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**The Proposal of Common Market among Syria,
Lebanon, Iraq and Iran**

Investigating opportunities for agricultural trade

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Forward

The years 2011 and 2012 witnessed a series of trade, financial and economic sanctions against Syria in the course of the crisis that has been hitting the country. The main characteristic of these sanctions is that they were imposed by Syria's traditional trading partners (i.e. Arab countries¹ and the EU).

These developments stimulated economic analysts and decision makers to re-visit Syria's trading directions, and look for strengthening trade relations with other partners who maintained their economic relations with Syria during the crisis. Thus, Syria cabinet announced the new direction of its diplomatic and trade relations, which is called "stepping easterly"². Also, specialized newspapers published several articles that signaled the idea of establishing common market comprising a number of the region's countries, which can be useful for Syria in terms of filling the gap left by trade boycott due to the recent sanctions.

At this moment, the idea of a common market that comprises Iran, Iraq, Syria and Lebanon sparkled. These four countries form an extended geographically region that has important and multiple economic qualifications. Also, its potential bilateral trade is still largely unexploited.

This paper is sought to look into the actual possibility of establishing such market, and investigate the horizons and opportunities which could be materialized through that market; these horizons and opportunities that can serve as a trade basis for Syria to rely on it, and build upon it a major part of Syrian near-future trade composition.

¹ Excluding Lebanon, Jordan and Iraq.

² A declaration of the Minister of Foreign Affairs www.in-syria.net/news/4619/

Outline

Introduction: the meaning of common market

Economic and trade background for each of the four countries

Agricultural tariff in each of the four countries

Trade relationships between Syria and each of these countries

Current agreements

Are there production advantages for any of these countries?

Using trade indexes to discover trade future opportunities for Syria with these countries

The most relevant example for the region – the East African Union Common Market as a pattern

Conclusion

Recommendations

1. The meaning of common market

The unified market is a trade bloc formed by a number of countries. The market legislations imply a free trade area for goods, and impose general and common policies related to trade and trade organization. The legislations also secure free movement among member countries for production factors, such as individual persons, capitals, goods and services. That is, the movement of these factors across borders of the member countries is as easy as within the one member country. Furthermore, fees and non-trade barriers (NTBs) at the common borders are to be abolished as much as possible.

The common market, however, is the primary step towards establishing a unified market. It implies a free trade area with relatively (but not absolutely) free movement for production factors among member countries. Moreover, in the context of common market, some NTBs may still be at place.

The common market becomes a custom union once a unified custom system is added to the establishing agreement, such as the case of the EU.

The common market (and ultimately, the unified market) is distinguished by its high competitive nature due to the free movement of production factors, thus making the occurrence of monopolization cases in the market very difficult. Moreover, it generally results in a reduction in market shares of inefficient producers, or even it results in their withdrawal from the market, while efficient producers can benefit from economies of scale and the reduction in production costs. In addition, consumers in the common market's countries also benefit from the various alternatives and the availability of products with lower prices. Yet, the shift towards common market may cause injuries for some sectors on the short run as a result of increased competition and decreased protection and governmental support.

1.1. Is monetary unity required?

During the stage of common market, the monetary unity among member countries is not required, though such a unity, if exists, would encourage greatly the trade integration; reduce costs of bilateral trade and increase transparency and predictability. Nevertheless, it would be very useful for member countries to agree on adequate and harmonised monetary policies. It is also preferable to legitimize using member countries' national currencies in central and state-owned banks, so the trader can run his/her financial transactions with other member countries' currencies as easily as with his/her national currency.

2. Economic and trade background for each of the four countries³

2.1 Syria

Syria has an area of 185,180 sq km, and population of 23 million (2010). Syria's total GDP reached US\$ 59.3 billion in 2010, and GDP per capita was slightly more than US\$ 5000 (the figure of 2011). Agriculture sector contribution in GDP represents 18%, industry 26% and services 56% (figures of 2010). The volume of labor forces is 5.5 million habitants (figures of 2010), and 17% of them work in agriculture.

In 2010, total value of Syrian exports was US\$ 12.8, and total value of Syrian imports was US\$ 13.8. Main exports are oil and minerals, fruits and vegetables and cottons respectively. Major imports are machines and transport vehicles. The most important exporter for Syrian market was China in 2009, dominating almost 11% of Syria's total imports.

The Syrian economy is distinguished by its diversity, though it is concentrated around oil, agriculture and tourism sectors. Agriculture has the priority in development plans, where the state supports substantially the sector, directly through Agricultural Support Fund, and indirectly through other entities. The country is suffering an increasing wave of drought, as well as unfavorable surrounding political conditions, particularly the sanctions imposed by Arab League, the EU and the USA recently in 2011 and 2012.

2.2 Lebanon

The total area of Lebanon amounts to 10,215 sq km, and the total population of Lebanese people is estimated at 4 million (2011). According to 2012 estimations, Lebanese total GDP was US\$ 41.5 billion. GDP per capita was US\$ 11000 in 2011. Agriculture contributes by only 5% of total GDP, and industry by 19%, while the rest is afforded by services. Total figure of labor forces is 1.5 million workers, and 20%-30% of them work in agriculture⁴.

The value of Lebanese exports in 2012 is estimated at less than US\$ 1 billion. These exports are mainly artificial jewels and non-organic chemicals. The major destination market for Lebanese export is Syria (25%). Lebanon's imports, however, are basically oil and cars. The value of Lebanese imports was US\$ 16.6 (figure of 2008). Syria is the main exporter for Lebanon, originating 12% of its total imports.

The Lebanese economy is characterized by a strong private sector, which represents three fourth of total demand on goods. It is also characterized by a developed banking sector. Lebanon is by far a free market, where the state doesn't intervene in the market functionality.

³ Source: Syrian Agricultural Trade report 2011 and Wikipedia Encyclopedia.

