

Food Security Analysis In Light Of The Food Prices Fluctuation In The Arab Regions With In The Period Of (2000-2018)

تحليل اوضاع الامن الغذائي في الاقاليم العربية في ظل تقلبات اسعار الغذاء للمدة (2000-2018)

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ABSTRACT

By determining the reasons stand behind the increasing of food prices, particularly grains such as wheat, can find the alternative ways to decrease their effects. Where this price increasing has negative effects in different levels, and this is mainly connecting to the mentioned goods offering policies and specialization of resources. Moreover, the food exposure of Arab Economies to international food markets is considered a huge challenge to face the prices shocks, where the Arab Regions as a group import about %25 of the gross of grains in the international markets, which make them the biggest importer in the world. And their exposure increases with the increase of their imports and the weakness of their local production. Some of food prices increasing reasons is because of the lack of balance between offer and the commercial demand limitations of the exporting countries, and this is requesting to work towards the food relative prices stability through encouraging agricultural investments policies, and to make the agriculture a pioneer sector to achieve suitable levels of Food Security

Key words: food prices, food supply, food security, international markets, arab regions.

المستخلص

ان تحديد الاسباب وراء الارتفاع المتزايد لاسعار السلع الغذائية الرئيسية وبشكل خاص الحبوب ومنها القمح، يساهم في ايجاد السبل الكفيلة للتخفيف من اثارها، اذ يترتب على ذلك الارتفاع اثار سلبية مختلف المستويات، والتي ترتبط اساسا بسياسات عرض السلع المذكورة وتخصيص الموارد، كما يمثل الانكشاف الغذائي لاقتصادات البلدان العربية على اسواق الغذاء العالمية تحديا كبير لمواجهة صدمات الاسعار اذ تستورد بلدان الاقاليم العربية كمجموعة حوالي 25% من اجمالي الحبوب في الاسواق العالمية مما يعدها اكبر مستورد للغذاء في العالم، وتزداد حدة انكشافها مع تزايد نسبة وارداتها وضعف انتاجها المحلي. وتبين ان بعض اسباب ارتفاع اسعار الغذاء يعود الى انعدام التوازن بين العرض والطلب والقيود التجارية للبلدان المصدرة، وهذا يتطلب العمل باتجاه تحقيق الاستقرار النسبي لاسعار الغذائية من خلال سياسات دعم وتشجيع الاستثمار الزراعي، والعمل على جعل القطاع الزراعي قطاع رائد في مجال تحقيق مستويات مناسبة من الامن الغذائي.

الكلمات المفتاحية: اسعار الغذاء، عرض الغذاء، الامن الغذائي، الاسواق العالمية، الاقاليم العربية

INTRODUCTION

Food shortage became the current century feature, where its consequences extended to next generations and millions of people suffering because of it in the world. The increasing of unprecedented prices have negative effects on consumers, especially poor people and those with lower incomes. Although, the international markets had witnessed prices increasing within different times, but didn't take the dimensions that have been taken during this decade, and they didn't reach the hazard that have reached in this period. As its effects differ among countries based on their economic structure and income levels and the relative importance of the agricultural sector. Hence, the strongest pressures because of prices increasing are those which made on low income and importing food countries, especially when it happened suddenly and reach to highly extreme levels; become practicing their pressures on their financial resources.

IMPORTANCE OF RESEARCH

Prices levels that have been witnessed by some basic goods (Wheat) raise increasing concerns because of close related to what people consuming of kind and quantity of those goods, which considered of the main goods, particularly prices of food goods became related to policies of exporting countries to those goods, and the ability of importing countries of how will handel the burdens of making them available, and this will be reflected on poor and low income people, and then to the food security levels.

RESEARCH PROBLEM

Most of the world countries (Arab Regions) facing a food crisis has been intensified after the changes that happened to the global environment especially in the beginning of the 21st century, and the changes that happened to the international trade level and the limitations that practiced by the exporting food countries, all this contributed not to decrease the prices or stable them in a appropriate level.

RESEARCH OBJECTIVE

To know the historical path of food prices development generally, and the wheat - as a main good - in particularly. Reasons that led to that and effects that resulted internationally and in the Arab regions, that threatening millions of people lives, and what are the suitable procedures to overcome that in the future.

RESEARCH HYPOTHESIS

The research assumes that the increasing rise in prices is the result of changes that led to an imbalance between food supply and demand, in addition to economic factors that caused rapid increases in prices, which resulted in serious economic and social effects.

RESEARCH CHART

In order to validate the research hypothesis and achieve its objective, the following topics have been addressed: The Theoretical Frame, The Nature and Direction of Food Prices, Food Security in the Arab Regions, Factors that causing Food Prices Raising of the overall level and the Food Security, within a period of between 2000-2020 on the international level and the period between 2000 - 2018 in the Arab Regions level, and this is because of the difficulty of collecting some data.

1-1 THEORETICAL FRAME

The huge food prices rising has triggered the fears of food security and the increasing of malnutrition and the exacerbation of poverty, which is rarely to be happened because of general natural circumstances, excepting the drought that happened in most of global countries in 1972, which affected even main countries that producing grains.

