakistan 2013-14. Economic Advisor's Wing, Finance Division, Government of Pakistan, Islamabad, Pakistan.
- Gulati, A., J. Hanson and G. Pursell. 1990. Effective incentives in India's agriculture cotton groundnuts, wheat and rice. Policy, Planning and Research Working Paper No. WPS 332. World Bank. pp. 20-24.
- Hanif, M. N. and S. K. Jafri .2008. Financial development and textile sector competitiveness: A case study of Pakistan. *South Asia Econ. J.* 91:41-158.
- International Trade Center (ITC). 2013. Trade Maps: Trade Statistics for International Business Development. International Trade Center, Geneva, Switzerland.
- International Trade Center (ITC). 2014. Trade Maps: Trade Statistics for International Business Development. International Trade Center, Geneva, Switzerland.
- Javed, I., A. Ghafoor, A. Ali, M. A. Imran and M. Ashfaq. 2015. Margins and determinants of rice exports from Pakistan to United Arab Emirates. *Pak. J. Agri. Sci.* 52:569-575.
- Kumar, A., A. Jabir and S. Harbir. 2001. Trade in livestock products in India: Trends, performance and competitiveness. *Ind. J. Agri. Econ.* 56:653-667.
- Latruffe, L. 2010. Competitiveness, Productivity and Efficiency in the Agricultural and Agri-Food Sectors. OECD Food, Agriculture and Fisheries Papers, No. 30, OECD Publishing, Paris. pp. 6-63.
- Mahmood, A. 2004. Export Competitiveness and Agricultural Comparative Production Sector: Trends Advantage and of Analysis. *Pak. Dev. Rev. Part II.* 43:541-561.
- Mustafa, K. 2003. Barriers against Agricultural Export from Pakistan: The Role of WTO Sanitary and Phytosanitary Agreement. *Pak. Dev. Rev.* 42:487-510.
- Mustafa, U. and M.A. Quddus. 2012. Evaluating Global Commodity Price Fluctuation and Its Implication for Pakistan Agriculture: An Application of Policy Analysis Matrix. SANEI Working Paper Series No. 12-09, South Asia Network of Economic Research Institutes, Dhaka. pp.1-23
- Quddus, M.A. and U. Mustafa. 2011. Comparative advantage of major crops production in Punjab: An application of policy analysis matrix. *Lahore J. Econ.* 16:63-94.
- Rakotoarisoa, M. and A. Gulati. 2006. Competitiveness and trade potential of India's Dairy Industry. *Food Policy.* 31:216-227.
- Riaz, K. 2009. Revealed Comparative advantage analysis of Pakistan's agricultural exports. *Pak. J. App. Econ.* 19:103-127.
- Riaz, K. and H.G.P. Jansen. 2012. Spatial Patterns of revealed comparative advantage of Pakistan's agricultural exports. *Pak. Econ. Soc. Rev.* 50:97-120
- Samaratunga, P., K. Karunagoda and M. Thibbotuwawa. 2007. Mapping and Analysis of South Asian Agricultural Trade Liberalization Efforts. *Agricultural Trade: Planting the seeds of regional liberalization in Asia. A study of Asia-Pacific Research and Training Network on Trade, UN/ESCAP Studies in Trade and Investment.* pp.33-74.
- Sharif, M., U. Mustafa and U. Farooq. 2006. Managing fresh fruits trade under WTO Scenario: A case study of citrus export from Pakistan. *Pak. Dev. Rev.* 45:4-12
- Taylor, D.S. and P.T. Philips. 1991. Food-pricing policy in developing countries: Further evidence on cereal producer prices. *Am. J. Agric. Econ.* 73:1036-1043.

Copyright of Pakistan Journal of Agricultural Sciences is the property of Pakistan Journal of Agricultural Sciences, University of Agriculture, Faisalabad and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.