⁴ The statistics of Lebanese Ministry of agriculture

<http://www.ministryinfo.gov.lb/sub/LebaneseEconomy/Agricultureandwater.aspx>

2.3 Iraq

Iraq has a total area of 437,072 sq km, and population stands at approximately 32 million (2010). Iraq's total GDP in 2011 was US\$ 109 billion and GDP per capita was US\$ 3900. Agriculture contributes by 10% of total GDP, while industry contributes by 60% and the rest is presented by services. The volume of labor forces is 10 million workers (figure of 2010), and 22% of them work in agriculture.

Main exports are oil and minerals, and main imports are foods and medicines. Total exports of Iraq in 2011 valued about US\$ 78 billion, while its total imports valued US\$ 54 billion. The major destination markets for Iraqi exports are the USA and India, whereas the main exporting markets to Iraq are Turkey and Syria respectively (24% and 19%).

Oil sector dominates the economy of Iraq, where 95% of its earned hard currencies are brought in by that sector. Iraq suffered the war and security turmoil in the last decade, but it has started recovering in recent years. Iraq is a net food importer despite the facts that 30%-40% of its arable lands are still unexploited, and water resources are robustly available.

2.4 Iran

Iran which has an area of 1,648,000 sq km, and 77 million population (2012). Iran's total GDP equals to US\$ 990 billion, and GDP per capita equals to US\$ 6360. Agriculture contributes by 11% of total GDP, industry by 42% and the rest comes from services. Total labor force is 26 million workers (figure of 2010). Agricultural labor force represents 30% of total labor force.

Iran exports' value was US\$ 84 billion, majorly to China and India, while its imports' value was US\$ 59 billion, distributed among several countries, mainly the UAE and China (2010 statistics). The most important Iranian exports are oil and chemical products, whereas the most important imports are commodities used as inputs for industry, and capital goods. Food and agricultural products form less than 19% of Iranian imports.

Iranian economy ranks 17th in the world on the scale of purchasing power parity (PPP), and 26th on the scale of market value. The Iranian economy is passing through a transformative phase, and is still dominated by the state (50% of its activities are centrally planned).

The following table summarizes the economic characteristics of the four countries:

Table 1: some economic characteristics for the four countries.

Country	GDP (billion \$)	GDP per capita (1000\$) ⁵	Agriculture contribution in GDP	Main importers	Main exporters
Syria	⁶ 59.3	5	%18	Iraq, Lebanon	China
Lebanon	⁷ 41.5	11	%5	Syria	Syria
Iraq	⁸ 109	3.9	10	USA	Turkey, Syria
Iran	⁹ 990	6.4	%11	China, India	China, UAE

Table1 shows that the four countries have relatively near-similar levels of livelihoods, and by large, there are substantial trade relations among them. It is also clear that Syria is the one has clearest agricultural face among then, followed by Iran. Therefore, at the first glance, it can be drawn that there are promising agricultural investment opportunities for Syria in the other three countries, taking into consideration the largely immature agricultural sector in these countries.

In this respect, it is worth to mention that if agricultural labor force and agricultural contribution to GDP are compared, Syria seems balanced while the other three countries have substantial agricultural labor but limited agricultural contribution to total GDP; this reflects the weak farming sector in these countries, and consequently, the existence of opportunities for common cooperation.

3 Agricultural tariff in each of the four countries

Before dealing with the issue of tariff in each of the four countries, it should be noted that all of these countries are “observers” in the WTO, that is, none of them has completed its accession process to the organization. Accordingly, there is no MFN tariff¹⁰ in each of them. However, there are general tariffs, and special tariffs dedicated for free trade agreements.

⁵ 2011 estimations.

⁶ 2010 estimations.

⁷ 2012estimations.

⁸ 2010 estimations.

⁹ 2011 estimations

¹⁰ When a country becomes a full WTO member, it has a tariff called most favored nation (MFN) tariff, which refers to the tariff applied for imports from all other WTO members. It is called so because all other WTO member countries are “most favored nations” – there is no discrimination between this and that member countries.

3.1 Agricultural tariff in Syria

Syrian agricultural tariff is disparate: it is 3% for sheep and goats as well as rice and raw sugarcane, and it is 1% for maize, soybean, barley, wheat and plant oils; however, it reaches 50% for citrus and figs, as well as some other fruits and vegetables¹¹.

3.2 Agricultural tariff in Lebanon

Lebanese custom system is distinguished by the quantitative fees, besides tariffs. Thus, it is more complicated than Syrian custom system, which rarely imposes quantitative fees. The tariff for goats is 5% while there is no tariff for sheep. Most cereals also have no tariff except rice (5%). In general, Lebanese agricultural tariff is zero, yet some quantitative fees exist occasionally.

3.3 Agricultural tariff in Iraq

Agricultural tariff in Iraq is relatively high, reaching 10% for sheep, goats and meats, and 5% for cereals whatever they are.

3.4 Agricultural tariff in Iran

Agricultural tariff in Iran is the highest comparing with the other three countries. It is 25% for raw agricultural commodities and 15% for processed agricultural products. The reason behind this high tariff is supporting and protecting local agricultural production. In addition, Iran imposes substantial quantitative fees, besides agricultural tariffs.

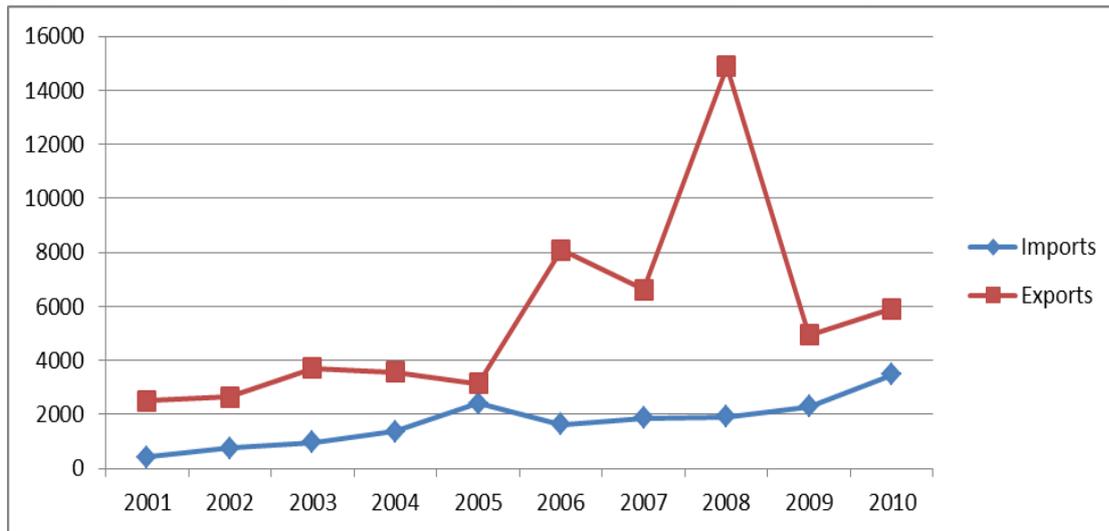
4 Trade relationships between Syria and each of the other three countries