Hence, droughts or agricultural courses problems may affect certain countries but will not effect on the international trade (Global Market); because of the variation of the agricultural seasons among the regions and countries compensate the shortage of others. And has no hazard effects only

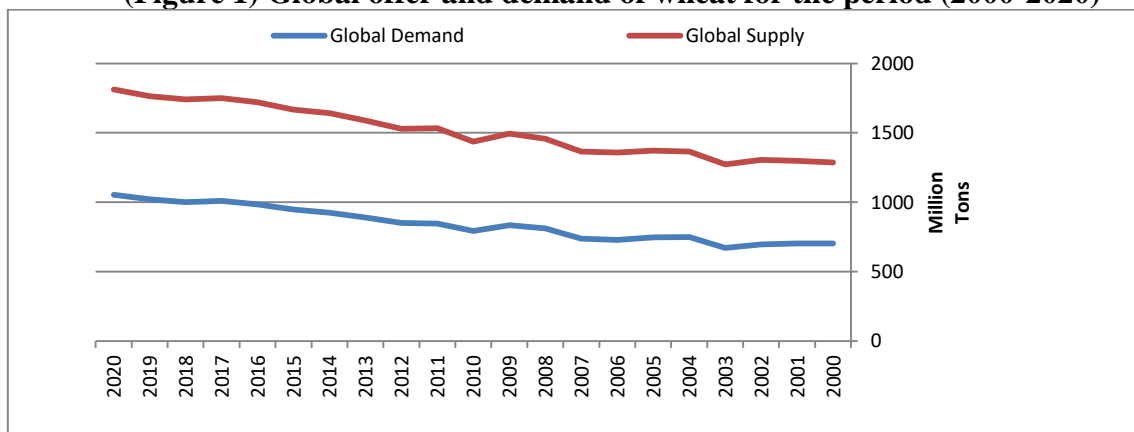
when it extended to long periods and hits main countries that produce and consume grains, and if we will take its dimensions away from the natural factors, the economic dimension will be that the commodity is basic and important such as grains that subject to the oligopolistic market pattern, and such a market controlled by a certain number of countries, as result they can agree and determine prices, quantities and the size of their competitors sells. (2)

In this case and according to Food and Agriculture Organization statistics, the production of food in the world can offer 2800 calories of food daily for each person (which is more than the minimum level that requested for a good health) and this is although, of the huge raise of population. Also, the First Food Institution indicates to the availability not the rarity which considered the best description of food supplies in the world today.

In fact there are enough food, where this huge and sudden and huge raising of food prices didn't happen because of a technological, social or political problem, and the matter of aiding countries to achieve gains and access to yield raising technology through a number of projects to find a new items to increase the food production by the international organization which has its importance in the agricultural development (3). While it is related to an extent with nature of grains market (Wheat particularly) as it is an organized monopoly market to produce profits.

Such a case contributes in the exacerbate in lack of food security, which creates an imbalance between offer and demands on food goods (grains, including wheat), which considered one of the basic factors in price volatility in the local and international markets. In the time where the demand is increasing either global level or most developing countries (Arab countries), the offer couldn't keep up with the demand (as shown in figure.1).

(Figure 1) Global offer and demand of wheat for the period (2000-2020)



Source: the figure is made by the researcher based on the statistics website of FAO (Food and Agriculture Organization) www.faostat.org

In case of the developing countries (Arab countries) the main factors stand behind the insufficient of supply in the decrease of productivity and its recession, and the deterioration and weakness of the base of the natural resources, and markets distortion and narrowness. On a global level many factors have contributed in prices increasing including offer shocks of the main exporting countries, and the trade limitation, the increasing of trade and the speculation of the financial instruments that based on food commodities, and the increasing of oil prices, that practicing upward pressures on the local prices in many countries affecting on the costs table in agriculture and transportation, while the food raising prices has formed chances for small farmers, but the difference in prices has effects on both consumers and producers, where the huge prices increasing affecting on the food pure consumers and the inability of food price predictability obstruct the process of planning and make the investment endanger, and frustrate the producers motivations and this will form a lost chances for the farmers to increase their incomes (19). The international food prices increasing have shown number of weaknesses in the performances of the

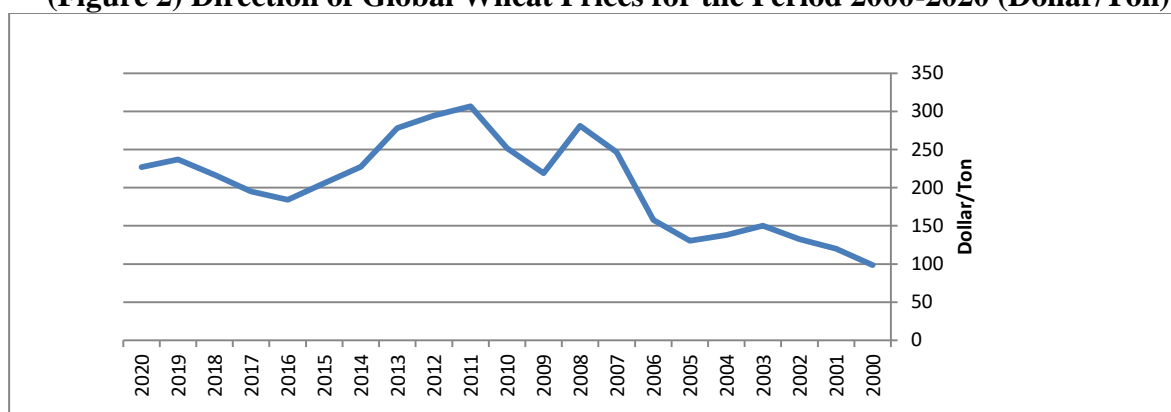
global food markets, in time where the food prices stayed relatively stable and low for long decades, the food prices fluctuations in the past recent years have shown new challenges.

The effects of the excessive price increasing as a result of many countries policies have shown the international trade system limitations and doubled the need of the countries non-regression of their commitments in more opened and fair trade system. As well as the speculation in the future assets and the basic commodities markets in food prices. In the same context there is a challenge which presented by the speed of freeing the trade in the field of agriculture and it's succession and impression, in the time of enhancing trade freeing of the agriculture exports in the Developing countries and the chances of increasing farmers entering, there should be policies to encourage the production in an efficient and competitive way and the increasing of agriculture sector investment. In case of the primary existence in the imports there should be a temporary supporting mechanism for the small farmers who their living ways facing hazard (20).

1-1-1. NATURE AND DIRECTION OF FOOD PRICE FLUCTUATIONS:

While were global food prices during the 1980s and the 1990s until 2008 in decreasing with productivity raising and the lowering of the food storage withdrawing size, and the decreasing of agriculture investments; all this led to the reduction of the agriculture production in most of the developing countries. Hence, this led to the decreasing of prices and transforming the agricultural resources to non-food uses, then the prices started raising in 2002 in clear diversion of long-term period, and most of the commodities' prices started raising especially wheat (**Figure 2**) (20).

