World Food Programme

REGIONAL MARKET ANALYSIS

Economic Trends across RBC Region
H2 2021 Update

WFP/Deniz Akkus

Issue #10 - February 2022

EXECUTIVE SUMMARY

- In 2021, countries started easing movement restrictions, tourism sector witnessed an upturn, and demand was boosted leading to increasing oil prices that was in favor of oil exporting countries. Accordingly, the region reported an average annual increase of 9.8 percent of GDP in 2021 compared with 8.6 contraction in 2020.
- Several countries in the region witnessed price increases between June 2021 and December 2021 led by global food inflationary pressures. According to the cost of food basket, a proxy for food inflation rates, **Lebanon** reported the highest annual increase of 351 percent in December 2021, followed by **Syria** (97 percent), and **Yemen** (81 percent) with notable discrepancies between Internationally Recognized Government and Sanaa-based authorities areas of control.
- Increasing food prices were not only limited to staples but were also reported for nutritious food such as vegetables and fruits, protein, pulses and nuts, and dairy products. A continuous increase in food prices, especially the nutritious ones put the vulnerable population at higher risk of malnutrition.
- A comparison for the food basket cost in the region is feasible by converting the cost of food basket from local currency units into USD. **Turkey**, **Jordan**, **Armenia**, and **Libya** were continuously reporting the highest food basket cost in USD terms throughout the second half of 2021.
- Purchasing power of households is eroded by fluctuations in prices (reflected in the cost of the food basket) and decreasing share of value of assistance to the food basket cost. In countries experiencing severe depreciation of their currency or relatively higher inflation rates, the share of food transfer value to food basket cost is relatively low. This is the case for **Yemen**, **Turkey**, **Syria**, **Lebanon**, and **Libya**.


WFP/Amina Al Korey

EXECUTIVE SUMMARY

- The FAO Food Price Index (FFPI), a measure of the monthly change in international prices of a basket of food commodities, continued increasing in the second half of 2021. FFPI spiked 23 percent year-on-year in December 2021 and 30 percent was the average annual increase in the second half of the year. Supply chain disruptions, congestion and delays at ports, scarcity of labor and commodities, increasing global crude oil prices, and unfavorable weather conditions, all combined contributed to the rise in food prices.
- The final impact on each country in the region varies according to different risk factors such as domestic production levels vs relative dependency on imports and the rate of change in domestic prices. A risk analysis is conducted in this report where each country is assigned a risk category based on these risk factors. No single country in the region falls into the **Low-risk** category. **Lebanon**, **Syria**, **Yemen**, and **Libya** fell within the **High-risk** category for inflationary pressures and/or the relatively high import dependency ratios for wheat and/or vegetable oils. The remaining countries fall into the **Medium-risk** category.

The region refers to countries that fall under WFP regional Bureau of Cairo. This includes **Algeria**, **Armenia**, **Egypt**, **Iran**, **Iraq**, **Jordan**, **Lebanon**, **Libya**, **Palestine**, **Syria**, **Tunisia**, **Turkey**, and **Yemen**.


WFP/Elias Halabi

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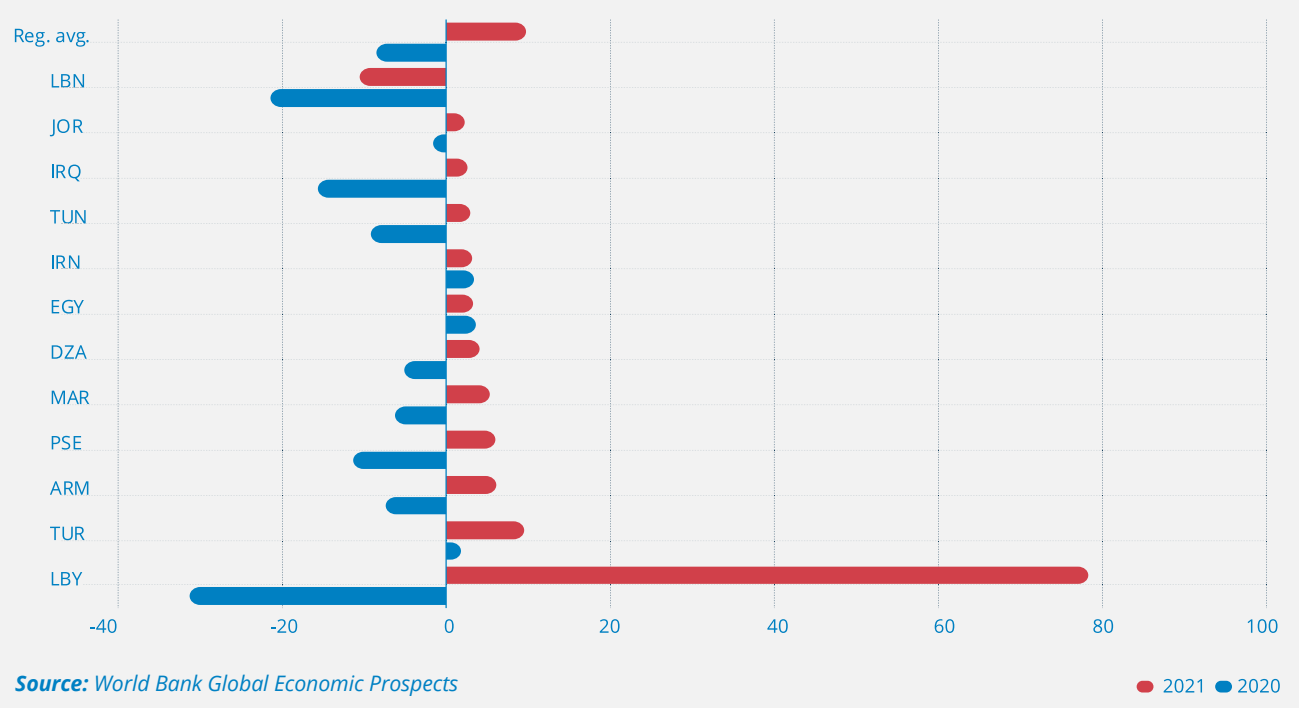
I. MACROECONOMIC OUTLOOK

a. GDP

The pandemic affected most economies of the region in 2020; GDP recorded a regional average annual decrease of 8.6 percent[1]. In 2021, countries started easing internal movement restrictions, borders were open for tourists, demand increased leading to increasing oil prices which was in favor of oil exporting countries such as **Libya**, **Algeria**, **Iran**, and **Iraq**. Inflow of remittances persisted which is crucial for economies where share of remittances to GDP is distinguished. Accordingly, the region reported an average annual increase of 9.8 percent of GDP in 2021.