4.1 Trade relation with Lebanon

Syrian Lebanese trade relationships are longstanding and mature, where Syrian agricultural exports to Lebanon reached 6 billion S.P. in 2010; total Syrian agricultural exports reached 133 billion SP in the same year. Identically, Syrian agricultural imports from Lebanon reached 3.5 billion SP while Syria's total agricultural imports reached 192 billion SP. However, Syria's agricultural exports to Lebanon fell in 2009 due to the unfavorable climatic conditions that the country passed through in 2007 and 2008. Yet, Syrian agricultural imports stayed steadily increasing. Here is a figure that illustrates the trends of agricultural trade between Syria and Lebanon in recent years.

¹¹ For further information about Syrian agricultural tariffs, please refer to "Studying the Impact of Syria's Accession to the WTO on Agricultural Sector".

Figure 1: trends of Syrian Lebanese agricultural trade, (2001-2010), million SP.



Source: NAPC database

Furthermore, Lebanon-Syria Treaty of Brotherhood, Cooperation, and Coordination signed in 1989 established the basis for mutual cooperation in all sectors, including trade, where the legal text of the treaty implies the creation of an economic and social affairs' committee. According to the text, the committee is to consist of concerned ministers from both sides, and is to be entitled to coordinate economic and social cooperation. The committee's recommendations become obligatory once the Supreme Syrian Lebanese Council approves them.

On the other hand, Syria and Lebanon are member countries of the Great Arab Free Trade Area (GAFTA), which means that tariffs are zeroed between the two countries.

4.2 Trade relationships with Iraq

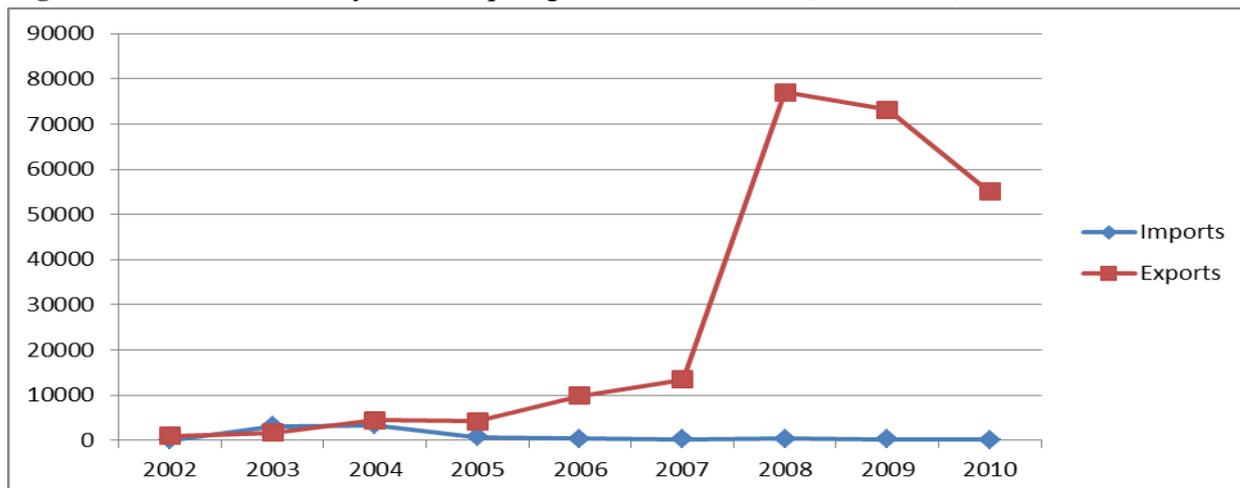
Trade relationship with Iraq passed through several phases: in the 90s of the last century, it was very weak, then it mounted at the early years of first decade of current century, but after the war in Iraq, Syria's agricultural imports from Iraq slumped down in accordance with Iraq's internal circumstances, while Syria's exports remained at the same level. In recent years, Syria's agricultural exports to Iraq increased substantially, whereas Syria's agricultural imports continued to decrease.

In 2010, Syria's agricultural exports to Iraq exceeded 55 billion SP, which accounts for more than 40% of total Syrian agricultural exports. Identically, Syria's agricultural imports from Iraq were about 104 million SP, which represent less than 0.1 per cent of total value of Syrian agricultural imports.

It should be mentioned also that Iraq is a GAFTA member country, just like Lebanon, which means that tariff for traded goods between Syria and Iraq is zero on both sides.

Figure 2 illustrates the development of bilateral trade in recent years.

Figure 2: trends of Syrian Iraqi agricultural trade, (2001-2010)¹², million SP.



Source: NAPC database

4.3 Trade relations with Iran

Despite the close political relations between Syria and Iran, trade relations have not been at a satisfying level. Statistics reveal a very limited bilateral trade flows, particularly in terms of agricultural products. However, since 2007, Syrian agricultural imports from Iran have been growing steadily, while Syrian agricultural exports to Iran have been slumping.