(Figure 2) Direction of Global Wheat Prices for the Period 2000-2020 (Dollar/Ton)



Source: The figure is created by the researcher collecting data from Food and Agriculture Organization statistics website: www.faostat.org

There are two factors keeping the wheat price high, from the offering side there is situation of doubt in the size and quality of wheat exports from Australia, where the harvests have been damaged because of raining and heavy floods. Hence, offering mechanisms based on the possibility of huge turnout of the wheat importing countries including the Middle East and North Africa countries to the market with huge buying orders. And this connected in the desire of creating situation of security with sufficiency of local food storages in time where some countries facing a situation of political instability. And there is another reason represented with a country such as Kingdom of Saudi Arabia which reducing the local production to keep the water resources, while hugely depend on importing (29).

The critical food prices rising cases are important because of their negative effects on food security, and the geopolitical and environmental changes worsening the crisis in the future; which will increase the possibility of food commodities flows (14). The production has been increased but slower than the demand and this leading to a continuous draining of food storages (**Table 1**).

(Table 1) World Demand and Production Of Wheat For The Period 2000-2020 (Million Tons)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Demand	702.8	702.7	695.5	670.8	748.8	747	729.6	737.5	811.1
Production	585.7	589.8	574.7	560.1	632.1	626.7	602.3	612.9	683.0
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017
Demand	833.7	793.1	846.7	850.6	890.1	923.8	946.7	983.5	1009.2
Production	687.5	649.5	699.4	659.3	718.3	732.2	739.7	757.0	762.0
Year	2018	2019	2020	-	-	-	-	-	-
Demand	999.8	1021.9	1052.6						
Production	732.2	762.0	774.2						

Source: Table prepared by Researcher based on the FAO statistics website: www.faostat.org

If the price increasing continue along with global production and demand of wheat during the period 2000-2020 with existing of the gap between what is requested and gross production of wheat during the mentioned period. While wheat price keep raising during the same period with big ratios that exceeding double what were in the start of the new millennium. The mentioned food commodities price increasing indicates to an existing of weaknesses in the global food supplies. the global food price increasing and fluctuations became a long term phenomena.

In 2005 extreme changes happened in the climate of the main food producing countries, which resulted a reduction of wheat production in the world (**as shown in Table 1**), in the same time an external factors quickly started amending food prices to be raised as a respond of the offer and demand dynamics, thus the actual food prices of the Agriculture and Food Organization has been raised more than double of their level, which is 91 points in 2000 to reach 201 points in 2008 and to 240 points in 2011, then witnessed a decreasing in 2016 where reached to 176 points and that because of the pressure that resulted of the huge exportable supplies and the increasing of competition among the exporters (10)

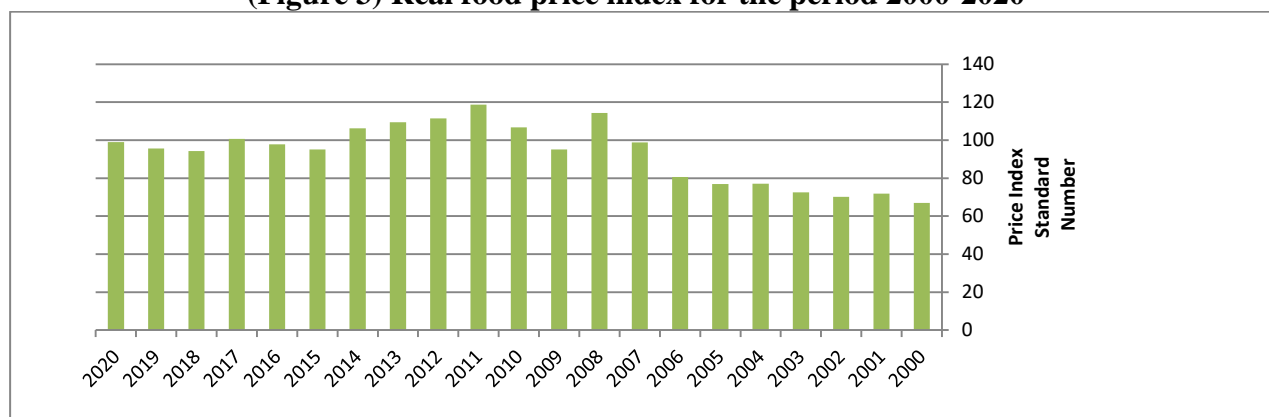
But, this decrease stayed humble compering to the level of prices during the period of 2000-2011, thus we have to take in consideration the continue of this historic increasing of food prices in the near future, with all its effects on the expectations of Sustainable poverty alleviation in countries that depend mainly on food imports, and because of the economic situations for the low income and will be the most affected category in these changes that happened to the food prices (24). However, global grain markets receiving less than of wheat global production; while the rest of that ratio been consumed locally (18)

Perhaps the important this was that the real prices stayed at higher than its low level before for a period more than frequent 10 years, and this longest continuous periodic raising that the real prices witnessed in the current middle century (13). some countries have experienced ways to isolate themselves from the possibility of extreme food shortage and prices shocks, and many exporting food countries have imposed limitation on exporting, while the importing countries were trying to keep the level of food supply locally by gaining grains in any price. And that has resulted global price fluctuations, and attraction of investments to speculate in the grain market and this led to price level raising directly and indirectly (9). This rise has continued till 2010 which led to fears about

repercussions of this rise, where the price increase shock during 2010-2011 led to put 44 million people below poverty line globally, and 68 million of food consumers below poverty line, while 24 million of farmers managed to get out of poverty predicament that happened because of agricultural harvests prices increasing.

