

# Competitive Advantage of GCC Date Palm Sector in the International Market: Market Shares, Revealed Comparative Advantages, and Trade Balance Indexes

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## Abstract

In the GCC countries, date-palm sector is strategically important for the economic, social and environmental development. Therefore, markets globalization has had a huge impact on the comparative advantages of date exports from the GCC countries, highlighting a new range of necessary determinants for competitiveness of these countries on the international date palm date market. The current study is conducted in the framework of the “Development of sustainable date palm production systems in the GCC countries of the Arabian Peninsula” project funded by the Gulf Cooperation Council (GCC) and led by the International Center for Agricultural Research in the Dry Areas (ICARDA), and aims to provide updated estimates of competitiveness indicators of the GCC countries on the international market of date palm.

The study starts by a summary description of updated figures concerning date's production, yields, and consumption trends of the different GCC countries. This first part of the research paper also includes a presentation of the date trade matrix (destinations of exports and imports) of the considered countries. In a second part of this section, a set of competitiveness indicators were calculated to better reflect on the date trade balances performances of each of the GCC countries. The measures of competitiveness indicators conducted in this paper include: i) the Market Share (MS); ii) the Revealed Comparative Advantage (RCA); and iii) the Trade Balance Index (TBI). The Market share indicator was used to identify size advantages and the degree of specialization of a given country on the international market of a given commodity. The RCA has been defined as a measure of performance of international trade competitiveness of a given country for a given commodity. The TBI is used to analyze whether a country has specialization in export (as net-exporter) or in import (as net-importer) for a specific group of products. Data from both FAOSTAT and UN COMTRADE sources was used for the calculation of these indicators. Empirical findings show that GCC and North African countries are holding more than 70% of the international market of dates. The sum of market shares of the 6 GCC countries was about 30% of the international date market during 2015. This is showing that these countries together have strong potential for dominating the international date market. In terms of growth, it was clear that all GCC countries, including the least present on the international market are progressing quite positively with increasing shares from one year to another. In terms of RCA, the highest RCA value was recorded for Saudi Arabia (KSA). It was for about 43.5 in 2013, indicating that the country date export share for 2013 is 43.5% higher than its share in total world export of agricultural goods. Finally, TBI results show the existence of structural differences between KSA and UAE in terms of dates export and import patterns. These two countries are both the main players in date export in the GCC area. However, even though UAE is a net exporter of date palm, which its TBI is much lower than the TBI of KSA, showing that UAE is also importing a higher proportion of its exported dates compared to KSA. The date trade patterns among the GCC countries shows that there is a wide scope of

coordination between the different trade strategies of these countries, through specialization and division of tasks. This can generate important opportunities for gaining more weight on the world market of dates.

**Keywords:** competitive advantages, competitiveness indices, market share, revealed comparative advantage, trade balance index, dates marketing, Gulf cooperation council (GCC)

## 1. Introduction and Background

Date palm production is a strategic sector in most of the GCC countries. The sector is one of the oldest economic activity in the Arabian Peninsula and continue to play a key role in the culture of its population. In addition to the importance of dates for domestic consumption, the date sector is considered also as potential source of employment, income generation, and trade in many of these countries. The date fruit, known for its nutritive as well as spiritual value, is marketed all over the world under different forms (fresh fruits, or high value confectionery). In the very arid areas, date fruit remains as an important source of subsistence and resilience for local communities.

The share of the GCC countries in the total world export value was about 25% in 2013 (FAO, 2013). The largest exporting countries of date on the international market are Tunisia, Algeria, Egypt, KSA, and United Arab Emirates (UAE). The high competitiveness on the international market of dates involves developing analytical reflections and studies on sources of competitiveness as well as its indicators, which can serve to set targets, objectives, and trade strategies. This competitiveness analysis and performances assessment of the GCC countries on the international market of dates is the purpose of this study.

In the littertaure there is no unique definition of the concept of competitiveness. Several approaches to competitiveness have produced different definitions. The concept is indeed very general and multifaceted and has a multidimensional nature linked to the optimal use of resources and geared for capturing development perspectives (Biggeri, 2007). With the increased globalization of the economy, the term competitiveness has become ubiquitous. The World Economic Forum's Global Competitiveness Report defines competitiveness as "the set of institutions, policies, and factors that determine the level of productivity of a country." An earlier definition by Michael Porter (1990) of the competitiveness of national (and regional) economic sectors and clusters of firms (at meso-level) refers to the competitiveness as the "ability of firms to achieve sustainable success against their competitors in other countries, regions or clusters". This is different from the definition of firms' competitiveness which is rather related to the "ability to provide products and services more effectively and efficiently than relevant competitors and to generate, at the same time, returns on investment for stakeholders (Porter, 1990).

Lachaal (2001) provides a comprehensive assessment of what can be considered as determinants of competitiveness (Figure 1). These include national (natural resources endowment, level of technology use, productivity of production within the cluster of firms for a given sector, scale economies, transport and marketing costs, etc.) and international (exchange rate, world market conditions, international transport costs, distance of countries from their relevant potential markets) determinants.

Biggeri (2007) considers that measures of competitiveness at economic sector level include the overall profitability of one nation's firms in the sector, the trade balance in the industry, the balance of outbound and inbound foreign direct investment, and direct measures of cost and quality at industry level. In line with this statement, Lachaal (2001) states that measures of the competitiveness may include different types of indicators such as: (i) measures related to the production costs (comparative advantages/relative costs/absolute costs, etc); (ii) measures related to the factor productivity, and (iii) measures of trade performances.

In this research paper, we calculate and discuss a set of trade performance indicators for the GCC countries operating on the international date market. Thus, the aim of this study is analyze the trade performances of GCC countries on the international market of dates. A list of performance indicators will be measured and reported. These include: i) the market share of a given country on the world export market of date palm, ii) the revealed comparative advantage, and iii) the trade balance index. The assessment and comparison of these indicators among the GCC countries, as well as with other major international competitors would provide insights that can be used for setting improved trade strategies and market opportunities.