Figure 1: GDP growth rate, 2020 & 2021



Source: *World Bank Global Economic Prospects*


WFP/Ali Abdallah

*1 Regional average includes **Algeria**, **Tunisia**, **Libya**, **Egypt**, **Jordan**, **Lebanon**, **Palestine**, **Turkey**, **Iran**, **Iraq**, and **Armenia.***

Libya shifted from an alarming decline in GDP by over -31 percent to a 78 percent annual GDP increase in 2021. In 2020, there was a significant cut in oil production because of 8-months blockade on oil ports, in addition to a decline in global demand and oil prices. Towards the end of 2020, the opposing parties signed a cease fire agreement leading to an instant resumption of oil production and simultaneously global oil prices were increasing timely with higher demand.

Lebanon is the only country reporting an economic contraction in both 2020 and 2021. The ongoing economic crisis and political instability led to further contraction in the economy by 10.5 percent in 2021.

Economies of the region rely on three economic sectors: oil revenues, tourism, and remittances. In the following, we deep dive into each of these three key economic sectors because they affect eventually GDP.


WFP/Issa Al Awamleh

a.1. Oil Revenues

The global increase in oil prices and the increase in local production levels, especially in **Libya** followed with **Iran**, led to a notable increase in oil revenues.

Global crude oil prices started increasing in the second quarter of 2020 and reached USD 84/barrel in October 2021, the highest record in 7 years. Oil prices fell by 10 USD/barrel in December 2021 following the spread of Omicron and associated unclarities about the demand outlook. Yet, the price level is still relatively high.

The increase in global oil prices was instantly reflected on oil prices of each of the oil exporting countries. The four producing countries in the region recorded an average annual increase of 70 percent in oil prices.

Figure 2: *Euro Brent Prices, USD/Barrel*

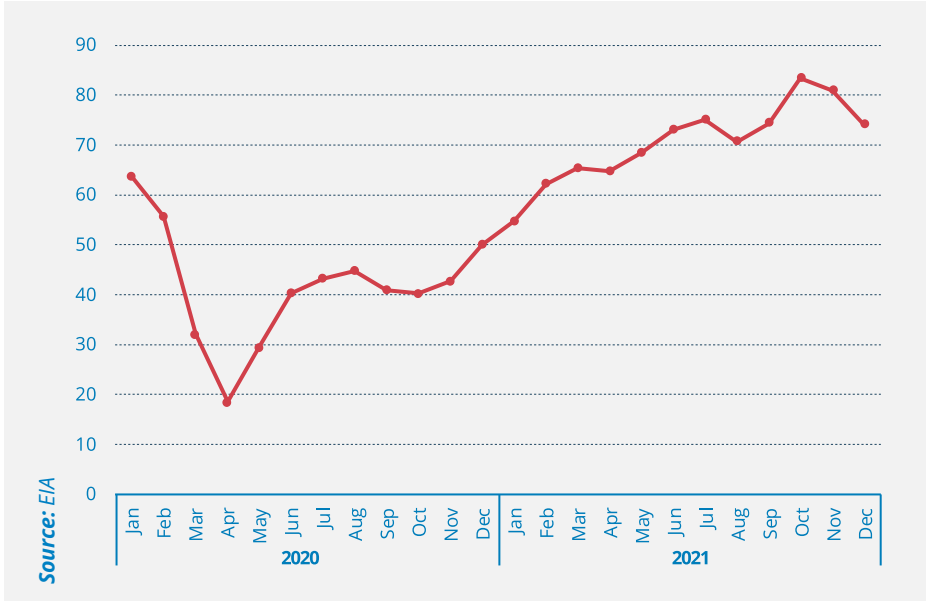


Table 1: Crude Oil Prices (USD/Barrel) and Annual Rate of Change

Country	2020	2021	Annual Rate of Change
Algeria	42	71	68%
Iran	41	70	71%
Iraq	42	70	68%
Libya	40	69	73%
4 Countries Average	41	70	70%
Brent	42	71	69%

Source: *EIA, OPEC*

In terms of oil production, **Libya** is the country that witnessed a boom in its oil production (213 percent of annual increase between 2020 and 2021) after an 8-months blockade on oil ports in 2020. Oil production levels increased by 21 percent in **Iran** and there was no change in either **Algeria** or **Iraq**.

Table 2: Oil production levels (tb/d)

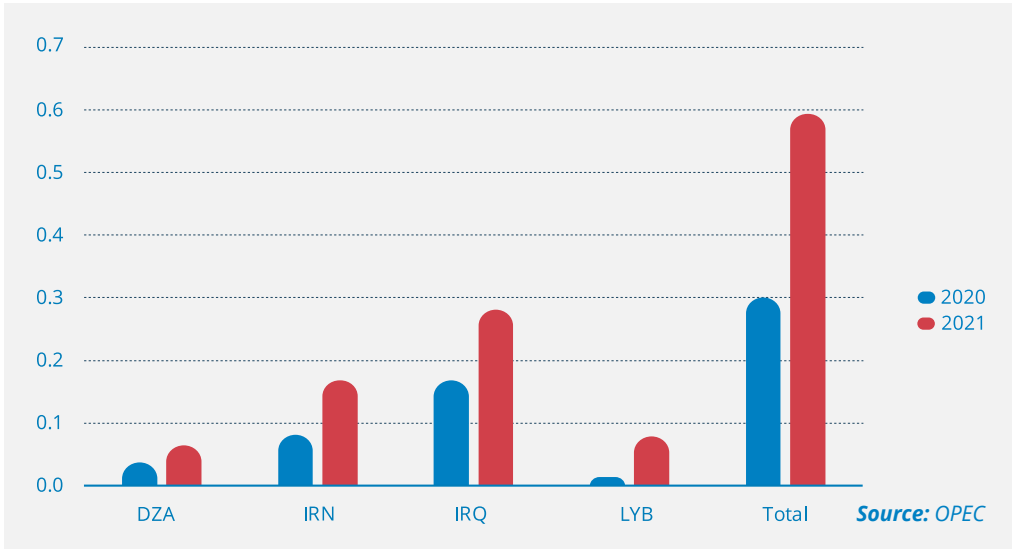
Country	2020	2021	Annual Rate of Change
Algeria	897	908	1%
Iran	1,988	2,404	21%
Iraq	4,049	4,024	-1%
Libya	367	1,149	213%
4 Countries Average	7,301	8,485	16%

Source: *OPEC*

Accordingly, oil revenues increased in each of the four oil producing countries. **Libya** recorded the highest increase rate (441 percent) followed by **Iran** (107 percent).