Statistics (**Figure 3**) indicate the continuous prices rising of most food commodities to ascending directions globally, the food price record number has raised to 67 points in 2000 and 114.3 points in 2008 with increasing of %41.2 comparing with 2000, then to 118.8 points in 2011, although of its relative decreasing during the period of 2012-2020 but they have stayed high in the start of the millennium, however, the huge supplies and the low global level of exporting sales have contributed in the pressure on the prices causing their retract during the mentioned period (11)

(Figure 3) Real food price index for the period 2000-2020



Source: Figure prepared by the researcher based on Food and Agriculture Organization website: www.fao.org/fileadmin/.../food_price_index_nominal_real.xls

Generally, the food prices record numbers show ascending direction on the world level comparing to basic year. This raising is a result of the shortage of food commodities offering because of the unfavorable climate circumstances in some main producing countries, using the agricultural harvest to produce biofuel, increase of demand as a result of population increasing and changing consuming patterns, and some of the food commodities exporting countries have lifted the support on their exports or banned the exporting in some cases (4).

2-1 FOOD SECURITY IN THE ARAB REGIONS :

Many Arab countries suffer of huge food shortage and this makes them vulnerable for the world's market prices fluctuations and the policies approached by the grain exporting countries, and the lack of elements to achieve the food security although, the availability financial resource of some Arabic countries (Oil Exporter) that can import what they need of food commodities but this is not enough to achieve the food security, where the oil prices fluctuations and the financial and the political turbulence that some of the countries suffered of that for many years all this has contributed in exacerbate the food problem and the lack of the essential elements of the agricultural production, which resulted the retract of the agricultural food production (Grains especially wheat)

The insufficiency of the local production to fulfill the growing demand and the depending on imports from the outsider world to provide food make it suffer the food exposure problem which exacerbate with the increasing of price fluctuations in the global market which forms a burden on many countries especially those who do not have enough financial resources, this resulted a reduce in their ability to fulfill the growing food security requirements.

Wheat occupies first place in grain groups in terms of its importance on the Arabic level, and its production a percentage of %46.8 of the grains total production (5). Wheat production in the Arab Mashriq has reached 7233 ton in 2006 achieving an increase of %50.3 over 2000, then this percentage has witnessed a reduction in 2008 with a percentage of %50.7 and this because of the

drought wave and the irregular rates of raining during the season which affected badly on the agricultural production in the most of the Arabic regions, as in the Maghreb region where the production has fall down during the year with the percentage of %40.3 in 2008 comparing with 2006, which has witnessed a noticeable increase in 2000 which reached to %70 comparing with 2008 and this is because of the unfavorable climatic conditions experienced by the Maghreb particularly Morocco and Algeria (6).

Where the middle regions the production size has witnessed a relative stability during the period of 2000-2018, where we will witness that the production size of wheat tends to increase albeit modestly and this is because of most of the region depend on irrigated agriculture where the production will be relatively stable.

Although the production increasing of wheat in the region of Arabic Gulf that reached a %30.5 in 2006 comparing to 2000 where the production was 1931tons then has witnessed a gradual reduction in 2009 till 2008 and this reduction has reached %55.4 in 2018.

On the other hand the Arabic level of wheat production has witnessed the same curve of a clear gradual increasing in 2000 till 2006 where the increasing has reached %46.2, but it has recorded a drop in 2008, so the wheat production size has reduced to be 19620 tons after it reached 28659 tons in 2006 with a percentage of % 31.5 affected by the drought wave that hit most of the Arabic countries and also because of the irregular raining rates and the unfavorable climatic conditions. Then the production size has witnessed a relative stability during 2009-2018. With the regarding of wheat size demand as it is considered the main commodity in the Arabic food basket, where the wheat demand has witnessed an increase on the both levels Arabic and regionally during the period of 2000-2018, Then the production size has witnessed a relative stability during 2009-2018. With the regard of wheat size demand; as

is considered the main commodity in the Arabic food basket, where the wheat demand size has witnessed an increase on the both levels Arabic and regionally during the period of 2000-2018, As for the Arabic Mashriq region the ascending direction of demand except the reduction that recorded during the period of 2015-2018, In 2000 the demand size has reached 7856 tons to be increased 11572 tons in 2009 then to reach its highest level in 2013 to be 12685 tons, this continuous increase is a result of the population increasing and the inability of the local production size to fulfill the food requirements which led to import the food supply of wheat from the global markets, the same case in the rest of the Arabic regions where the demand size of wheat has clearly increased during the mentioned period, the demand size in the Maghreb has reached 22693 tons in 2009 where it was 13802 tons in 2000 such an increase almost a double comparing to the year 2000 and the demand size has continued increasing with slightly changes to reach 29101 tons in 2018. In the Arabian Gulf region the direction of wheat demand increasing during the period 2000 to 2018, but its highest level has recorded in 2014 where it reached 10525 tons. Where the middle region has witnessed an increase of the size demand to be 18210 tons in 2009 after it was 12770 tons in 2000 with an increasing of %29.8 and the upward direction of wheat demand size has continued to reach its highest level in 2014 with 23616 tons, then it has witnessed a slight reduction with the percentage of %10.1 in 2018 comparing to 2014.

on the level of all Arabic regions as clearly (**shown in table 2**) the direction of exacerbate demand on wheat during 2000-2018 although the production size increase during the mentioned period but it was late to the demand and resulted a gap that rapidly expanding and indicating to how far the dependence on the outside to meet the local needs of food that affected to a limit with the global prices fluctuations and the main exporting countries' policies and what procedures that follow to control the global wheat market, and that what makes the Arabic countries subject hugely to the inclusions of that policies and their inability to effect on such kind of market from a side, and the absence of developing planning and clear policies to advance their agricultural sectors and use what available of resources from other side, all that made them vulnerable to shocks from two sides first what related to prices and second what related to quantities.