## 2. Literature Review

Analyzing competitive advantage of agricultural trade for given countries at the word market has become more and more relevant over the past decades. Such relevance is mainly induced by the increasing importance of global trade and the need to enhance both structural and price competitiveness for countries to be able to better integrate international markets and draw economic advantages from trade operations. For the GCC countries, the

importance of trade competitiveness studies is reflected by a variety of research carried out in these countries, with particular applications to KSA and UAE.

Liu (2004) studied the marketing potential of dates in the European Union (EU) market. This study aims to evaluate the potential of several traditional and non-traditional date varieties in the EU market. Results from this research suggest the existence of a room to increase dates imports in the EU, but with high standards of quality, and therefore traceability of the dates needs to be met. Results also indicated that *Medjool* variety has attracted major interest in the United Kingdom and France and fetched high prices, and consequently a good market prospects for this variety accompanied with some challenges such as logistical constraints due to the low supply volume and retailer reluctances. In opposite, potential markets for *Hayani* and *Bahri* varieties seems to be limited to small ethnic communities. In another study, Kahtani (2007) focused on the comparison between specific outlets and varieties of dates in Riyadh region. Variance analysis showed a high variability of marketing margins of date's varieties such as *Al Hulawa*, *Al Sukkari* and a rather stable market attributes of *Al Sukkari* variety. Empirical findings from this study also indicate that the production of dates has increased in the last five years and opened avenues for domestic and foreign marketing channels. In addition, demand of dates will further increase with the growing population.

Mahmoudi et al. (2008) examined the potential benefits and challenges of processing, marketing and pest controls, associated with organic date palm production. Their findings suggest that some of these challenges, including marketing capacities and markets penetration, will be persistent for the dates palm sector. In a country market study of KSA, Rensburg & Letswalo (2010) analyzed the trade flows between KSA and South Africa. The method used was based on the Trade Potential Index (TPI). Their study indicated that major South Africa imports from KSA were dates. The study also indicated wide opportunities from deepening trade between both countries.

Al Shreed et al. (2012) analyzed the status of KSA dates in the global markets and their potential for exports. Their methodological framework was based on calculating the average price of dates for each of the groups of importing and exporting countries. Results identified potential strengths of KSA date palm sector that could be used either individually or collectively to strengthen the exports of dates from the KSA to each of the date importing groups of countries (Group 1: European Union, North America, Australia and New Zealand; Group 2: Eastern Europe, Turkey and Russia; Group 3: the Gulf countries in the Middle-East; Group 4: the Arab States; Group 5: South Asia). This study also identified the potential market opportunities that can be seized under each of these markets. El Habba & Mulhim (2013) analyzed the potential exports of KSA dates to the international market. Although, KSA is considered as a major date producing country in the GCC with clear revealed comparative advantage, the study considers its exported volume to be still weak. Authors suggest to enhance promotion campaigns in relevant international markets after establishing solid markets standards and applying the needed requirements of potentially relevant markets.

To go more in depth, Rashidi (2013) examined the motivation factors influencing date's exports as well as export perception by small and medium enterprises (SMEs) of the KSA. Empirical findings of this study suggest that external exporting motivations, lower risk, and higher commitment to export are the main motivation factors for enhancing the KSA SMEs involvement in dates export. More recently, Abdel Gawad et al. (2014) conducted a study in KSA with the aim to analyze production and marketing of dates in the local market, and to study general trends of date exports to the world markets. A special emphasis was given to the geographic distribution of dates exporting and the competitive position including the key determinants of competitive advantage in the world market. Authors used multi- regression model based on Porter's diamond to determine and test factors affecting the competitiveness of KSA dates such structural conditions, demand conditions, related and supporting industries, and company strategy, among others. Empirical findings from this study suggest that all factors mentioned above are key determinants and their signs and the magnitude of their statistical significance was different from expectations. In fact, the quantity of date production in KSA was negatively correlated with the value of export of dates in the country. Authors explain this result by the facts that consumption of dates in domestic market is high and is able to absorb the high quality dates, which is needed for the good penetration of external markets. Based on such results, this research suggests more studies are needed for related and supporting industries of dates in KSA, in addition to give more attention to the quality of dates, packaging and selling prices for the KSA exporting dates. As it is shown through this review, most of the competitiveness-related studies of the date palm sector in the GCC countries are focusing on KSA as being a major producer and exporter of the region. In our current study, we will rather adopt a more comprehensive approach by considering 6 GCC countries and by further looking at the intra trade flows among these countries.

### 3. Methodological Framework

Competitiveness is a complex concept which embed different indicators and involves different methods for their calculation. The competitiveness of a given sector (or subsector) can be analyzed from several perspectives (Han et al. 2009). The focus of this paper was about the competitiveness of the date subsector in the GCC countries. After a quick overview of the trends of different production and trade aggregates, the paper provides a calculation of a list of indicators which are widely used in competitiveness studies. The set of chosen indicators includes the Market Share (MS), Revealed Comparative Advantage (RCA), and the Trade Balance Index (TBI).

#### 3.1 Market Share (MS)

The Market share indicator is used to identify size advantages and the degree of specialization of a given country on the international market of a given commodity (Han et al., 2009). It is expressed as the percentage of the total available market of commodity  $i$  (market segment) which captured by a country  $j$ . MS is calculated as shown in the following equation.

$$MS_{ij} = X_{ij}/X_{iw}$$

Where  $X_{ij}$  is the export of commodity  $i$  of country  $j$ ; and  $X_{iw}$  is the world export of commodity  $i$ .