WFP/Suraj Sharma

Figure 3: Oil Revenues, Bn USD/day



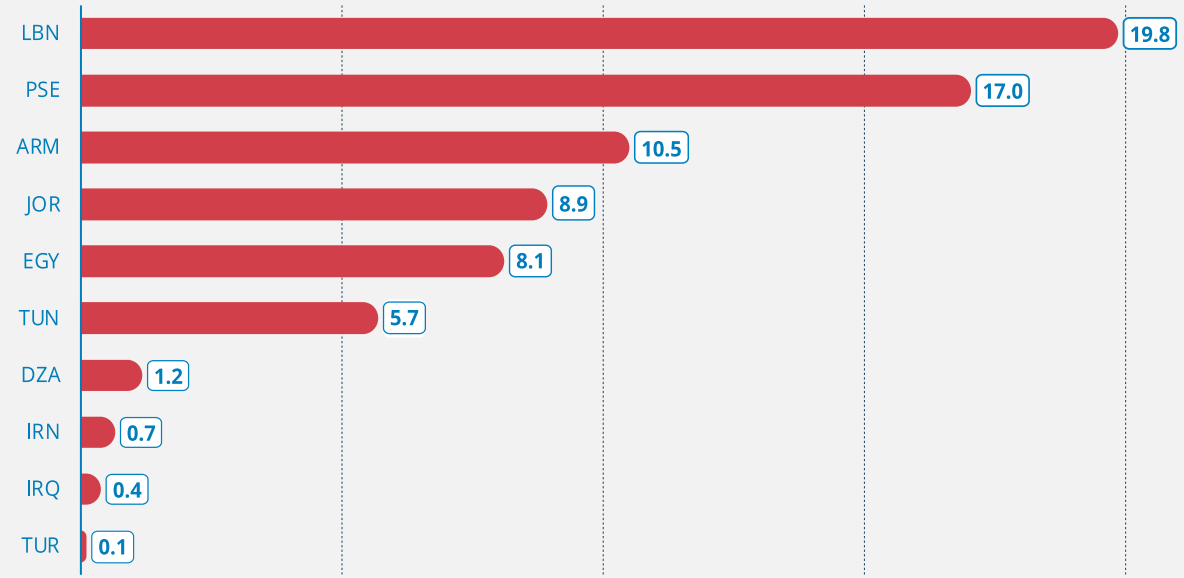

WFP/Deniz Akkus

a.2. Remittances

For the developing Middle East and North Africa region, remittances have long constituted the largest source of external resource flows. **Lebanon** followed by **Palestine** are the two countries with the highest share of remittance to GDP (nearly one fifth of GDP in **Lebanon** and 17 percent in **Palestine**).

In 2021, the return to growth of host countries in the European Union (notably **France** and **Spain**) led to a surge in remittance receipts for the Maghreb (**Algeria**, **Morocco**, and **Tunisia**) by 15.2 percent. Similarly, the upsurge in global oil prices positively affected the GCC countries and resulted in strong gains in remittance inflows to **Egypt**[2] (up 12.6 percent to USD 33 billion). On the contrary, flows to **Jordan** and **Lebanon** fell in 2021 by 6.9 percent and 0.3 percent respectively. The outlook for remittances in 2022 is one of slower growth of 3.6 percent due to risks stemming from COVID-19[3].

Figure 4: Remittance inflows as % of GDP, 2020[4]



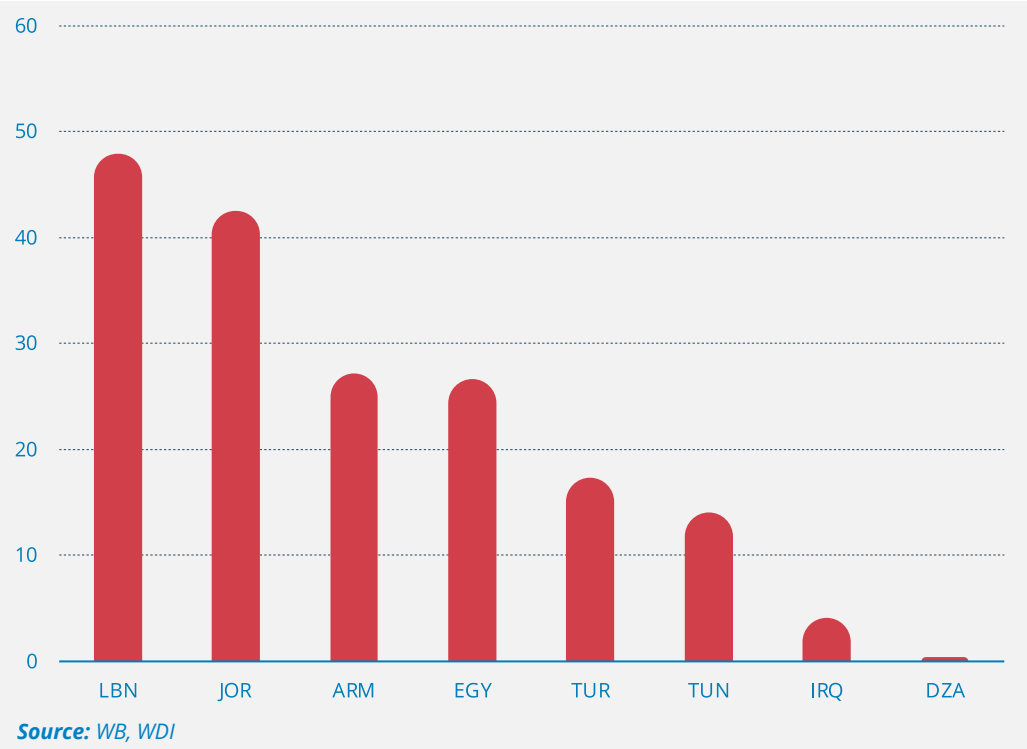
Source: *WDI, WB*

*2 GCC countries is the largest source of remittance inflows to **Egypt**.*
3 World Bank, November 2021, Link
*4 2020 is the latest available data for share of remittances as % of GDP. No data is available for **Syria** or **Libya** or **Yemen**.*

a.3. Tourism

Tourism receipts is another importance source of income and contributor to the economy of the region. In 2019, tourism receipts as a share of total exports stood at 48 ad 42 percent in **Lebanon** and **Jordan**[5]. In addition to **Lebanon** and **Jordan**, tourism in **Armenia**, **Egypt**, **Turkey**, and **Tunisia** is an important source of foreign currency.

Figure 5: Tourism receipts, as a share of total exports



Source: *WB, WDI*

In 2021, movement restrictions following the pandemic were relaxed and countries witnessed an increase in tourism receipts. **Turkey**, the country with the highest value of tourism revenues, recorded an annual increase of 107 percent in the first 9 months of 2021 against the corresponding period of 2020. **Egypt**, the second top, witnessed an annual increase of 72 percent in the first 6 months of 2021 against the first 6m of 2020.

5 Source: World Bank WDI. 2019 is the latest available.


WFP/Khudr Alissa

Table 3: Tourism Receipts in 2020 and 2021 and Rate of Change

Country	2020	2021	Rate of change	Timeframe (based on latest available data)
Turkey	8.1	16.9	107%	9m
Egypt	1.8	3.1	72%	6m
Jordan	1.2	1.7	40%	9m
Tunisia	0.6	0.7	6%	9m

Source: *statistical offices and central banks*

Jordan reported 40 percent increase at a value of USD 1.7 million in the first 9m of 2021, which could offset the decrease in remittances inflow. While remittances inflow decreased by USD 0.1 bn in the first 9 months of 2021, tourism receipts increased by USD 0.48 bn in the first 9 months of 2021.