Syrian agricultural exports to Iran in 2010 accounted for 276 million SP, from 133 billion SP as the total value of Syrian agricultural imports. Syrian agricultural imports from Iran, however, accounted for 1.8 billion SP; this represents about 1% only from total value of Syrian agricultural imports (192 billion SP).

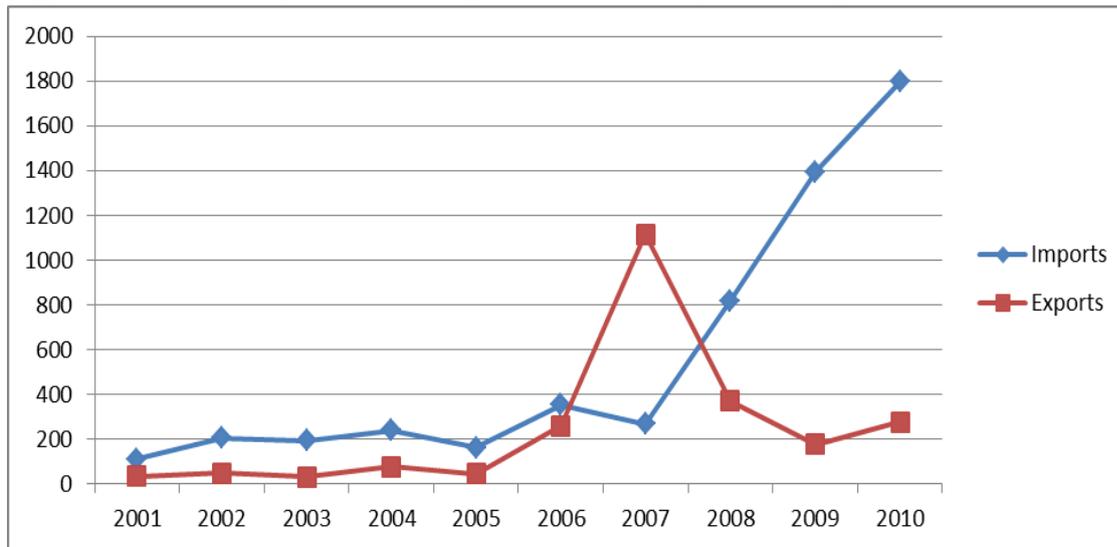
Syria and Iran launched bilateral negotiations in 2007 to establish a common free trade area. Later, the negotiations succeeded in establishing a preferential trade agreement that was enforced in 1-3-2009. The agreement reduces tariffs on exchanged goods between the two countries, and covers several sectors including agriculture¹³. Nevertheless, the agreement's trade reflections, particularly its agricultural trade reflections, remained limited. Yet, recently in 8-3-2011, the two countries signed a bilateral free trade agreement that implies a large liberalization of bilateral trade; it provides that a free trade area will be established within a transitional period that can be 5 years at most. The agreement covers particularly agricultural trade, and is expected to make important change in terms of raising bilateral agricultural trade level, as well as other trade sectors.

Followingly, a figure clarifies the development of bilateral agricultural trade between Syria and Iran in the last decade.

¹² No trade data available for 2001.

¹³ Please see Syrian Agricultural Trade report, issues 2008-2009 and 2007, Chapter 4, Agreements signed by Syria.

Figure 3: trends of Syrian Iranian agricultural trade, (2001-2010), million SP.



Source: NAPC database

5 Production advantages

It is noticeable that there is similarity in the building of Syrian and Lebanese agricultural sector, which makes it difficult to find an agricultural product in which Lebanon has a production advantage, if compared to Syria; however, the contrary is not difficult (i.e. finding a production advantages for Syrian agricultural products, comparing with Lebanese products). Iraq, however, has commonly a weak agricultural sector, and several Syrian products can have production advantages in its markets; nevertheless, very few Iraqi agricultural products can have production advantages in Syrian markets. Lastly, agricultural sectors in Syria and Iran have different buildings, which may indicate potential trade opportunities, and some production advantages for products of each country in the other. Here is a detailed review for this.

5.1 Lebanese agricultural products and production advantages

Lebanon is a narrow strip with 50% of its land mountains. Thus, a substantial production of any agricultural product is not expected. Nevertheless, vegetables and fruits are produced beyond other Lebanese agricultural products, forming 60% of total agricultural exports. Yet, Lebanon imports 75% of its requirements of cereals.

Looking into the vegetables and fruits that Lebanon could be distinguished with (if compared to its neighbors), banana plantation is worth mentioning. Banana plantation succeeded in the south of Lebanon (though it also succeeded in the Syrian coast). Furthermore, there is a possibility for a rocketing production in the framework of the so-called “exploiting marine bio-treasures”.

5.2 Iraqi agricultural products and production advantages

Iraq has production advantages in producing (and thus exporting) several agricultural products and commodities, such as fruits, vegetables, dates, some kinds of cereals and oil plants, and some live animals like sheep. Nonetheless, these advantages are still not

exploited for production purposes, and Iraq needs an extended time period to tangibly develop them¹⁴.

5.3 Iranian agricultural products and production advantages

Arable land in Iran accounts for one third of the country's total area, yet most of this land is uncultivated due to the unfavorable soil and the unavailable water. Also, 11% of Iran's area is covered with forests. Iranian agricultural production is concentrated around cereals, dates, vegetables, grapes and pistachio. Iran is internationally the first producer and exporter of raisin. In addition, it is the first producer of Japanese maple¹⁵, and produces also many medical herbs.

6 Utilizing trade indexes to find out trade future opportunities with these countries

Concerning Syrian agricultural trade, the agricultural exports have a weakness, which is their concentration in a limited number of products. In this sense, Hershman index¹⁶, which measures exports' concentration, was 0.51 in 2005, but the figure has been improving in recent years, where it has become 0.26 in 2009.

Identically, Syrian food and agricultural products have a humble revealed comparative advantage (RCA), where these two sectors (food and agriculture) rank 5th and 6th on the scale of Syrian RCAs for the productive sectors, following textiles, clothing, fuel and mining. RCA for Syrian agricultural exports was 2.23 in 2005, but it has fallen to 1.66 in 2009. Syrian food exports' RCA, however, has fallen from 2.21 in 2005 to 1.55 in 2009.