#### 3.2 Revealed Comparative Advantage (RCA)

The RCA has been defined by Balassa (1979) as a measure of international trade competitiveness of a given country for a given commodity. It is calculated as being a ratio of the export share of commodity  $j$  of a country  $I$ , compared to his total exportations (all sectors/commodities included), by the world export share of the same commodity compared to total world export (all sectors/commodities included). The RCA can be calculated as by the following equation.

$$RCA_{ij} = \frac{X_{ij} / \sum_i X_{ij}}{\sum_j X_{ij} / \sum_i \sum_j X_{ij}}$$

Where,  $X$  is the export of commodity  $i$  by country  $j$ ;  $\sum_i X_{ij}$  are total exports of country  $j$ ;  $\sum_j X_{ij}$  are total world exports of commodity  $i$ ; and  $\sum_i \sum_j X_{ij}$  are the total world exports. If  $RCA > 1$ , then a comparative advantage is revealed; if  $RCA < 1$  then a comparative disadvantage of the respective country is revealed.

#### 3.3 Trade Balance Index (TBI)

Trade balance index (TBI). It is employed to analyze whether a country has specialization in export (as net-exporter) or in import (as net-importer) for a specific group of products. TBI was used as one of the crucial variables for analyzing the catching-up economies comparative advantage. The TBI value indicates a qualitative structure of product export and import and trade flows. It is formulated as follows:

$$TBI_{ij} = (X_{ij} - M_{ij}) / (X_{ij} + M_{ij})$$

Where  $X_{ij}$  and  $M_{ij}$  represent exports and imports, respectively, of country  $i$  for product  $j$ .

The TBI value varies between  $-100$  (if a country only imports) and  $100$  (if a country only exports). Any value within  $-1$  and  $+1$  implies that the country exports and imports a commodity simultaneously. A country is referred to as “net importer” in a specific group of product where the value of TBI is negative and as “net exporter where the value of TBI is positive.

#### 3.4 Source of Data

UN COMTRADE (Note 1) and FAO (Note 2) annual time series (from 1961 to 2011) of all national aggregates including average yield, total country production, consumption, export, and import are the primary source of data used in this research. Data from both sources was continuously cross checked in order to be sure of its reliability.

## 4. Results and Discussion

### 4.1 Production and Consumption Trends, and Patterns of Date Palm in the GCC Countries

The results displayed in Table 1 show that date palm areas, production and yield are progressing quit differently among the GCC countries. KSA, Oman, and UAE have the highest harvested areas in 2014 with respectively 107 281 ha; 36 255 ha and 28 485 ha. While this area was stable in Oman during the last two decades (from 35508 ha in 2000 to 36255 ha in 2014), it has rather been decreasing in both KSA (from 142450 ha in 2000 to

107281 ha in 2014) and UAE (from 185330 ha in 2000 to 28485 ha in 2014). This decrease was the highest in UAE with more than 80% between 2000 and 2014.

Table 1. Date areas, production and yield of the GCC countries

GCC Countries	Items	Units	2000	2005	2010	2014
<b>Bahrain</b>	Area harvested	ha	823	1400	1588	3195
	Production	tons	16508	12000	12472	11164
	Yield	kg/ha	200583	85714	78527	34937
<b>Kuwait</b>	Area harvested	ha	1350	2000	5089	8931
	Production	tons	10155	15800	32561	115213
	Yield	kg/ha	75222	79000	63977	129004
<b>Oman</b>	Area harvested	ha	35508	31353	31353	36255
	Production	tons	280030	247331	276405	328392
	Yield	kg/ha	78864	78887	88159	90578
<b>Qatar</b>	Area harvested	ha	1931	1444	2469	2290
	Production	tons	16116	19844	21491	27482
	Yield	kg/ha	83459	137424	87043	120009
<b>Saudi Arabia</b>	Area harvested	ha	142450	150744	155118	107281
	Production	tons	734844	970488	991546	766800
	Yield	kg/ha	51586	64380	63922	71476
<b>United Arab Emirates</b>	Area harvested	ha	185330	185330	197400	28485
	Production	tons	757601	757601	825300	255182
	Yield	kg/ha	40878	40878	41809	89586

Source: FAOSTAT (several years).

Harvested areas in Bahrain, Kuwait and Qatar are still very limited with respective values of 3195 ha; 8931 ha; and 2290 ha during 2014. However, harvested areas in these three countries have been quickly progressing during the last two decade with an average annual increase of about 20%, 40%, and 1.38% in respectively Bahrain, Kuwait, & Qatar (Table 1).

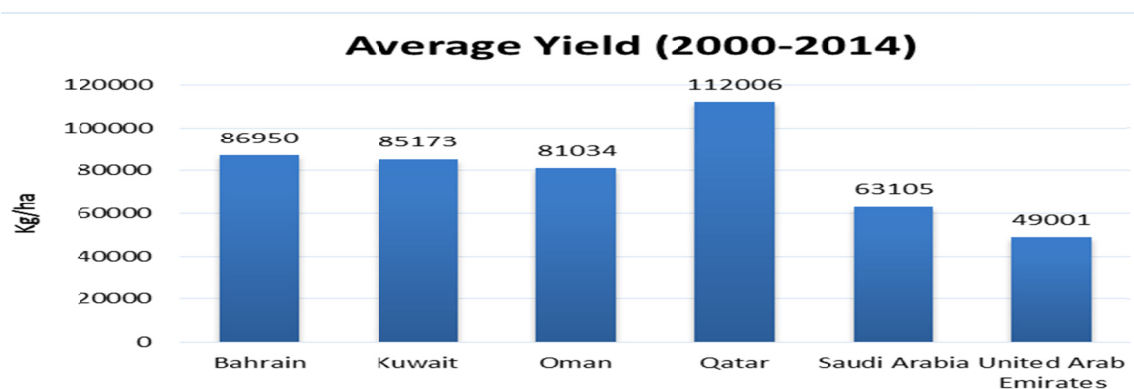


Figure 1. Average yield of dates in GCC countries calculated over the period 2000-2014

The highest average yields (calculated over the period 2000-2014) are recorded in Qatar, Bahrain, and Kuwait with respectively 112006 Kg/ha; 86950 kg/ha; and 85173 Kg/ha (see figure 1). Average yields are the lowest in Saudi Arabia and UAE, with respectively 63105 Kg/ha and 49001 kg/ha in both countries. These yield values combined to the statistics on harvested areas makes Saudi Arabia the first producer of dates in the GCC region, with an average annual production (Note 3) of 933 899 tons per year, followed by UAE producing and average of 623 900 tons per year. More insight about the production levels (total domestic production quantities) of dates and their historical trends, including annual growth rates are given in the Figure 2.