Jordan data	2020	2021	Difference
Remittances Inflow (USD bn)	2.04	1.94	-0.10
Tourism receipts (USD bn)	1.22	1.70	0.48

Source: *Central Bank of Jordan*

II. PRICES AND EXCHANGE RATES

a. Inflation Rates

Several countries in the region witnessed price increases between June 2021 and December 2021[6]. The increase was mainly led by higher food inflation rates which are linked to global inflationary pressures. The FAO Food Price Index reaches a 10-year high in 2021, despite a small December decline. The FAO Food Price Index (FFPI) averaged 133.7 points in December 2021, down 1.2 points (0.9 percent) from November, but still up 25.1 points (23.1 percent) from December 2020.

The inflation rates and the fluctuations in the rate of inflation between mid-year and end of the year differed considerably among countries in the region. In terms of level of inflation rates, **Lebanon** followed by **Iran** and **Turkey** recorded the highest annual inflation rates at 224, 35, and 36 percent respectively in December 2021 up from 100, 48, and 18 percent in June 2021 . Food price index drives total inflation in most countries of the region, and this is reflected in having the same three countries; **Lebanon**, **Iran**, and **Turkey**, reporting the highest annual increase in food price index at a rate of 439, 42, and 44 percent respectively in November 2021 compared with 222, 63, and 20 percent respectively in June 2021[7].

Table 5: Annual Inflation Rate, mid-year and end of year

Country	June 2021	December 2021 (or latest available in H2 2021)	Latest data available in H2 2021
Algeria	4.1%	8.6%	Oct-21
Armenia	6.5%	7.7%	Dec-21
Egypt	4.9%	5.9%	Dec-21
Iran	47.6%	35.2%	Dec-21
Iraq	6.5%	8.4%	Nov-21
Jordan	1.8%	1.7%	Nov-21
Lebanon	100.6%	224.4%	Dec-21
Libya	2.1%	4.1%	Oct-21
Palestine	2.1%	1.3%	Dec-21
Tunisia	5.7%	6.6%	Dec-21
Turkey	17.5%	36.1%	Dec-21

Source: *National Statistical Centers*

*6 Latest available data during the draft of the report is November 2021 for **Iraq** and **Jordan** and October 2021 for **Algeria** and **Libya**.*
*7 No data available for **Yemen** and **Syria**.*

Table 6: Annual Food Inflation Rate, mid-year and end of year

Country	June 2021	December 2021 (or latest available in H2 2021)	Latest data available in H2 2021
Algeria	3.8%	12.3%	Oct-21
Armenia	8.8%	12.9%	Dec-21
Egypt	3.3%	8.4%	Dec-21
Iran	62.7%	42.0%	Dec-21
Iraq	6.2%	8.3%	Nov-21
Jordan	-0.3%	-0.6%	Nov-21
Lebanon	221.8%	438.7%	Dec-21
Libya	3.1%	5.9%	Oct-21
Palestine	3.3%	1.8%	Nov-21
Tunisia	7.2%	7.6%	Dec-21
Turkey	20.0%	43.8%	Dec-21

Source: *National Statistical Centers*

WFP/ Hussam Al-Saleh

Drivers for increased inflationary pressure vary across countries. The financial crisis that began in October 2019 compound with alarming debts, depleting foreign reserves, subsidies removal, and continuous currency depreciation suffocated the Lebanese economy, affecting general price level. In Iran, fallout of COVID-19, restricted access to foreign reserves due to U.S. sanctions and declining income from the oil sector – one of the main income sources for the government – heightened inflation rates. Yet, inflation rate in December increased at a lower rate compared to June 2021 for the slowdown in increase rate of food items in **Iran**.

The sharp increase in annual inflation rates in **Turkey** comes after the President's order to repeatedly slash interest rates in recent months despite double-digit inflation[8]. Central banks normally opt for raising interest rates to combat inflation by encouraging savings and cutting demand which leads to slow economic growth. In December 2021, the Consumer Price index jumped by 13.6 percent against November 2021 in **Turkey**, the largest monthly gain on record and by 36 percent annually, the highest annual increase since September 2002. Simultaneously, in December 2021, a sharp depreciation of the Turkish Lira has been recorded, which lost annually about 46 percent of its value against the dollar. Finally, rising international commodity prices exerted further pressure on producer and consumer prices.

Algeria, **Armenia**, and **Egypt** witnessed an increase in annual inflation rates between June 2021 and October/December 2021, attributed mainly to increasing food prices.

b. Variation in the Cost of the Food Basket[9]

Since there are data limitations on inflation and food inflation rates for some countries such as **Syria** and **Yemen**, we leveraged WFP field price monitoring to capture the two countries in this analysis. According to the cost of food basket, a proxy for food inflation rates, **Syria** reported an alarming annual increase of 97 percent in December 2021, followed by **Yemen** (81 percent) with notable discrepancies between Internationally Recognized Government and Sanaa-based authorities areas of control. The former is pushing up national average prices (117 percent) against 41 percent in Sanaa'-based authorities' areas.

WFP/Inger Marie Vennize

8 https://www.ft.com/content/c4edcd14-85c3-46b9-a87a-f2369e8dadc6
9 No data is available for **Algeria**, **Iran** *or* **Tunisia**.

Table 7: Food Basket Cost in LCU and Food Basket Vatiations

Country	H2 2021	Dec.21/ Dec.20	H2 2021/H2 2020	H2 2021/H1 2021
Armenia	13,586	18%	16%	6%
Egypt	244	20%	17%	6%
Iraq	24,631	17%	18%	4%
Jordan	20	2%	1%	2%
Lebanon	444,348	351%	267%	124%
Libya	137	15%	12%	10.1%
Palestine	26	9%	6%	3%
Syria	38,765	97%	110%	23%
Turkey	277	37%	24%	14%
Yemen	9,701	81%	61%	37%

Source: *WFP COs*


WFP/Katharina Meyer-Seipp

Hyperinflation in **Syria** is linked to the Lebanese financial crisis that trickled down to the Syrian economy through the withhold of hard currency Syrians deposited in Lebanese banks, which led to a shortfall of hard currency in the country and a sharp depreciation of the Syrian Pound (SYP). The depreciation of Turkish Lira has also worsened the cost-of-living faced by Syrians in the Cross-border region. Furthermore, high fuel prices are a key and a persistent challenge, which is indirectly pushing food prices up.