In the following sections, three trade indexes will be conducted on some selected products to find, at a glance, the trade potential opportunities for Syria in the three countries.

6.1 Terms of Trade index

This index accounts for the price of one exported ton of given commodity (or sector) from the examined country to a trade partner country, divided on the price of one imported ton of the same commodity from the trade partner country to the examined country. This index was conducted on the chapters of Syrian agricultural trade (in accordance with the harmonized system) from 2005 to 2010 with each of Lebanon, Iraq and Iran. The results were as follows:

¹⁴ The expected impacts of liberalizing international trade on agricultural sector in Iraq.

¹⁵ It is also called berberis, a forestry tree that has medical benefits.

¹⁶ An index that measures market concentration, ranging between 0 and 1. When the index value is 1, the market is concentrated in one product, and when it is 0, that is to say the market doesn't have any concentration.

Table 2: Terms of Trade index for agricultural trade between Syria and Lebanon.

Commodity	2005	2006	2007	2008	2009	2010
Cereals	0.8	-	-	1.1	-	3.2
Products of the milling industry	2.8	-	-	0.5	0.9	2.5
Oil seeds	0.3	0.8	0.7	-	0.3	-
Animal or vegetable fats and oils	1.8	2.2	2.2	3.0	2.0	1.6
Preparation of meat, of fish	1.0	0.9	0.6	-	0.9	0.9
Sugars and sugar confectionery	0.2	0.2	0.1	0.1	0.1	0.1
Preparations of cereals, flour	0.6	0.7	1.0	0.9	0.5	0.5
Preparation of vegetables, fruit	0.8	0.5	1.3	1.0	0.9	0.7
Miscellaneous edible preparations	1.9	2.7	1.0	0.5	0.8	1.2
Residues and waste from the food industries	9.6	21.6	16.0	3.8	2.5	21.5
Tobacco	0.1	0.1	-	-	-	-
Fertilizers	-	0.4	-	0.5	16.4	1.9
Essential oils and resinoids	-	0.5	-	-	-	-
Dairy produce	1.9	-	1.1	-	1.4	-
Raw hides and skins	1.0	3.5	-	-	-	9.1
Manufactures of straw	-	0.6	-	-	-	-
Products of animal origin	2.0	-	-	2.9	2.1	1.8
Wool	2.4	-	-	-	-	-
Cotton	-	-	-	2.9	-	0.8
Other plants	8.6	2.9	-	0.5	0.5	2.3
Edible vegetables	3.1	1.8	1.8	2.3	4.5	3.0
Edible fruit and nuts	4.0	3.7	5.8	5.6	8.7	5.8
Food and animals items	1.6	1.5	1.8	3.7	2.2	2.8
Nonfood items	2.0	2.2	4.0	1.6	2.1	3.4
Processed items	1.1	1.0	2.2	1.5	0.8	1.2
Raw items	3.0	2.7	2.8	3.6	3.7	3.9

Source: the author calculations, on the basis of NAPC database

It is apparent from the table that terms of trade are largely in favor of Syria if residues and waste from the food industries are concerned, and are increasingly in favor of Syria when cereals and raw hides and skins trade are explored. Terms of trade are almost-steadily in favor of Syria in case of products of the milling industry, and are volatilizingly in favor of Syria in case of animal or vegetable fats and oils, fertilizers, dairy produce, products of animal origin, wool, edible vegetables, edible fruit and nuts and food and animals items.

Generally speaking, terms of trade are in favor of Syria, either in case of raw or processed items, and either in case of food or non-food items. This is promising news for Syrian trade with Lebanon. Yet, terms of trade are generally in favor of Lebanon in case of preparations of cereals/ flour, though these terms were neutral in 2007.

Table 3: Terms of Trade index for agricultural trade between Syria and Iraq.

Commodity	2005	2006	2007	2008	2009	2010
Cereals	3.2	-	-	-	-	-
Oil seeds and oleaginous fruits	0.7	0.4	0.2	0.9	1.5	3.6
Sugars and sugar confectionery	3.1	-	-	-	1.1	-
Preparations of cereals, flour	3.1	-	-	-	-	-
Preparations of vegetables, fruit, nuts or other parts of plants	1.3	-	-	-	-	-
Residues and waste from the food industries	2.9	-	-	-	-	-
Fertilizers	1.0	-	3.1	-	1.9	-
Dairy produce	-	-	-	0.6	-	-
Raw hides and skins	1.0	-	0.9	-	7.1	11.5
Products of animal origin	-	-	-	0.2	0.8	0.3
Wool	3.1	-	-	0.5	7.3	0.0
Edible vegetables	0.6	0.7	-	-	-	-
Edible fruit and nuts	1.0	0.6	1.0	2.1	2.8	2.9
Food and animals items	1.2	0.8	1.3	3.2	3.8	3.6
Nonfood items	2.2	1.9	3.2	3.1	1.3	1.7
Processed items	2.2	1.7	3.6	0.6	3.4	-
Raw items	0.8	0.6	1.5	2.7	3.1	2.5

Source: the author calculations, on the basis of NAPC database

As illustrated in the table, the data on Syrian Iraqi agricultural trade has a lot of gaps due to the circumstances of ex-war in Iraq, and even, some data sets for entire sections are missing. Still, in general, terms of agricultural trade are in favor of Syria, either in case of raw or processed items (particularly in recent years, concerning raw items). Also, terms of trade for each of oil seeds, raw hides and skins, edible fruits, edible vegetables and food and animal items are increasingly in favor of Syria, while fertilizers are volatilizingly in favor of Syria, as well as non-food items in general.

Table 4: Terms of Trade index for agricultural trade between Syria and Iran.