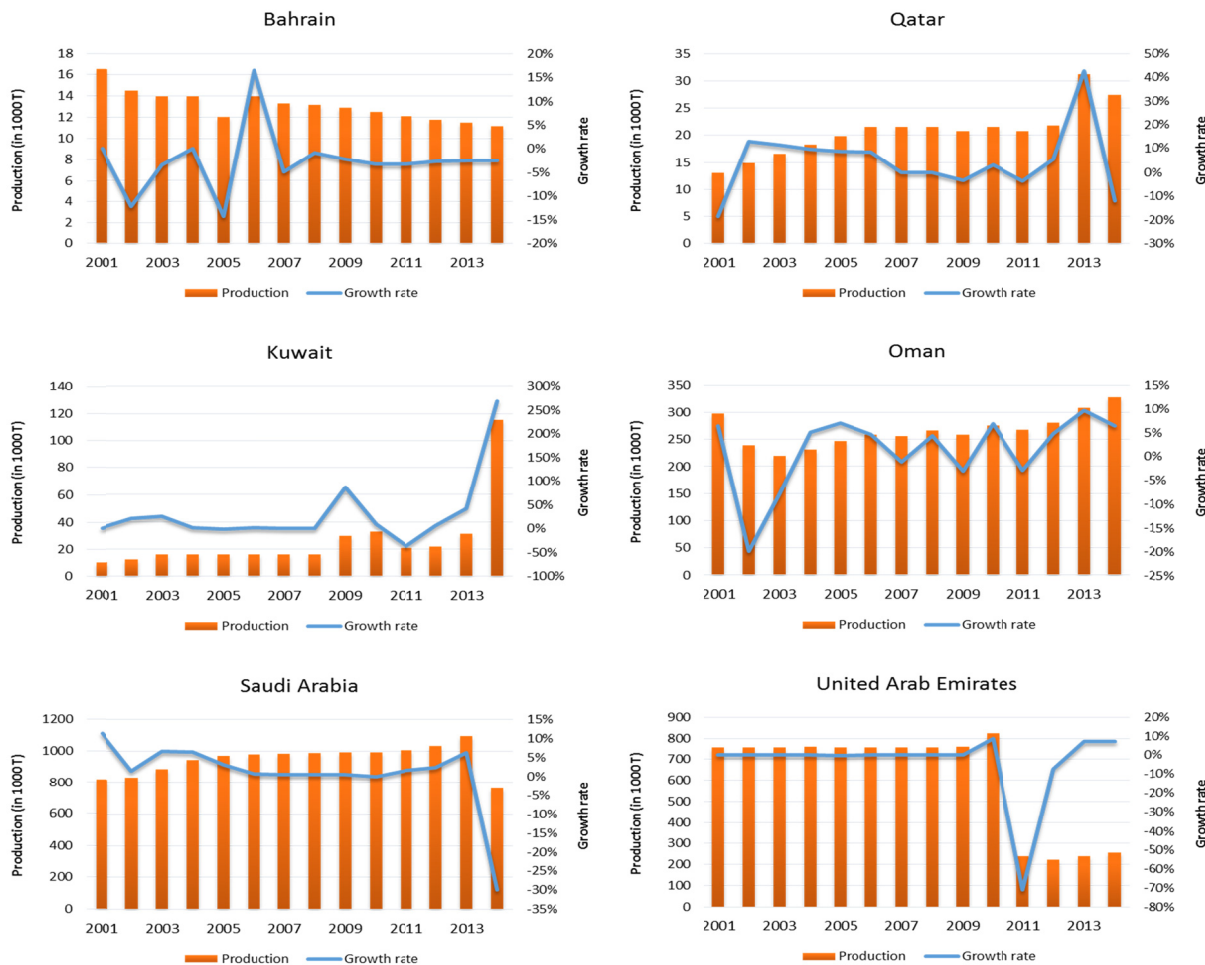


Figure 2. Production trends of dates in GCC countries

In terms of consumption, the FAO figures show that Dates consumption per capita is the highest in Oman with a value of 68 Kg/capita/year, followed by Saudi Arabia with a value of 34 Kg/capita/year (Figure 3). However, consumption statistics on Qatar, and Bahrain are not available. The trends of dates consumption per capita in the considered countries is shown to be decreasing during the period 2000 to 2013.