On 11 December, the Ministry of Internal Trade and Consumer Protection increased the price of the subsidized 90-Octane gasoline sold through the electronic card from SYP 750/litre to SYP 1,100/litre, representing the third increase of the price of subsidized 90-Octane gasoline during 2021. Moreover, the informal national average price of transport diesel decreased by seven percent m-o-m, while it increased by 172 percent y-o-y, reaching SYP 2,759/litre in December 2021. The informal price remains almost five times higher than the formal price (SYP 474/ litre)[10]. Furthermore, erratic rainfall in the 2020/21 agricultural season, together with several heatwaves, the high cost of inputs, limited availability of irrigation water and high cost of fuel for pumping, resulted in a significant contraction of harvestable cereal area. Wheat production in 2021 is estimated at around 1.05 million tonnes, down from 2.8 million in 2020. At 268,000 tonnes, barley production is about 10 percent of the bumper harvests in 2019 and 2020[11].

10 Monthly Market bulletin, December 2021, Link
11 FAO giews Syria country brief, Link

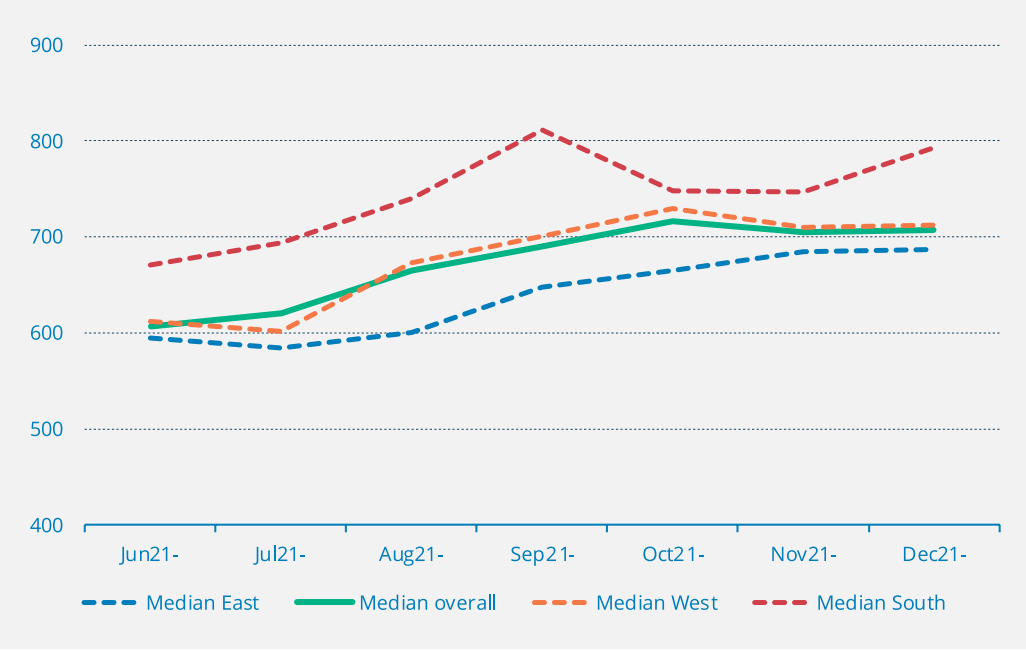
The ongoing conflict combined with currency devaluation and the surge in global prices of key food commodities kept pressuring prices in **Yemen**, the country that is highly dependent on food imports with more than 90 percent import dependency[12]. The cost of the food basket in H2 2021 increased by 61 percent compared with H2 2020. The food basket cost in Internationally Recognized Government areas (IRG) is pushing the national average up through a 88 percent increase in H2 2021 compared with H2 2020. However, Sanaa'-based authorities reported 32 percent increase during the same time interval. In the second half of 2021, the percentage of households reporting inadequate food consumption stood at 48 percent in IRG against 41 percent in Sanaa'-based authorities.

Libya reported an annual increase of 15 percent in December 2021. It is worth noting that despite the moderate annual increase in **Libya** compared to **Syria** or **Lebanon** or **Yemen**, the food basket cost recorded an average annual increase of 12 percent in H2 2021 against -1 percent in H1 2021. In December, a 20 percent raise in public sector wages was approved by **Libya**'s internationally recognized government. Public salaries account for more than half of public spending. Increased salaries can lead to higher inflation rates and a further devaluation of the Libyan dinar[13]. The Southern region continue to witness the highest food basket cost. Between December and June 2021, the rate of increase in prices in the South was the highest but still comparable with West and East regions; 18,16, and 15 percent respectively.

Similar to food inflation rates, **Lebanon** reported the highest increase in the cost of food basket year-over-year (351 percent) or over the second half of 2021 against the same corresponding period of 2020 (267 percent) or over the second half of 2021 against the first half of the same year (124 percent).

Food prices in the **State of Palestine** remain low, nevertheless there is a notable regional gap in the level of prices in the West Bank and Gaza. In December 2021, the cost of food basket in West Bank was 33 percent higher than Gaza (ILS 30 vs ILS 23). This is justified by the higher employment rates and income levels in the West Bank.

Figure 6: Food Basket Cost in LYD



12 Food security quarterly review in Yemen, Link
13 https://www.reuters.com/article/libya-economy-idAFL8N2J244V

According to WFP stress level categorizations, **Lebanon** and **Yemen** are experiencing crisis levels across 6- and 12-months variations of the food basket cost. In terms of 12-months variations, most countries are going at least through stress levels.

Table 8: Stress Level Categorization of 6- and 12- months Variations

	Normal	Stress	Alert	Crisis
Rate of change	<10%	10% to <20%	20% to <30%	>30%

The heightened food prices across the region are driven by higher global food prices linked to global supply disruptions, surge in oil prices, and relatively high dependency of the region on food imports. Section II is dedicated to cover key reasons behind high global food prices and key drivers and risk factors determining the final impact on each county in the region.

b.1. Price Evolution of Nutritious Food

Increasing food prices were not only limited to staples but were also reported for nutritious food such as vegetables and fruits, protein, pulses and nuts, and dairy products. A continuous increase in food prices, especially the nutritious ones could lead to a deterioration in the nutrition status of people. When a crisis occurs, children, adolescent girls and women are part of the most vulnerable population particularly children under five years of age, pregnant and lactating women, and girls. They are at higher risk of malnutrition, mortality, and morbidity. In the most affected countries, the price evolution is having detrimental effects on dietary patterns and is adversely affecting the purchase power, the dietary diversity, and the nutritional status of the most vulnerable segment of the population.

Evidence shows the strong correlation between low dietary diversity and


WFP/Mercy Hands

micronutrient deficiencies such as a lower consumption of iron or vitamin A rich foods (some vegetables, fruits and cereals, meat, egg, beans…). According to WHO, vitamins and minerals deficiencies can cause several health and nutrition issues especially for children under the age of 5 years and women. Iron-deficiency is the most common cause of anaemia that particularly affects young children and pregnant women. Vitamin A deficiency is the leading cause of preventable blindness in children and increases the risk of disease and death from severe infections[14].