Commodity	2005	2006	2007	2008	2009	2010
Oil seeds	-	1.4	4.8	-	1.7	1.1
Vegetable plaiting materials	-	-	0.5	2.2	-	-
Animal or vegetable fats and oils	5.1	-	-	-	-	-
Preparations of cereals, flour	-	1.3	0.6	-	-	-
Miscellaneous edible preparations	-	0.6	1.1	-	-	-
Dairy produce	0.3	0.2	-	-	-	1.0
Raw hides and skins	-	8.0	-	-	-	-
Cotton	-	1.9	-	-	-	-
Edible vegetables	1.0	-	-	3.4	-	0.2
Edible fruit and nuts	0.3	-	0.2	0.5	-	0.7
Food and animals items	1.4	1.2	1.2	0.6	0.8	0.9
Nonfood items	0.7	5.8	0.6	0.8	1.4	2.0
Processed items	4.0	3.2	5.5	0.3	0.3	0.3
Raw items	0.2	0.4	0.4	0.5	0.8	0.7

Source: the author calculations, on the basis of NAPC database

In general, terms of trade are heading increasingly towards Iran, which should alarm Syrian trade sector, and stimulates it to beat this backward direction through spotting barriers to agricultural trade with Iran and simultaneously discovering the new opportunities in the mutual trade flows. Specifically, terms of trade for raw items are not in favor of Syria, while terms of trade for processed items have recently become not in favor of Syria. However, terms of trade in case of non-food items are volatilizingly in favor of Syria, whereas terms of trade for food and animals items are currently not in favor of Syria, though they were in the past; this should question the reason for this unfavorable situation and how to find adequate resolutions for it. In this respect, the trend could be driven by a possible lowering of the quality of some Syrian agricultural exported commodities.

6.2 The Consine Measure of Complementarity in Foreign Trade

The formula of this index is as follows:

$$CONSINE_{ij} = \sum_k X_{ik} * M_{jk} / \sqrt{(\sum_k X_{ik} \cdot 2)} \cdot \sqrt{(\sum_k M_{jk} \cdot 2)}$$

Where:

X_{ik} is the value of commodity k exported by country i

M_{jk} is the value of commodity k imported by country j

This index defines the volume of complementarity between the structure of local products and the needs of importing markets. Its value ranges between 0 and 1, where the complementarity is inexistent when the index value is 0, and there is full complementarity when the index value is 1.

Followingly, the complementarities for some bilaterally-traded products between Syria and each of the three countries will be examined, where these products have been chosen upon the basis of the pre-knowledge about major agricultural products in each of these markets, as has been illustrated in this paper.

It is relevant to start with the cereal sector, where as it has been mentioned, Lebanon imports 75% of its demand of cereals, while Syria is a producing and exporting country of cereals. Therefore, the complementarity for cereals sector between Syria and Lebanon, and consequently between Syria and each of Iraq and Iran (they also import amounts of cereals), will be examined.

Table 5: Syrian exports and the other three countries' imports of cereals, million \$.

Year	2007	2008	2009	2010
Syrian exports of cereals	199.2	47.7	0.5	5.8
Lebanese imports of cereals	223.3	314.9	242.2	268.1
Consine (2010)	0.23			
Iraqi imports of cereals	922.5	1433.8	1176.2	850.2
Consine (2010)	0.32			
Iranian imports of cereals	0	0	0	2284.8
Consine (2010)	0			

Source: the author calculations¹⁷, on the basis of NAPC database

It is noticeable that the results shown in the above table are not encouraging for Syria, where the index value was around zero in terms of Iran, which has no formal statistics indicating an importation of cereals, except in 2010 - this makes the index value around zero. Also concerning Lebanon and Iraq, the table shows that the index values were 0.2 and 0.3 respectively.

Accordingly, the Syrian structure for cereals production has little complementarity with the demand of Lebanese, Iraqi and Iranian markets, though Iraq is the one that could have potential trade opportunities more than Lebanon and Iran.

The second sector to be examined in this research is citrus, where Syria is a major producer and exporter of citruses. The following table reveals the result appeared from applying this index for this sector with the three countries.

¹⁷ \$ exchange rate was considered 50 SP.

Table 6: Syrian exports and the other three countries' imports of citruses, million \$.

Year	2007	2008	2009	2010
Syrian exports of citruses	11.8	57.6	107.7	117.0
Lebanese imports of citruses	0.4	1	0.4	0.7
Consine (2010)	0.26			
Iraqi imports of citruses	9.762	26.958	104.311	110.276
Consine (2010)	0.35			
Iranian imports of citruses	0	0	0	116.3
Consine (2010)	0.40			

Source: the author calculations¹⁸, on the basis of NAPC database

The table makes a point that there is no serious complementarity between Syrian citrus production structure and the demand in the three countries. Nevertheless, the situation is less bad than in case of cereals. Moreover, the complementarity with the Iranian market is reasonable (40%), which allows for some exportation to that market. The index in terms of Iraq is also reasonable to an extent (35%), while the index concerning Lebanon reveals weak complementarity, thus it is not recommended to export citruses to Lebanon, but rather, to Iran then to Iraq.

The third sector to be examined is the live animals sector, considering that Syria traditionally exports sheep, particularly *Awassi*, though to other markets rather than the three countries studied here.

Table 7: Syrian exports and the other three countries' imports of live animals, million \$.

Year	2007	2008	2009	2010
Syrian exports of live animals	238.3	223.2	133.9	203.0
Lebanese imports of live animals	154.064	169.281	257.712	324.85
Consine (2010)	0.24			
Iraqi imports of live animals	1.54	6.757	2.959	4.736
Consine (2010)	0.25			
Iranian imports of live animals	0	0	0	533.60
Consine (2010)	0.25			

Source: the author calculations¹⁹, on the basis of NAPC database

¹⁸ \$ exchange rate was considered 50 SP.

The results of conducting the Consine Measure of Complementarity for this sector seem disappointing, and the index value is almost the same for each of the three countries; always around 0.25.

The last sector to be studied in the context of the Consine Measure of Complementarity is the olive oil sector. Results are as follows:

Table 8: Syrian exports and the other three countries' imports of olive oil, million \$.