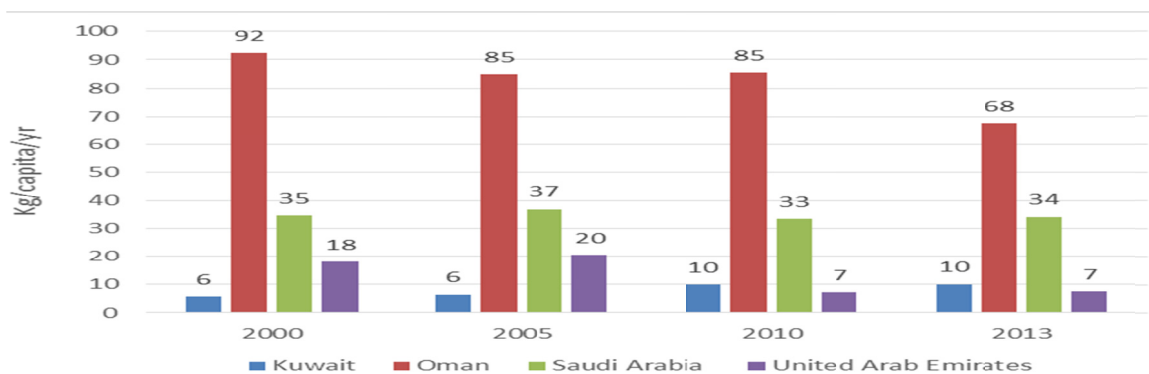


Figure 3. Trend of date consumption per capita, year (in Kg), 2013 data

Part of date production is also used as feed in some countries. This practice is not only observed in GCC countries, but is also frequent in other North African countries such as Tunisia. Another part of date production is

wasted. Figure 4 shows some figures of dates quantities used as feed and wasted in the considered GCC countries. It shows that up to 38% of the dates production was served to animals as feed in UAE during 2013. For Oman and Tunisia, this figure is variable between 4% and 15%, among years. The volume of wasted dates is also important in the considered countries. The lowest wasted percentage (of production) is recorded in Saudi Arabia (1%), while a highest rate of 13% is recorded in Kuwait.



Figure 4. Quantities and percentages of wasted dates and dates used as feed for selected countries

#### 4.2 Date Palm Trade Matrix of the GCC Countries

The trade matrix of dates for the GCC countries is represented through a list of exported quantities from each of these countries to different destinations in the world. However, due to the high number of destinations, we only summarized in Table 2 the number of countries to which each of the respective GCC countries are exporting to. We also added the exported quantities of dates and their respective value, for each GCC country. Results in table 2 shows that KAS and UAE are the most active in terms of market diversification expressed by the number of countries to which they are exporting dates. In 2015, UAE was exporting to 103 countries, while Saudi Arabia was exporting to 66 countries. Qatar and Oman are also exporting to high number of countries, with respectively 62 and 28 export destinations.

Table 2. Number of dates exporting markets for each of the GCC countries

	2012			2015		
	Number of countries	of Exported quantities (Tons)	Value of export (1000 US\$)	Number of countries	of Exported quantities (Tons)	Value of export (1000 US\$)
<b>Oman</b>	23	5814.9	7745.6	28	9141.6	11981.5
<b>Bahrain</b>	2	43.8	33.1	4	10.0	16.5
<b>Kuwait</b>	19	363.9	337.7	18	564.4	397.2
<b>Qatar</b>	n.a	n.a	n.a	62	534.8	351.4
<b>Saudi Arabia</b>	60	64299.0	74859.5	66	120358.0	136263.6
<b>UAE</b>	98	304090.5	129177.2	103	309782.1	171897.1

Note. n.a: not available.

Source: UN COMTRADE database; (na: not available). Number of countries shows the number of countries to which each of the respective GCC countries is exporting dates; Exported quantities are expressed in Tons; Value of export is expressed in 1000 US\$.

In addition to the figures in table 2, we wanted to stress the intensity of date exchange, particularly among the GCC countries (Figure 5). Figures show again that KSA and UAE are the most active in terms of export on the GCC market, with high and growing export values to the different GCC countries. On the GCC market, UAE is mostly exporting to Oman, followed by KSA and Qatar. While Saudi Arabia is mostly exporting to UAE followed by Kuwait and Qatar. Most of the Omani dates is also exported in the destination of UAE, which is showing that UAE is the first exporter and importer partner of Oman. This can be due to different consumers' preferences for dates in both countries and/or to different performances of dates processing companies in both countries.

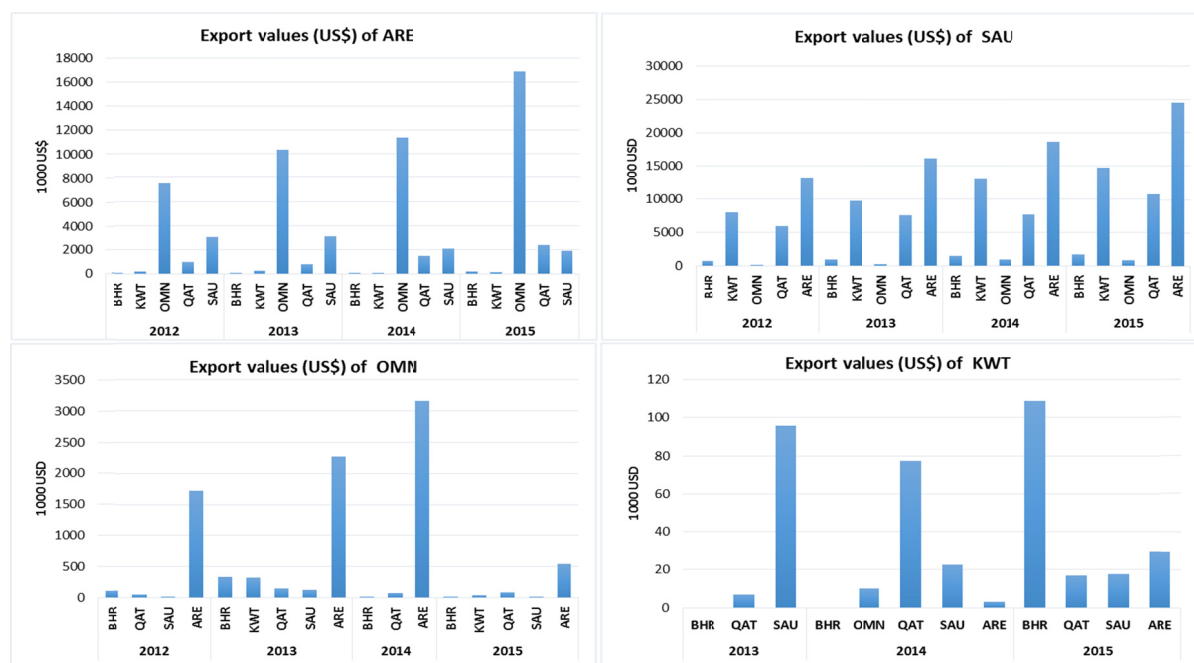


Figure 5. Export trade of dates among the GCC countries (UAE: United Arab Emirates, SAU: Saudi Arabia; OMN: Oman; and KWT: Kuwait) (Source: COMTRADE UN database)