**Table (2) Production and demand volume of wheat in the Arab regions for the period (2000-2018)
(Thousand Tons)**

Arabian Mashriq Province										
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Production	3591.1	5873.6	7581.5	7445.7	6565.7	7119.5	7233.7	6420.8	3577.6	5556.0
Demand	7856.5	9923.8	11136.5	10163.6	10629.4	11094.6	11279.9	10508.2	8341.9	11572.9
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	-
Production	5954.4	6829.8	6867.2	7570.7	7288.6	5693.9	4976.3	4997.3	3581.4	
Demand	10286.2	11899.2	11174.2	12685.8	10690.1	8271.9	7885.9	7481.9	7258.4	
Arabian Gulf Region										
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Production	1931.6	2236.5	2570.4	2629.8	2880.8	2762.8	2780.8	2778.0	2157.5	1376.5
Demand	5229.9	5465.1	5701.5	5961.7	6396.2	6827.5	6761.1	6475.3	6326.4	7509.7
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	-
Production	1617.3	1419.0	1106.6	893.5	914.2	821.2	718.5	720.5	613.7	
Demand	7898.7	7901.1	10203.6	8729.4	10525.4	8495.3	8229.6	9054.3	7466.4	
Middle Region										
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Production	6779.0	6558.4	6872.8	7177.6	7613.8	8557.1	8275.1	7379.9	7978.0	8523.9
Demand	12770.5	11786.2	13729.2	11323.6	12014.1	14426.6	16378.1	15653.1	16596.8	18210.8
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	-
Production	7178.3	8408.1	9120.4	9726.2	9274.0	10387.3	9859.5	8885.1	9051.6	
Demand	17882.2	18738.4	21885.4	22959.2	23616.6	22947.2	23132.1	21568.3	21221.0	
Arabian Maghreb region										
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Production	3108.4	6598.9	5408.0	10221.2	10118.3	7210.0	10369.8	5450.3	5907.4	11086.5
Demand	13802.0	16329.3	17252.1	19279.2	19401.1	17490.3	19182.7	16828.4	19345.3	22693.0
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	-
Production	8437.9	10703.0	9039.6	11415.2	9272.1	11811.0	6265.5	10779.9	12525.5	
Demand	20691.2	24522.1	23255.9	24176.8	25657.9	27211.6	24673.2	26223.5	29101.6	
Total										
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Production	15410.2	21267.6	22432.9	27474.5	27178.8	25649.5	28659.7	22029.2	19620.7	26543.1
Demand	39659.1	43504.6	47819.4	46728.3	48440.9	49839.0	53601.9	49465.2	50610.5	59986.6
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	-
Production	23188.1	27360.1	26134.0	29605.6	26748.9	28713.5	21820.0	25383.0	25772.3	
Demand	56758.5	63061.0	66519.1	68551.3	70490.2	66926.1	63921.0	64328.1	65047.5	

Source: Table prepared by the researcher based on the Food and Agriculture Organization website:

www.fao.org/faostat/en/#data.

The exposure to the risks of price fluctuations and quantities is a result of the increasing dependence on imports (particularly wheat), the Arabic countries considered as a price taker, where they to a limit depend on the imports because they produce low quantity of grains (wheat) globally, which expose them to risks that related to prices and quantities, the price risks represented with their increasing although the availability of quantities in the markets, as for the risks that related to quantities represented with the unavailability of food commodities, although the availability of sufficient financial resources (18). Although, all Arab countries are purely food importing countries but their exposure to the global markets differ with the contrast of their dependence on these markets to meet their local food requirements, and the reason behind that is because of the local production potential variation and the size of their stored which hugely depend on the availability of the agriculture and water resources and the effectiveness of the development economic policies in general (7), However the Arabian gulf countries the most exposing countries to the quantities risks

where the importing dependency reached between %55.4 in 2002 into %93.0 in 2008 (**Table No.3**), although they are less exposing to price risks as they enjoy a strong financial balance but they are more exposing to price risks to global markets when the oil prices go down and that will limit their financial capabilities and increase the difficulty to deal with food commodities price increasing (wheat).

(Table 3) Dependency on imports in the Arab regions for 2000-2018 (%)

Year	Arabian Mashriq Province	Arab Gulf Region	Middle Region	Arabian Maghreb region	Total
2000	54.2	63.6	46.9	77.4	61.2
2001	41.7	59.7	44.3	59.5	51.4
2002	33.8	55.4	50.2	68.6	53.9
2003	30.7	55.8	36.7	46.9	42.4
2004	41.9	57.6	36.6	47.8	45.0
2005	37.3	59.6	40.6	58.7	49.0
2006	41.0	58.9	49.4	45.9	47.8
2007	43.0	57.0	52.8	67.6	56.6
2008	58.4	66.0	51.9	69.4	61.4
2009	52.0	84.4	53.2	51.1	56.0
2010	42.3	86.7	59.8	59.2	59.9
2011	42.6	82.1	55.1	56.4	56.6
2012	38.5	89.2	58.3	61.1	60.7
2013	40.3	89.8	57.6	52.7	56.8
2014	31.8	92.2	60.8	63.8	62.2
2015	31.6	90.7	54.7	56.5	57.2
2016	36.9	91.4	57.3	74.6	65.9
2017	33.2	92.5	58.8	58.9	60.6
2018	51.4	93.0	57.3	56.9	60.5

Source: Table prepared by the researcher based on the Food and Agriculture Organization website:

www.fao.org/faostat/en/#data

As for, the Mashriq region countries their indications of their imports dependency has recorded less value in 2003 with the value of %30.7 to be increased to %58.4 in 2008 then have witnessed a relative decreasing in the next years to reach %51.4 in 2018, the countries of these regions are less exposing to quantity risks that resulted of offer reduction in the global market because of the increasing of their production levels which made them capable of absorbing the shocks to a limit, but countries such as Jordan, Lebanon and Syria they are facing risks related to quantities and prices because of their budgets deficit, the increase of the governmental debt level, weakness of external conditions and the limitation of the natural resources. As for, the middle region countries the indication of their imports dependency has recorded its highest level in 2014 to reach percentage %60.8 then have witnessed a slight reduction to be 0%57.3 in 2018, countries of these regions are exposed to low rates of risks to food supply fluctuations, but they are hugely facing risks related to prices because of the unavailability of enough financial resources to face the increase that may happened in the global markets because of the weak financial balance that limit the financing options.