Year	2007	2008	2009	2010
Syrian exports of olive oil	248.3	136.7	60.8	60.6
Lebanese imports of olive oil	5.8	2.5	7.7	9.2
Consine (2010)	0.22			
Iraqi imports of olive oil	1.54	6.757	2.959	4.736
Consine (2010)	0.22			
Iranian imports of olive oil	0	0	0	3667.4
Consine (2010)	0.12			

Source: the author calculations²⁰, on the basis of NAPC database

The index shows weak complementarity between Syrian production of olive oil and the demand structure of the three markets, particularly Iran, thus discouraging the exportation of olive oil to these markets.

6.3 Price Competitiveness Index (PCI):

This index measures the price advantage for a given commodity for an exporting country in an importing market; that is, the price competitive advantage for the exporter. The index value oscillates around 1: if it is greater than 1 then there is a higher price advantage for the product which the exporting country wants to export to the destination market, and vice versa. The index value can be calculated using the following formula:

$$PCI = \frac{P_c}{P_i} = \frac{\text{Average of other countries' prices for the given commodity in the targeted market}}{\text{Average of the intended country's prices for the given commodity in the targeted market}}$$

Consequently, counting on the ITC database, the main Syrian agricultural exports to the three markets were double-crossed with the main agricultural imports of the three countries, and then the major common commodities/chapters were captured as follows:

¹⁹ \$ exchange rate was considered 50 SP.

²⁰ \$ exchange rate was considered 50 SP.

Table 9: double-cross for some Syrian agricultural exports with agricultural imports of the three countries.

Some Syrian agricultural exports	Some Lebanese agricultural imports	Some Iraqi agricultural imports	Some Iranian agricultural imports
Tomato		X	
Eggs		X	
Cotton Lint			X
Beverage non-alc.	X		
Sugar refined	X	X	
Sugar confectionery		X	
Oranges			X
Apples		X	
Cheese of whole milk	X	X	
Potatoes	X		
Pastry	X	X	
Milk whole dried	X		

Source: based on ITC database

To conduct the index formula, NAPC database was utilized to obtain the values and quantities for Syria's exports of the above commodities, and therefore calculate the export prices. Identically, the ITC database was utilized to obtain the values and quantities for the three countries' imports of the above commodities from worldwide except Syria, and thus calculate the average import prices for these commodities when imported from countries rather than Syria.

The following table shows the calculations' results²¹.

²¹ Sugar was excluded from the calculations because its exportation is unreasonable economically.

Table 10: PCI index values for some Syrian agricultural exports in the three markets.

Commodity	Country	Syrian export price in 2010 (\$ per ton)	World (exc. Syria) export price in 2010 (\$ per ton)	PCI
Oranges	Iran	617	587	0.95
Tomatoes	Iraq	470	748	1.6
Apples	Iraq	673	906	1.4
Pastry	Iraq	885	2372	2.7
Pastry	Lebanon	1027	2924	2.9
Cheese	Iraq	2584	4668	1.8
Cheese	Lebanon	3319	4357	1.3
Cotton lint	Iran	666	1715	2.8

Source: based on NAPC and ITC databases

Notes:

- Syrian export prices in the three markets were calculated by dividing the values of Syrian exports of the given commodity to the concerned market in 2010 on the quantities of these exports in the same year; the value in US\$ was obtained by converting the amount of SPs to US\$, using an exchange rate of 50 SP per 1\$, which was the average exchange rate in 2010.
- The commodities were classified in accordance with the *harmonized system*, and as 6 digits.
- Syrian agricultural export statistics were obtained from NAPC database, and the three countries' import statistics from the ITC database.
- Statistics about Syrian exports of cotton lint to Iran are missed in the NAPC database; therefore, Syrian export general-price was used rather than Syrian export price-to-Iran.
- The statistics indicate that Syria has exported eggs and sugar confectionery, which are among the main imported commodities by Iraq; and potatoes, dried milk and non-alcoholic beverages, which are among the main Lebanese imports. However, NAPC database lacks statistics about total Syrian exports of these items in 2010²²; this makes the calculation of Syrian export general-price unaffordable. Therefore, the PCI values for these commodities were not calculated. Nevertheless, I underline the importance of calculating these PCIs values later, once the required statistics are available.
- Alongside the calculations, it was noticed that Syrian exports have occasionally considerable impact on other country's import general-price, but in some other cases they don't influence that price. For instance, Iranian import general-price for oranges was US\$ 587 \$ per ton, and when Syrian exports of oranges to Iran are

²² Even in recent years, the statistics are not available. For example, the last version of statistics for Syrian total exports of Potatoes dates to 2008.

excluded, the price shows little variation, remaining around US\$ 568.8 \$ per ton. Nonetheless, Iraqi import general-price for tomatoes was 635 US\$ per ton, and 748 US\$ per ton when Syrian exports of tomatoes to Iraq are dropped.

The table reveals that Syrian apples, tomatoes and cheese have strong price competitive advantage in Iraqi markets, and Syrian cheese has good price competitive advantage in Lebanese markets. Furthermore, Syrian pastry has very strong price competitive advantage in both Lebanese and Iraqi markets, as well as Syrian cotton lint in the Iranian markets. Still, Syrian oranges couldn't yet enjoy a price competitive advantage in the Iranian market, though it is not far from that - the index value equals 0.95.

7 The best model in light of the region's situation - East African Community (EAC) Common Market (EACCM)

In case the four countries signed a free trade agreement, it is logical that the establishment of a common market would be the final goal, just as has been agreed on in GAFTA. In this case, EACCM can be a tangible proper model to draw on, as a successful regional trade market. The EACCM comprises each of Tanzania, Kenya, Uganda, Rwanda, and Burundi. All of them are agricultural developing countries, but with different political regimes and various economic situations. Yet, they could unify their efforts and step successfully towards the common market.

The EACCM agreement went into force on 1-7-2-10. The agreement provides for the so-called four freedoms; which are the goods, labor, services and capital free movement across borders. This is envisaged to promote trade flows among the member countries and make the region more productive and prosperous²³.