Lebanon is the country recording the highest annual variation in H2 2021 across all nutritious food groups, followed with **Syria** and **Iran**. **Yemen**, **Armenia**, **Turkey**, **Libya**, and **Iraq** recorded relatively high variations across some nutritious food groups.


WFP/Zakaria Thlaij

*Table 9: Annual variation across different nutritious food commodity groups, H2 2021/H22020**

Country	Protein
Lebanon	213%
Iran	173%
Syria	71%
Yemen	33%
Turkey	29%
Armenia	23%
Libya	12%
Egypt	7%
Iraq	5%
Palestine	5%
Jordan	%1

Country	Vegetables and fruits
Lebanon	209%
Syria	63%
Armenia	41%
Turkey	5%
Egypt	2%
Iraq	-3%
Palestine	-3%
Libya	-5%
Yemen	-8%
Jordan	-13%

Country	Pulses and nuts
Lebanon	307%
Syria	111%
Iran	76%
Libya	21%
Iraq	10%
Armenia	10%
Turkey	7%
Palestine	2%
Jordan	1%
Egypt	-15%

Country	Milk and dairy
Lebanon	329%
Syria	104%
Egypt	21%
Turkey	17%
Armenia	8%
Iraq	8%
Palestine	0%
Libya	-1%
Jordan	-2%

* *No data is available for Algeria, Tunisia, and Data for Yemen and Iran is unavailable for some nutritious food groups*

14 *Micronutrients (who.int)*

As for Cereals and tubers, Lebanon remains the country recording the highest variations in H2 2021, followed with **Syria**, **Iran**, **Iraq**, and **Yemen**.

*Table 10: Annual variation of cereals food groups, H2 2021/H22020**

Country	Cereals and tubers
Lebanon	216%
Syria	106%
Iran	46%
Iraq	44%
Yemen	22%
Armenia	15%
Turkey	12%
Egypt	4%
Jordan	1%
Palestine	-3%
Libya	-6%


WFP/ Hussam Al-Saleh

c. Regional Comparison for the Cost of Food Basket[15]

A comparison for the food basket cost in the region is feasible by converting the cost of food basket from local currency units into USD. In the region, some countries have more than one exchange rate: the official rate and an unofficial market rate that is higher than the official rate. In the below analysis, we apply the unofficial rate which represents market rate and actual cost of price items. **Syria**, **Yemen**, **Lebanon**, and **Libya** are countries where data for the food basket cost and unofficial rates exist. Throughout the second half of 2021, **Palestine** followed by **Yemen**, **Syria**, **Egypt**, and **Iraq** recorded the lowest food basket cost in USD terms and the cost of the food basket in these countries is quite lower than the regional average.

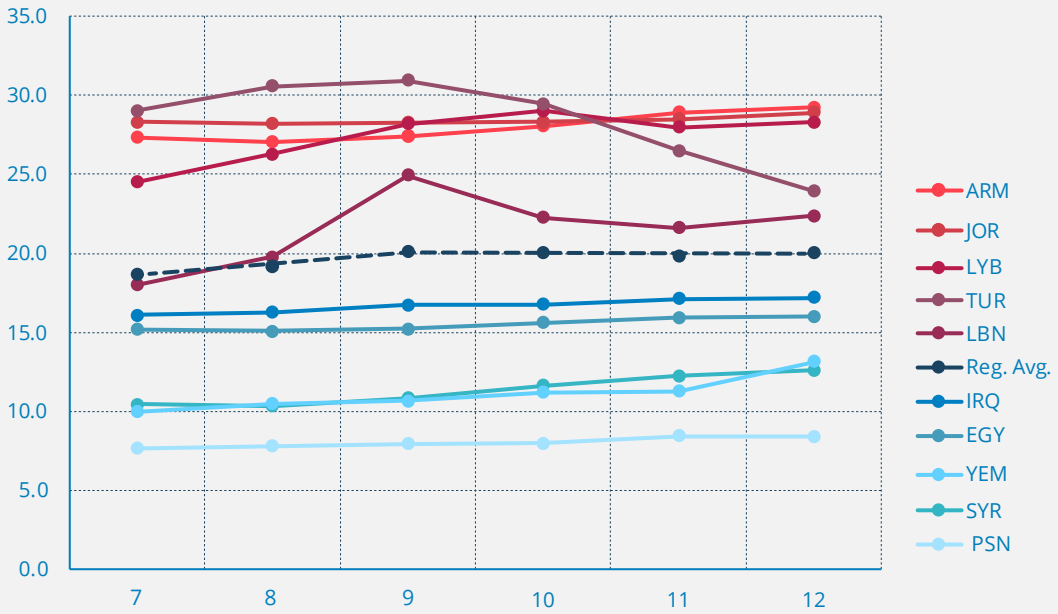
* *No data is available for Algeria, Tunisia.*

15 *Although the components of the food basket vary across these countries, they represent what is equivalent to 2,100 kcal per capita per month.*


WFP/Neda Mobarra

Food basket cost in Lebanon is the closest to the regional average, yet the gap widened in September for an appreciation in the local currency by 18 percent from LBP 19,607/USD in August 2021 down to LBP 16,600/USD in September 2021. **Turkey**, **Jordan**, **Armenia**, and **Libya** were continuously reporting the highest food basket cost in USD terms. The cost of food basket in **Turkey** fell in December 2021 by more than 2.5 dollars against November 2021 for a depreciation in the Turkish Lira from TL 10.7 per USD in November 2021 to TL 14 in December 2021.

Figure 7: Cost of the food basket cost in USD (parallel rate), July-December 2021



Source: *WFP COs*

d. Currency Fluctuations

Currency fluctuations can lead to price pressures especially in countries that heavily depend on imports to meet domestic demand. Currency depreciation is passed through higher prices of imported items that are eventually part of the food basket. **Lebanon**, **Syria**, and **Yemen** are the three countries reporting the highest annual variation in the food basket cost and among top four countries reporting the sharpest currency annual depreciation.

The rapid depreciation of the Turkish Lira (24 percent) in December 2021 is linked with higher food basket cost and higher inflation rates. In **Yemen**, the sharp depreciation of the Rial is led by the devaluation in IRG areas; 34 percent annual depreciation in December 2021. On the other hand, in Sanaa'-Based authorities areas reported a minor depreciation of the Yemeni Rial by 0.5 percent.