#### 4.3 Trade Performances of Dates: Results of Indicators Calculations

##### Market share indicator (MSI)

This section considers the GCC share in world export market of dates (trade between and beyond GCC economic area), and compares this share with the main competitors. The analysis shows that GCC and North African countries are holding more than 70% of the international market of dates. Figure 6 shows how this market is shared among the GCC countries and their direct competitors from North Africa, such as Tunisia, Algeria, and Egypt. In addition to Israel, who constantly holds around 10% of the international market of dates, Tunisia is dominating in terms of market share, with an average value of around 25% over the last decade. Algeria and Egypt are simultaneously holding around 4.2% and 3.8% of the market (Figure 6).



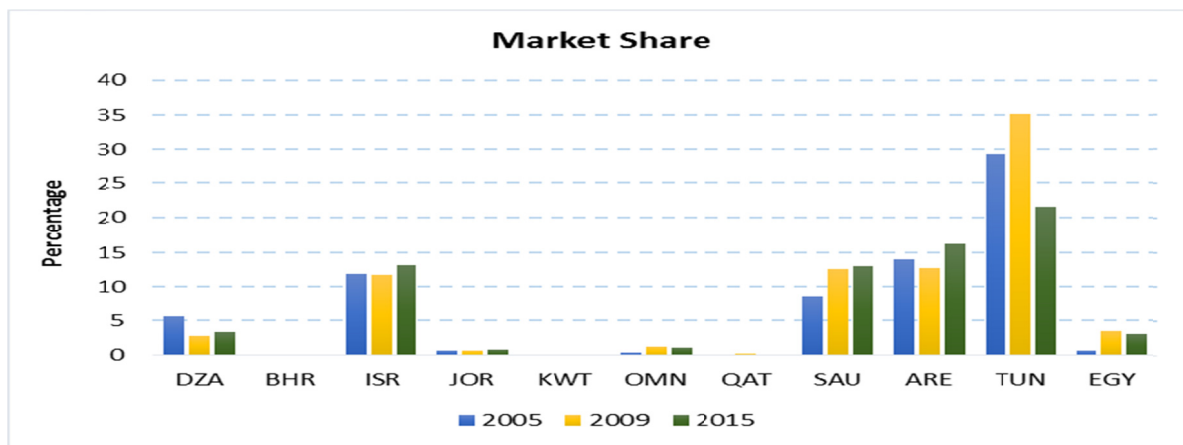


Figure 6. Market share of selected dates exporting countries, including GCC countries and their competitors

The sum of market shares of the 6 GCC countries was about 30% of the international date market during 2015. This is showing that these countries together have strong potential for dominating the dates market (Figure 6). This total share was constantly progressing during the last decade, from a total value of 22.98% in 2005 to 30.49% in 2015. This progress especially refers to the rapid increase of KSA, UAE, and Oman market shares as shown in Figure 7.

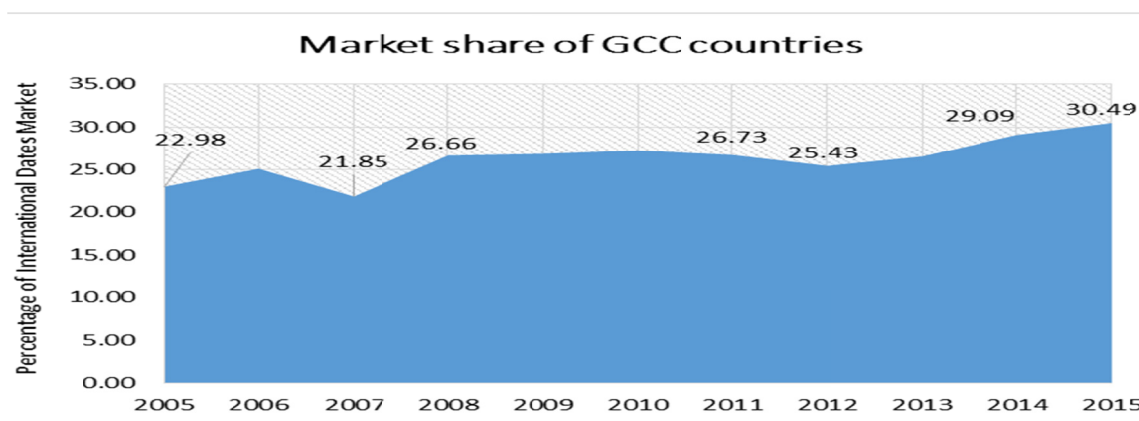


Figure 7. Trend of the GCC market share (sum of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and Emirates) during the last decade (2005-2015)

Figure 8 is providing the values of market shares separately for the GCC countries. The reason is that the market shares of Bahrain, Kuwait, and Qatar are much smaller than these of Oman, UAE, and KSA, in such a way that the presentation of all figures together might hide the small shares (values) of the least important countries in terms of market share. In terms of progress, it is clear that all GCC countries, including the least present on the international market are progressing quite positively with increasing shares from one year to another. This is especially true for Qatar and Kuwait. Oman, KSA, and UAE, also have the same trend with market shares increasing respectively from 0.34%, 8.65%, and 13.97% in 2005 to 1.14%, 12.95%, and 16.33% in 2015.