The common market represents the second phase of the regional integration process; the first phase was creating the custom union, which was fully materialized in 2010. The next goal is set to be the monetary unity. The agreement's texts cover the institutional framework, legislations and laws, safeguard measures, special measures for imbalances, monitoring and evaluation, as well as dispute settlement.

The custom union among the five countries was established based on the three following pillars: unified custom tariff, trade without fees among the member countries and common custom procedures. It is expected that the next period will witness substantial investments in agricultural industries in the member countries. This is because agribusiness sector in each of the five countries was far away from "economies of scale" (massive agricultural industries). The coming period is also expected to witness common investment in terms of production and trade coordination among small scale farmers. As a result, the establishment of this common make will ultimately produce winners and losers. The winners are the producers of food products and the consumers. The losers are the smugglers and illegal practitioners (corrupted officials). The market affords, via the comparative advantages of its natural resources, real investment opportunity that supports

²³ Based on the common market website <http://www.eac.int/commonmarket/home-mainmenu-1.html>

agricultural exportation through cheaper inputs and less interventions from international exchange rates²⁴.

8 Conclusion

It is obvious that the establishment of a common market among Syria, Lebanon, Iraq and Iran will bring in great economic benefits for the four countries; yet it must be planned carefully, and should be reached gradually from creating a free trade area to establishing a custom union, and then to developing a common market. Concerning Syria, its agricultural sector would benefit much more than the other three countries from this common market; this is evident in spite of the relatively weak agricultural sectors in the three countries.

Terms of Trade index, an index that reflects the current situation of bilateral trade flows, was conducted in this research, and the results indicated that terms of trade between Syria and Lebanon are generally in favor of Syria, either in case of raw or processed items, and either in case of food or non-food items - this is promising indications for Syria's trade with Lebanon. Concerning Iraq, terms of agricultural trade were also in favor of Syria, either concerning raw or processed items, particularly in recent years in case of raw items. It is also evident that terms of trade for oil seeds, skins, edible fruits and vegetables and animal products are increasingly leaning in favor of Syria, while terms of trade for fertilizers are volatily tending to be in favor of Syria. Nevertheless, terms of trade with Iran are heading increasingly towards Iran, which should alarm Syrian trade sector, and stimulates it to beat this backward direction through spotting barriers to agricultural trade with Iran and simultaneously discovering the new opportunities in the mutual trade flows.

Furthermore, using the complementarity index, which uncovers the volume of complementarity between the structure of local products on the one hand, and the needs of importing markets on the other hand, the complementarity for some bilaterally-traded products between Syria and each of the three countries were examined; these products have been chosen upon the basis of the pre-knowledge of major agricultural products in each of these markets. Consequently, it was found that the structure of Syrian cereals production has little complementarity with the demand of Lebanese, Iraqi and Iranian markets, though Iraq is the one that could have potential trade opportunities more than Lebanon and Iran. It was found also that there is no serious complementarity between the structure of Syrian citrus production and the demand on citrus in the three countries. Nevertheless, the situation is less bad than in case of cereals, and the complementarity with the Iranian market is reasonable. Identically, the results drawn from conducting the *index of complementarity* on the live animals sector seem disappointing. Lastly, the index shows weak complementarity between Syrian production of olive oil and the demand structure of the three markets, particularly Iran, thus discouraging the exportation of olive oil to these markets. Subsequently, these results point that Syrian exporter would hardly export cereals, citruses, live animals and olive oil to each of the three countries, though exporting cereals to Iraq or olive oil to Iran would be less difficult.

²⁴ The Wikipedia encyclopedia.

Still, when PCI index, which measures the price advantage in a given commodity for an exporting country in an importing market (i.e. the price competitive advantage for the exporter), was applied, the results held positive indications. The results indicated that Syrian apples, tomatoes and cheese have strong price competitive advantages in Iraqi markets, and Syrian cheese has good price competitive advantage in Lebanese markets. Furthermore, Syrian pastry has very strong price competitive advantage in both Lebanese and Iraqi markets, as well as Syrian cotton lint in the Iranian markets. Still, Syrian oranges couldn't yet enjoy a price competitive advantage in the Iranian market, though it is not far from it.

9 Recommendations

- It is recommended to establish a free trade area that comprises each of Lebanon, Iraq and Iran besides Syria, as a first step towards establishing a common market when its prerequisites are met. Iraq would be the most important trade partner for Syria in such market; therefore, it should be focused on from now.
- Such market would afford the so-called economies of scale, which reduce the production costs and increase the competitive advantages of the region's products.
- In the context of current circumstances that Syria is passing through, which may be unfavorable of speaking seriously about the common market, it is preferred to advance bilateral trade with each of the three countries. This would make common trade cooperation in favor of the proposed common market once the circumstances allow approaching it seriously.
- Accordingly, it is advised on the short term to increase the exportation of cheese and pastry to Lebanese markets; and apples, tomatoes, cheese and pastry to Iraqi markets; as well as cotton lint to Iranian markets.
- It is also useful on the long run to plan for exporting cereals (if it makes sense) to Iraq, and citrus, particularly oranges, to Iran. Nevertheless, how to improve the competitive conditions for these two sectors in the two markets should be researched; the complementarities between the structures of Syrian production and the demand in the two markets are still not sufficient.
- In the framework of scientific research, reasons behind the regressive trend of terms of trade with Iran (which is tending increasingly to be in favor of the later) during the last decade should be addressed, and relevant resolutions and suggestions to hinder and stop this tendency should be investigated. In this sense, it is likely that this situation is driven by a lowering of the quality of some Syrian agricultural exported commodities, particularly in light of the results brought by the PCI.
- This paper has focused on the benefits that Syrian agricultural sector would gain from a presumable common market; nonetheless, it hasn't covered the benefits that the other three countries would gain from such a common market. Therefore, it is suggestable to conduct future studies, preferably regional studies, on the gains that the other three countries would achieve, and

consequently to generate a comprehensive image about the potential benefits for the region entirely from such market.

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