Table 11: Depreciation/appreciation rate of local currencies to the USD[16]

Country	Dec. 2021 (LCU/USD)	Dec. 2021/Dec. 2020	H2 2021/H2 2020	H2 2021/H1 2021
Algeria	139	-5%	-6%	-3%
Armenia	485.5	7%	2%	8%
Egypt	15.7	0%	1%	0%
Iran	300000	-14%	-6%	-12%
Iraq	1477.2	-16%	-19%	-1%
Jordan	0.7	0%	0%	0%
Lebanon	26109	-68%	-62%	-44%
Libya	5	16%	22%	3%
Palestine	3.1	3%	6%	2%
Syria	3489.7	-19%	-30%	-4%
Tunisia	2.8	-6%	-3%	-3%
Turkey	13.9	-45%	-24%	-20%
Yemen	1002.1	-20%	-19%	-15%

Source: *WFP CO, government sources, FXtop*

16 *Unofficial exchange rate is leveraged for Lebanon, Syria, and Yemen. Positive rates refer to an appreciation and negative rates refer to a depreciation.*

e. Transfer Values

In this section the average cost of the food basket in December 2021 for each country in the region is compared against the transfer value WFP beneficiaries receive for food needs[17][18]. This analysis is not conceived as gap analysis, rather it is meant understand how purchasing power of households is eroded by fluctuations in prices (reflected in the cost of the food basket) and how much the value of assistance received helps beneficiaries to meet their food needs.

In countries experiencing severe depreciation of their currency or high inflation rates, the share of food transfer value to food basket cost is relatively low. This is the case for **Yemen**, **Turkey**, **Syria**, **Lebanon**, and **Libya**.

Other countries have transfer values that are equivalent or even higher than food basket cost, suggesting a stronger purchasing power for vulnerable households located in these countries.

Table 12: Food basket cost and transfer values in LCU in December 2021[19][20][21]

Country	FB cost in LCU	Transfer value in LCU	Transfer value/FB cost
Armenia	14,189	16,924	1.2
Egypt	252	400	1.6
Iraq	25,420	24,000	0.9
Jordan	21	23	1.1
Lebanon	584,196	300,000	0.5
Libya	142	82	0.6
Palestine	26	32	1.2
Syria	44,022	25,416	0.6
Turkey	334	120	0.4
Yemen	11,579	7,000	0.6

Source: *WFP Cos and Regional Bureau of Cairo analysis*

In countries going through hyperinflation and currency devaluations, diversification of assistance modalities or revision of transfer values might be an option considering that the political context also plays a role – as some governments impose caps on the transfer values, especially for non-nationals. In a nutshell, continuous monitoring of the adopted assistance modality and levels are key to ensure addressing the needs of the vulnerable, especially the neediest.

17 Conditional food assistance or e-voucher covering only food expenditure are considered for this analysis
18 The transfer values are per beneficiary/capita per month in local currency units.
*19 In **Lebanon**, WFP is also providing multipurpose cash transfers equivalent to 400,000 LBP which is considerably higher than the cost of food basket. The 300,00 LBP is the transfer value linked to food vouchers.*
*20 WFP Syria Co. applies a mixed modality (hybrid) ration; General Food Assistance and cash-based Transfers (per HH of 5). To calculate the (food) transfer value in **Syria**, we monetized the in-kind food rations using WFP field monitored prices in November 2021 and added to cash-based transfer (SYP 9,800/capita/month). **Syria** CO provides other different CBT programmes (e.g. out of school children, livelihood programmes), yet, we included only the hybrid ration as it is the most relevant to our scope of analysis.*
21 Transfer values examined represent the per capita value WFP beneficiaries receive on monthly. The below lists the transfer values analyzed in case of multiple programs in place based on CBT:

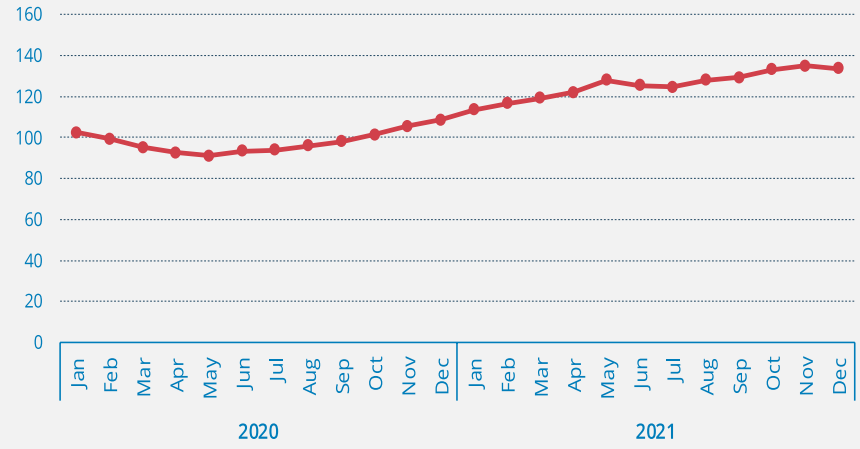
- ***Iraq** à cash-based assistance provided to refugee population*
- ***Jordan** à cash-based assistance targeting extremely vulnerable Syrians*
- ***Turkey** à e-vouchers for Syrian refugees outside camps*
- ***Yemen** à average of YER 7,500 and YER 6,500 (commodity voucher and cash).*

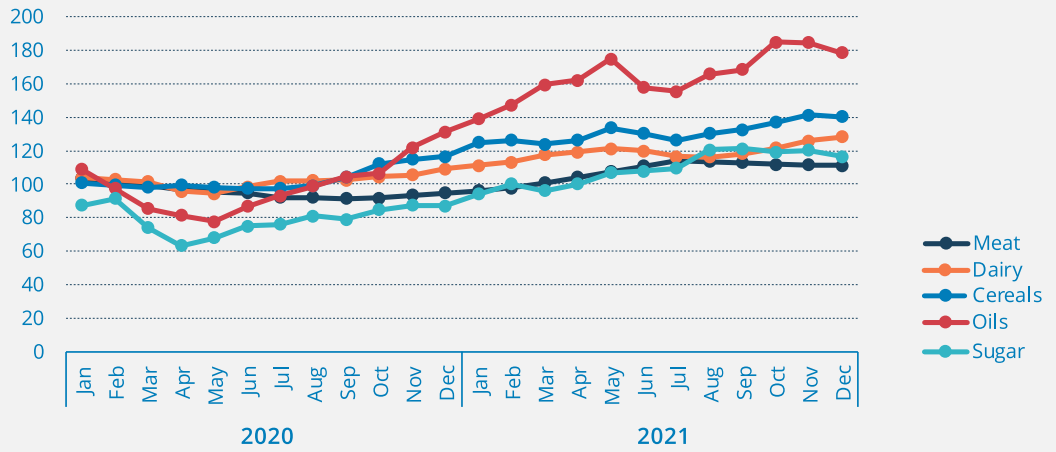
III. TREND OF GLOBAL FOOD PRICES AND IMPACT ON DOMESTIC PRICES

a. Global Figures and Background

The **FAO Food Price Index (FFPI)**[22, 23], a measure of the monthly change in international prices of a basket of food commodities, continued increasing in the second half of 2021. FFPI spiked 23 percent year-on-year in December 2021 and 30 percent was the average annual increase in the second half of the year. Vegetable oils led this annual increase by an alarming 36 percent annual increase and an average annual increase of 60 percent in H2 2021. Sugar and Cereal indices reported an average annual increase of 43 and 26 percent respectively, followed with 21 and 16 percent respectively for Meat and Diary.