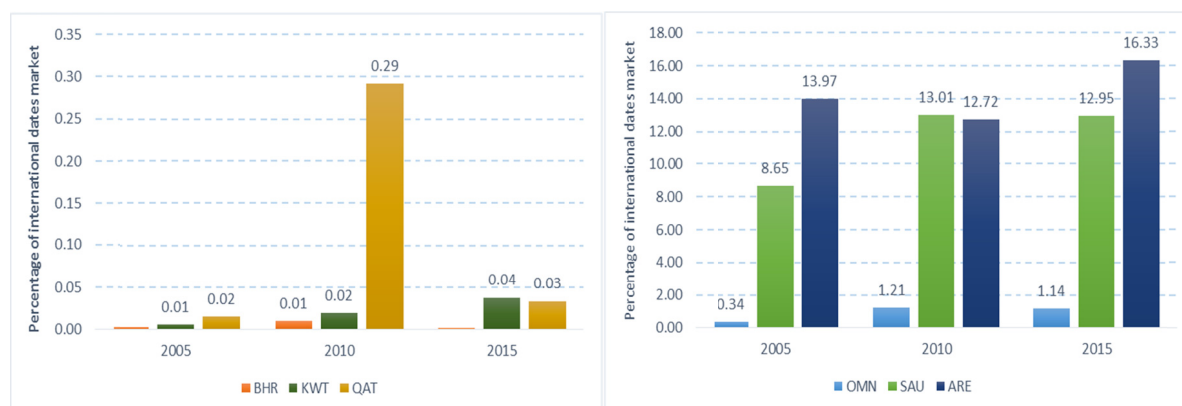


Figure 8. Market share of GCC countries on the international date market

Based on these findings, it is clear that coordination between the different trade strategies of the GCC countries, through specialization and division of tasks, can generate important opportunities for gaining more weight on the world market of dates. Dates producers and producers organizations in major GCC countries, for instance, can interact regularly with dates processing and packaging manufactories and learn about exigencies and requirements on different markets. Processing manufacturers can also develop strong interactions with date producer's organization to ensure the alignment of production procedures with specific international markets standards and norms. This type of interactions among the professional organizations within the GCC countries can be mutually advantageous and self-reinforcing, but will not happen without effective coordination at the policy making levels.

#### *“Revealed Comparative Advantage” of dates for the GCC countries (RCA)*

The revealed comparative advantage is an index used in international economics for calculating the relative advantage or disadvantage of a certain country in a certain class of goods or services as evidenced by trade flows. It is based on the Ricardian comparative advantage concept, with the assumption that commodity patterns of trade reflects inter-country differences in relative costs as well as in non-price factors.

The higher the RCA index value, the greater the importance of date relative to other agricultural exports. Thus, an RCA index of 43.5 for KSA in 2013, would indicate that the country dates export share for 2013 is 43.5% higher than its share in total world export of agricultural goods.

Table 3. Revealed comparative advantage of date trade for the GCC countries and their competitors

Countries	2002	2005	2007	2010	2013
DZA-Algeria	672.79	384.06	436.61	318.33	110.97
BHR – Bahrain	1.51	0.37	0.94	0.36	0.06
ISR – Israel	32.04	60.66	44.62	54.06	78.38
JOR – Jordan	4.97	6.30	6.83	7.71	7.08
KWT – Kuwait	4.09	na	0.73	1.71	1.04
OMN – Oman	9.71	5.39	22.67	17.29	12.98
QAT – Qatar	1.48	3.17	2.94	na	na
SAU – Saudi Arabia	104.68	45.11	31.67	47.13	43.51
UAE – Emirates	na	37.54	40.35	na	45.10
TUN – Tunisia	463.26	199.43	227.93	323.80	228.73
EGY – Egypt	7.23	4.02	3.43	14.67	10.19

Note. n.a: not available.

Source: Calculations from UN COMTRADE dataset (several years).

Results of the RCA calculation, shown in table 3 are very close the RCA patterns identified by El-Habba & Al-Mulhim (2013), with Kuwait and Bahrain having no RCA during the study period, and KSA and UAE having the highest comparative advantages among the GCC countries. Among competitors, Tunisia and Algeria are the countries with the highest RCA in terms of date trade.

In this study, we also used both FAOSTAT and UN COMTRADE data bases as some small differences exists

among both in terms of quantities and values of date traded. Results in Table 3 below were computed from UN COMTRADE data, while the results showing the trends of RCA in each of the GCC countries were calculated from FAOSTAT data (Figure 9). Results from both data sources are converging and confirming the RCA patterns also identified by other studies such as El-Habba & Al-Mulhim (2013).