As for the Maghreb region countries the indication of imports independency has recorded its lower rate in 2006 to reach %45.9, the mentioned indication has witnessed an increase to reach %56.9 in 2018, this make the countries of the Maghreb region less exposing to the supply fluctuations because the availability of supplying base that enable them to meet part of the local demand, but they may face risks related to prices because of the limitation of the strong financial base availability except Tunisia and Morocco whom witnessed risks of quantity reduction and

increasing prices because of their big dependence on imports and the weakness of financial conditions.

In general most of the Arab countries facing in one of the mentioned two sides if it was not both of them, if we look at the huge increase that shown through the dependence rate which totally ranges between %42.4 in 2003 into %60.5 in 2018 and this is showing the range of exposure of the Arab countries to the global food markets and the contrast of their financial and productivity conditions and the disparity in the degree and nature of risks that exposed to them, the contrast degree of their response to the shocks and the ability to absorbed their affects.

2-2 FACTORS CAUSING INCREASING OF FOOD PRICE:

1. The Imbalance of Offer and Demand:

Food price fluctuations is resulted because of two sides; that related to productions, first the unfavorable climatic conditions for the main producing countries in some production years, second demand increasing as a result of the purchasing power improvement and population increasing, the second side is what related to prices which is a result of disturbance of markets performance. Which they have group of effects that appears in the low food stocks and the drought cases that happened in the producing countries, and the increasing in demand of some commodities that related to population growing and increasing incomes (25).

2. Climate Changes:

The unsuitable natural conditions, the weather changes effects and the drought waves that hit huge parts in the world during the past years where the main reasons to increase the food prices that started in the late of the of 2006 causing disturbance in crops production in the main grains producing countries. Perhaps, the most prominent event is the drought extended in Australia which caused lowering in the rice crops to be %98 comparing to years before the drought, and this is as well as the Australian wheat crops that declined to be 9.8 million tons in 2006; where it was reaching more than 25 million tons in good seasons (exportable).

Floods have affected negatively on rice exports in South Africa (last grain exporting countries). Where its capability to export the mentioned crop in 2008-2009 to be 150 thousand tons, after the estimation done earlier by the Food and Agricultural Organization that its exporting capability has reached to 600 thousand tons of rice in 2007 (23).

3. Dropping of global grains stock:

The gradual decreasing of grains stocks level, since the middle of 1990s, considered another factor beside the offer and then one of the main contributors in basic food commodities' price increasing.

The food stocks levels have been affected with the performance and structure changes of markets under the system Global Trade Organization, as well as the amendments that have been called by the international financial institutions. and reducing the role of state in keeping the spare stocks, and the gradual cancellation of the trade semi-governmental institutions in controlling the food commodities trade through imposing tariff and customs to limit the movement of food stocks inside the country and between the state and others countries. All these factors in the main food producing countries connected to the increasing of storing costs and competition, all these have led to the decreasing of stocks, where there is a negative relationship with an statistical relationship between the ratio of stock and the usage (the ratio of stocks in the beginning of the season and the usage during the season) and the average grain prices during the season, and this means the tight markets globally in the beginning of the season tends to apply cumulative pressure on prices. and also contributes in lowering them into very low levels, because of the absence of the temporary stocks supplies, and that means prices could be increased suddenly under the effect of offer and demand shock (23).

Although, the size of grain stalks is relatively small , but the shortage of the stocks could lead to a huge price increasing and the collapse of markets' work. The difference in the global stocks in the end year of 2007-2008 was about 60 million tons or %2.7 of the global production, but the price increasing in 2007-2008 the difference of grain stocks beside the price increasing where enough to cause a hazard problem in the market specially with the most important commodities.

Regionally, the grains production is less affected with weathering conditions, the decreasing of production in some places can be compensated with higher production in other places. As a result, the global trade can reduce the big need of the spare grains stocks locally (26).

4. Speculation in Major Stocks Exchanges:

Speculations in major stock exchanges affecting commodities prices and the mechanism of food pricing all over the world. The levels of food commodities' prices is connected to the fluctuations and turbulence that have been witnessed by the global markets of financing and mortgages in the unites states, financial speculators have turned in to investing the stocks and bonds in buying future contracts of food commodities and raw materials in purpose of getting quick revenues of their money. And this was one of the reasons in beginning of key commodities prices increasing, in same time there was shortage of food supplies, which is paired with decreasing of global food stocks that had contributed in huge increasing of food commodities prices in all over the world (23)

5. Freeing Trade:

Some economists calls to work under the economy of duty free market with a limited interfering of the state which will achieve better efficiency and higher productivity. in persuit of gains from trade liberalization including expanding the zone to reach the foreign markets but however the decreasing of food commodities prices and creating jobs opportunities was less expected, in addition to that the environmental costs increasing and the inability of the governmental policies to guarantee a long term development.

Governments in many countries have faced huge economic difficulties where they reduced their subsidization to small farmers and consumers in the frame of the submitted advice by the international institutions, so they concentrated on producing the export crops with intention to improve the situation of the balance of payments but not to guarantee the food security, the export agriculture could motivate the investment in high pricing crops instead of the low pricing commodities which is directed to meet the local food needs (9).

6. Eliminating of Import Tariffs on Agricultural Commodities:

The international bank estimated the gains for the developing countries with low and middle income of %50 of the possible economic gains for the global trade which will be achieved through eliminating the customs barriers, but in most cases of opening the markets will not only limited to regulate the flow of agricultural imports to their markets. Where the agricultural support of the advanced countries dumping the markets of the developing countries with less cost produced commodities of what been produced locally. And this led to the reduction of the local production; because of its not being able to compete, high costs and hugely the depending on food imports (21).

7. Biofuel production:

The oil prices increasing, which considered as the main component in the agriculture inputs been affecting in converting a big part of the grains global production towards biofuel, thus it created a completion situation between producing grains in purpose of food in to producing cheaper fuel. As a result almost 100 million tons of grains had directed to produce fuel rather than food during 2007-2008. Farmers in the advanced countries have allocated a huge part of their crops to produce fuel compering with the previous years, on the other hand lands and available resources have been decreased to produce food, which led to reduce what available especially in the developing and the less growing countries (23).