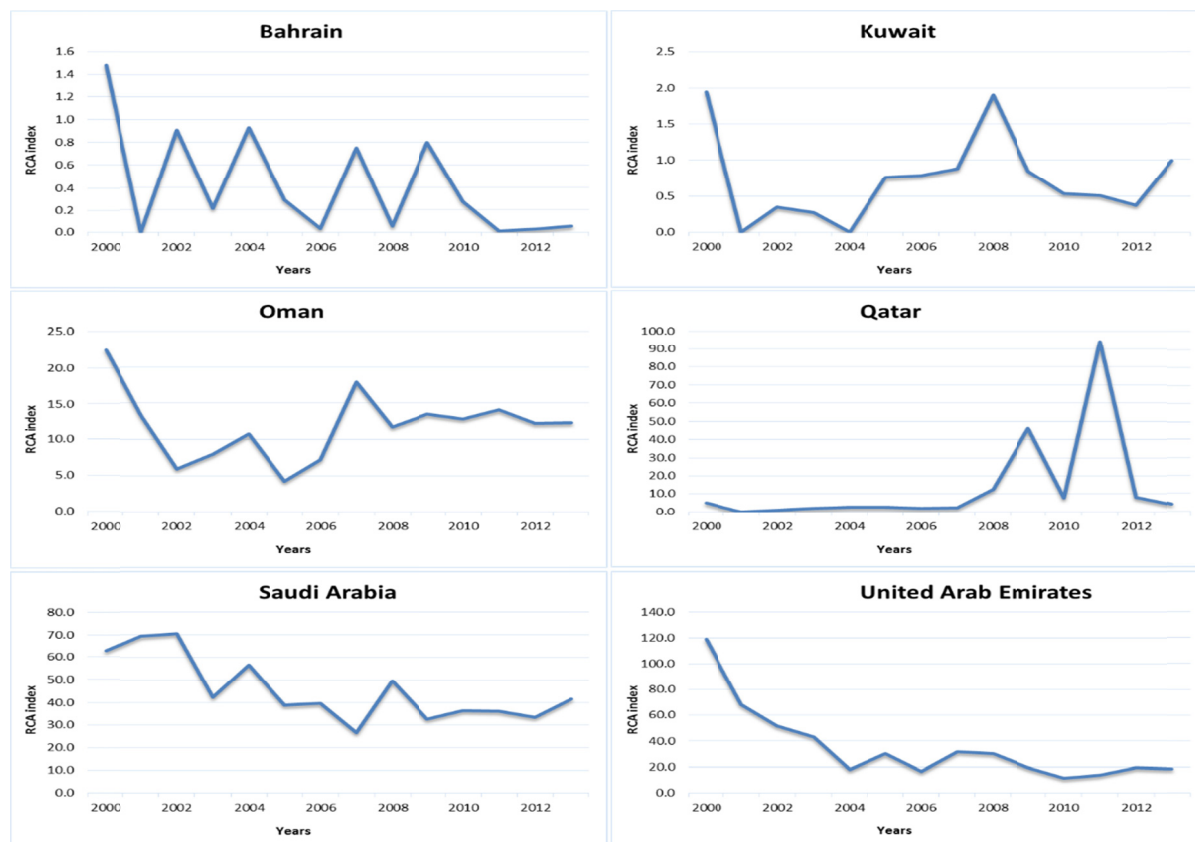


Figure 9. Trend of the Revealed comparative advantage of date trade for the considered GCC countries (for the period 2000-2013)

Source: Calculations from FAO dataset.

#### Results of "Trade Balance Index" (TBI)

The trade balance index is an indicator of countries specialization in either export or import of a given commodity. As argued in section 3.3, any TBI value comprised between -1 and +1 indicates that the country is both importing and exporting date on the international market. Negative values of TBI (as highlighted in table 10), refer to countries which are net importers while positive values refer to net exporter countries.

Table 4 shows the existence of structural differences between KSA and UAE in terms of dates export and import patterns. These two countries are both the main players in date export in the GCC area. However, even though UAE is a net exporter of dates, its TBI is much lower than the TBI of KSA, showing that UAE is also importing a higher proportion of its exported dates compared to KSA. KSA is a net exporter with very limited quantities of date importation. Most of its date export is essentially driven by domestic production.

Table 4. Trade Balance Index of dates for the GCC countries and their competitors

Countries	2001	2005	2008	2010	2013
DZA-Algeria	1	1	1	1	1
BHR – Bahrain	-0.83	-0.95	-0.67	-0.90	-0.97
ISR – Israel	1	1	1	1	1
JOR – Jordan	-0.72	-0.50	-0.40	-0.41	-0.44
KWT – Kuwait	-1.00		-0.99	-0.95	-0.91
OMN – Oman	0.98	-0.32	-0.60	-0.18	0.01
QAT – Qatar	-1	-0.95	-1	-1	-1
SAU – Saudi Arabia	1	0.90	0.83	0.96	0.95
UAE – Emirates		0.17	0.05		0.14
TUN – Tunisia	1	1	1	0.99	0.99
EGY – Egypt	-0.04	0.77	0.55	0.84	0.68

Note. Positive values indicate that the country is a net exporter. Negative values indicate the country is a net importer.

In 2013, Bahrain, Kuwait, and Qatar were recorded as net importers of date, with most of their domestic consumption coming from importations. In 2013, the TBI values for these countries were respectively about -0.97, -0.91, and -1.

### 5. Concluding Remarks and Implications

The present study was mainly focusing on analyzing the trade performances of GCC countries on the international market of dates. A list of performance indicators, including the Market shares, revealed comparative advantage, and trade balance index, have been measured. The assessment and comparison of these indicators among the considered countries can be used for setting improved trade strategies and access to more valuable market opportunities.

Results of our analysis have shown the market share of the six GCC countries considered was about 30% of the international date market during 2015. The findings implies that GCC countries together have strong potential for dominating the international date market. In terms of RCA, the highest RCA value was recorded for KSA, showing that the country dates export share for 2013 is 43.5% higher than its share in total world export of agricultural goods. Moreover, KSA had a positive trade balance, showing that this country is the only net exporter of date in the region. Despite the high RCA indicators of UAE, its TBI was lower than KSA showing that UAE is also importing a higher proportion of its exported dates.

The date trade patterns among the GCC countries shows the existence of a wide scope of coordination between the different trade strategies of these countries, through specialization and division of tasks. This can generate important opportunities for gaining more weight on the world market of dates. Dates producers and producers organizations in major GCC countries, for instance, can interact regularly with dates processing and packaging manufactories and learn about exigencies and requirements on different markets. Processing manufacturers can also develop strong interactions with date producers' organizations to ensure the alignment of production procedures with specific international markets standards and norms.

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## Notes

Note 1. <https://comtrade.un.org/data/>

Note 2. <http://www.fao.org/faostat/en/>

Note 3. Calculated over the period 2000-2014.

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