It is expected 600 million people will suffer of chronic malnutrition by 2030, because of the continuous pressure on prices and one of its reasons is converting food crops away from food consuming and direct it in to production of ethanol (22).

8. Fall short Agricultural Production in the Developing Countries (Arab Countries):

There are long-term structural reasons led to affects in the availability of foods, hence this created a real crisis, these factors are related to offer in term of difficulties that developing countries suffer of (Arab Countries), which represented in short fall in production and agricultural productivity in facing the local consuming. The main factor behind supplies shortage is represented in agricultural productivity that has been reduced in the last two decades in the developing countries (Arab Countries), and this indicates to the neglecting that has been extended in to the agricultural sector. This is led to a structural failure in the strategy of development that represented with shortage in the Public and Private investment in the agricultural sector, where investment is a basic condition and an important motivation in the agricultural development and food production in the developing countries. One of the important factors that stand behind the investment shortage is the structural adjustment that neglected and weakened the role of the main arrangements of the institutional support, therefore, the general shortage in the investment in the agricultural sector has become worse because of the market unsurprising failure, and increased the negative effects on costs that carried by farmers (25).

Flexibility increasing of countries in facing the food crisis in the future are represented in building the productivity capabilities and the agricultural competence through the enhancement the capability of producing more food in competitive costs.

As a result of that in case of any critical world prices increasing happened the local production will be able to respond and reduce in a limit the effect of global prices fluctuation in the local food markets.

Expanding the agricultural production capability is supported by the agricultural lending, and can increase food and reduce the possible effects for offer shocks (28)

9. Reflection Food Commodities Prices Increasing on the Whole Economy Level and Food Security:

It is necessary to address the issue of repercussions of price increasing to guarantee putting a suitable and efficient economic mechanism to reduce their effects, the food prices increasing forming shocks that should be absorbed and overcome them by the consumers and this needs a response a response from the economic policies to face these shocks and it is important that the food prices increasing effects will not lead to inflation or move to another stage that carry accelerated inflationary effects.

Through using the cash policy the central banks can prevent the shocks that generated as a reason of food prices increasing to create a continuous increasing in the inflation by restraining the main inflation and its expectations through taking a strict stand in the field of the cash policy, here it should be bring attention by following such kind of strict policies especially by developing countries might lead to slow down in development or resulting a recession. However, allowing the doubling of inflation effects will be harmful on poor people (20).

3-1-1 Reflection of Prices increasing on Macroeconomic level:

1. Inflation and Increasing of Economic Cost:

Economic policies response to food commodities' prices increasing has affected on the macroeconomic stability in many developing countries (Arab Countries). to reduce its effects demanded increasing in general expenses to finance the basic services. Especially the most poor countries have faced a challenge in financing the financial subsidies and the social protection and food, as well as fuel imports. Many of them forced draining reserves of foreign currencies or

resorting to local borrowing, and risking of re-allocating the resources, inflation pressures increasing and the imbalance of payments balance.

The financial cost of the food commodities prices increasing has an effect on the economies of the developing countries (Arab Countries) which consider more vulnerable to prices shocks from others in the international food and fuel markets. As well as, it combined the negative effects of crisis on the public budget and inflation levels, where most likely countries like Djibouti, Eritrea, Haiti, Sierra Leone, Tajikistan, Togo facing financial costs that exceed their budgets. It is difficult in the situation of financial cost increasing controlling inflation and high prices of food and energy in many countries, where markets are not working well, and supplies have been reduced, therefore, spending increase may lead to the local inflation levels increasing (8).

1. Payments Balance:

The effects of food prices increasing on the payment balance are different between one country to another according to their depends on the imported food commodities and the reserves level. May the food prices increasing by itself has no big effects on the payment balance according to the estimations by the International fund but when it is conjugated with the fuel price increasing this effect could resulted a severe damage(17).

In other words, the impact on the balance of payments is intensified in countries where food trade accounts for a large share of exports or imports, and exporting countries achieve great benefits when prices rise, while countries that import a large share of food are most affected by high prices. The effects of the terms of trade are important, as countries that export oil and minerals may not need to produce larger quantities of these products to compensate for the rise in food prices if the price of their exports rises by a greater rate than the increase in the price of food imports.

With regard to the financial effects, the impact of rising food prices is most severe in countries where food subsidies constitute an important part of the budget, and for importers, the cost of rising prices will have a direct financial impact if the subsidies do not continue and increase to compensate for the rise in prices. This will have an important impact in terms of opportunity costs even in exporting countries that support domestic consumption. In both cases, high subsidy levels can reduce the funds available for investment in public goods, such as agricultural research, health, and education, and reducing spending on these items can reduce long-term economic growth (12).

Non-oil exporting countries are facing increasing financial pressures as a result of the recent price hike. In addition to inflation, rising food prices directly affect the trade and financial balance. Many Arab countries (Egypt, Jordan, Syria, and Yemen) have increased the wages of workers in the public sector and provided subsidies to some necessary commodities (such as bread), direct cash transfers, and the abolition of tariffs on basic commodities.

As well as, these procedures will not be sustainable unless there will be an increase in the revenues, and to finance the extra expanding countries may limit their other necessary expenses or increase the borrowing, and this will affect negatively on their economy on a long term. But, increasing their revenues by exports of others commodities will may lead to reduce some burdens on the budget and it considered a good choice from the economic side.

In the case of petroleum producing countries, the increase of oil revenue will enhance their ability to execute food support programs, but such case will not continue in case of oil prices decreasing, where this will lead to decline of commercial balance which will decrease the governmental imports and investments options, and if food prices continue to be higher than oil prices this will cause funding shortfall and the food support programs will lead to financial balance slump (27).

3- 2 Reflection of Food Prices Rising on Food Security Level:

1. Social Protection Programs:

Food commodities prices rising have huge effect on poor people, because they expense more than their income on food, where the number of those who suffer of chronic hunger suffering have been increased to be 110 million people in 2007-2008 and this is because of prices rising, which will forced them to change the type of food or having less meals. on the extend of few countries with low income, security nets working on converting cash balances or in-kind in target of limitation of weakness cases which caused by the continuous prices rising, or to provide protection for big ration of population (15).

The food help programs and security nets in many developing countries are supporting categories that hugely suffer from lack of food security. These programs are connected together directly and support each other to make the social protection systems will be more effective in the field of facing prices shocks, and it should keep up with risk management tools to reduce the affects after crises and should include a mechanism that appropriate for food prices direction and inflation (20). Hence, it lead to big change in consuming styles, how to manage the expenses and food type that be suitable with this rising and within new priorities ladder. Studies which their results are included in reports of food security in the Arab countries indicate that the food commodities prices rising have led to a clear reduction in families of basic food commodities consumption especially those with low income, which resulted the speared diseases that resulted of malnutrition because of the inability in food sources variety which is considered a key factor in health (6).

2. Consumption and Nutrition:

Although, there is no clarity about acclimatization strategies and nutrition results under the food prices rising, but the acclimatization with prices rising shocks, drought, economic crisis and other shocks that limit of the possibility of gaining food. Where it uses strategies that based to food including changes in food quality and quantity, usually, start to limit foods quantity consumed from different food groups, and converting from high calories foods to less calories. With grains food commodities prices rising to high levels, often such replacements of this kind of commodities is very limited beside the other food commodities prices rising, so, they directed to have less number of meals a day, and the distribution strategy of the family converting to acclimatization with less meals and not paying any expenses on health and education, selling assets and seeking for activities to bring extra income (16).

3. Income and Level Of Poverty:

Food Commodities expense is the big share of families income especially families who live in countryside (more than two-thirds of families income expended on food), this ratio has been increased under the food commodities prices fluctuations which resulted that many families couldn't fulfill their food needs, the problem become bigger when some families reach the level of the inability to fulfill their social developments commitments and life commitments to their individuals and that what threaten the social security. Groups that affected by prices rising include shepherds, small farmers and poor people, although there are different reasons of food crisis, the difficulties that faced by individuals and different population categories have different faces of different groups that include the following (22):

- The inability to burry food costs, and what links to it of calories shortage.
- Migration of families individuals in seeking for a job.
- Reduction of families expense on health care, education and other necessities.
- Selling productive assets, here we have to refer to such case lead to the inability of families saving to improve their living circumstances and doing projects that bring them income especially in the countryside regions, and this will cause the affection of development rates.

This means that food prices rising and fluctuations have dangerous effects on developing countries (Arab Countries) and the inability of increasing the local production for technical and material reasons and sometimes importing reasons, or those countries which unable to face the risks and implement quick procedures to provide food commodities in supported prices which may need procedures on whole level (Arabic) to reduce the crisis effects.

CONCLUSIONS :

1. The economic factors represented by the imbalance between supply and demand, the decline in global stocks and the liberalization of trade, the trend towards biofuel production and the decrease in agricultural production had a role in the rise in food prices, especially the main ones, which reflected their effects on the macro and food levels in the world in general and the Arab regions in particular as the largest importers For this type of goods, the most affected by the high prices.
2. The turbulence and fluctuations of short-term phenomena that are related to food security represent risks whose effects have appeared on the economic and social levels.
3. It became clear by comparing the volume of supply and demand for food commodities (wheat) at the level of the world and the Arab regions that there is a discrepancy between what is available of them and the volume of food requirements, resulting in fluctuations in price levels in global and local markets
4. The ability reduction of countries in facing shocks resulted from prices fluctuations and quantities is a result of lack of local production and the deterioration of the resources base, in addition to the increasing dependence on global markets to meet food requirements.
5. Climate changes in the major food producing countries had a role in decreasing of grain production.
6. The severity of the vulnerability of developing countries (Arab Countries) to food prices rising that linked to long-term structural reasons related to offer side in terms of production and productivity failure to meet the requirements, and this is a result of neglecting of the agricultural sector and lack of public and private investment.
7. Although, the increase in the production volume during the research period, but it did not keep pace with the demand which resulted a gap rapidly expanding that indicating to the high percentage of dependence on the outside to meet the local food needs.
8. Imbalance in the relationship between the volume of production and demand volume in the Arab regions during the study period confirming the failure of relevant policies to achieve an appropriate degree of stability in food supplies at the local level in event of a sudden and long-term rise in global prices for the main commodities.
9. Increasing of exposure degree of countries in the Arab regions to the global food markets, and varying of their financial and productive conditions, also the varying of risks nature that they have been exposed to, and their ability varying to shocks response and the ability to absorb their effects.

SUGGESTION:

1. The fiscal policy seeks to finance expenditures in a way that reduce minimum level of the negative effects on the poor and low-income people. Taking in consideration the size of the fiscal deficit and the its financing ways, and the spending limitation in the low-priority fields.
2. The interest of social protection programs, identifying needs and weaknesses and managing them in order to increase their efficiency and develop their capabilities.
3. It should pay an interest to risks management of price fluctuations, within the framework of policies related to food security and the food stores management.
4. Work towards achieving a relative stability in food prices, by reducing duties and export restrictions imposed on food commodities for importing and exporting countries.

5. Investing in human resources, developing the agricultural research, reforming the production incentives structure, and developing administrative capability in designing and implementing of food production projects and programs.
6. Paying attention to field of supporting and providing the agricultural production inputs and working on raising the hectare productivity, especially for small producers to enable them to continue in the production process.
7. Removing the huge subsidies and incentives for the biofuel industry.
8. The need for state intervention to stabilize the food prices and reduce their fluctuations and effects on low-income groups and those suffering of poverty.
9. Establishing a strategic grains reserve, determine the optimum stock level and the level of costs and losses that linked to these reserves.
10. Attention to be paid on development of agriculture, such as depending on seeds with good varieties and resisting drought and diseases, and the adoption of modern irrigation techniques.

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