Figures 8 & 9: FAO food price index and five commodity groups, 2-years trend





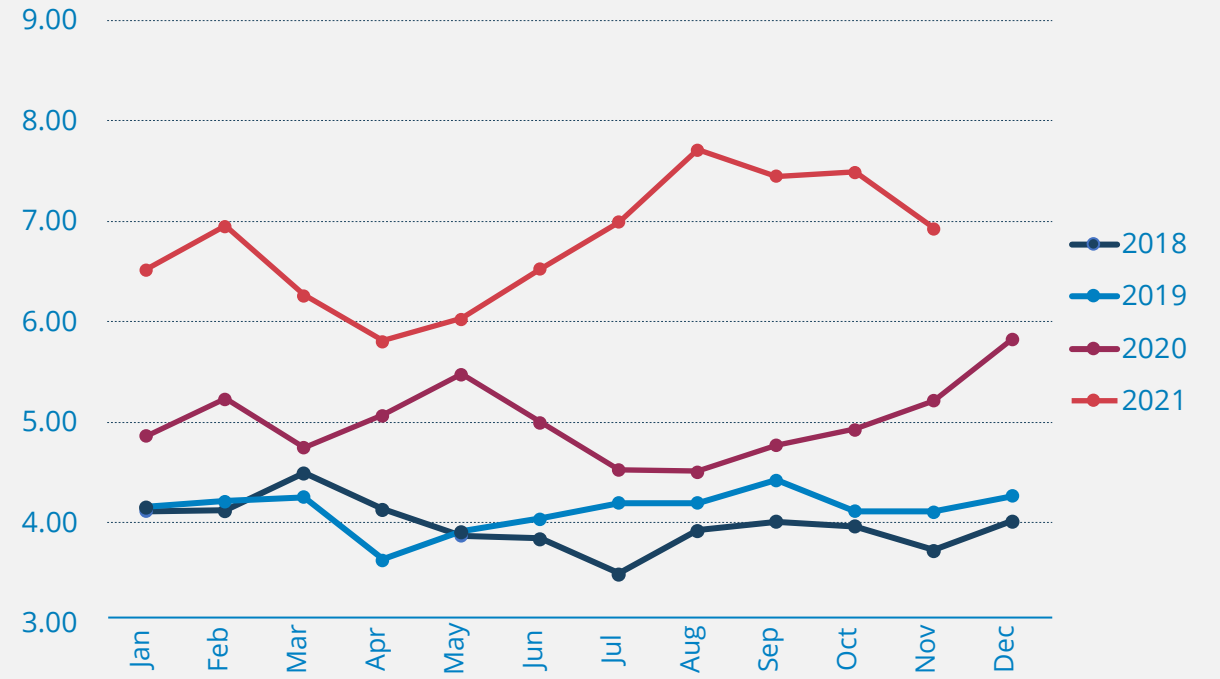
Source: *FAO*

22 *Source: https://www.fao.org/worldfoodsituation/foodpricesindex/en/*
23 *The FAO Food Price Index (FFPI) is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices (Cereals, oils, meat, dairy, and Sugar) weighted by the average export shares of each of the groups over 2014-2016.*

Supply chain disruptions have been much more severe and longer-lasting than expected this year on strong demand as economies emerged from lockdown, shipping container shortages, a lack of semiconductors, congestion at Asian ports due to Covid-19 restrictions, and scarcity of labor and commodities[24].

Global supply chain disruptions led to congestion and disruptions in most ports worldwide which had considerable impacts on WFP supply lanes. Indeed, the global average delays for late arrivals was the highest in 2021; 7 days in the first 11 months of 2021[25] compared with 5 days in the corresponding period of 2020. In addition, freight costs reported an increase equivalent to 25 percent for liners and over 50 percent for charters between 2020 and 2021.

Figure 10: *Global Average delays for late vessel arrivals, in days*



Source: *Sea-Intelligence, GLP report issue 124*

WFP/Inger Marie Vennize

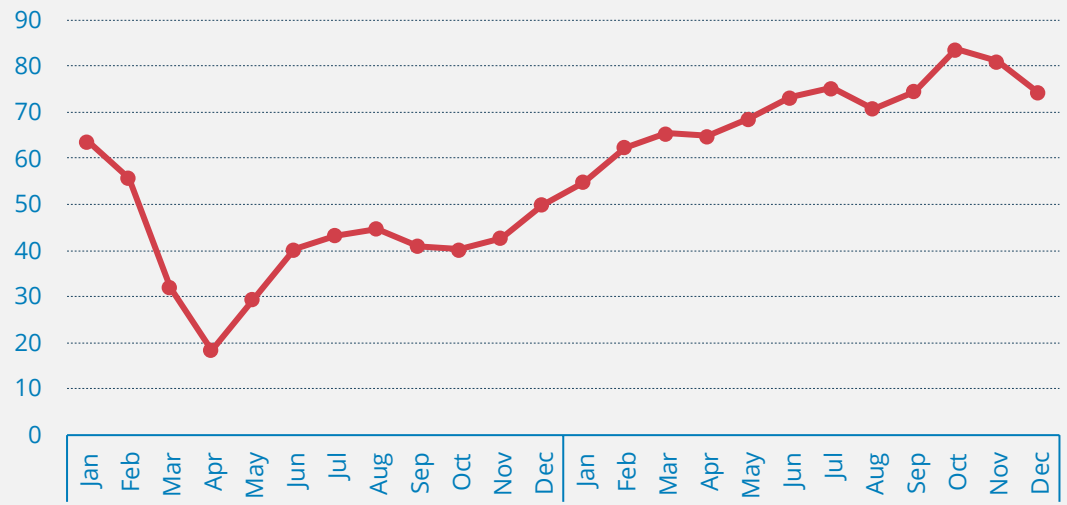
24 Global outlook report, Focus Economics, December 2021.
25 December data was not available during the draft of report. Source: Sea-Intelligence, Link

Further to supply disruptions, rising temperatures and unfavourable climate conditions for wheat production, led to a continued surge in world wheat prices, standing at 38.3 percent higher year-on-year, and reaching their highest level since November 2012. Global wheat production in 2021/2022 is estimated to annually decline by 6 million tonnes, the second highest decline in 10 years[26].

Increasing global crude oil prices are also pushing up food prices through higher input and transportation costs. Indeed, the correlation coefficient between Brent prices and FFPI over the past three years was positive and strong at 0.92 [27].

After a significant decline in the first four months of 2020, Brent prices continued increasing reaching a record high of USD 84 per barrel in October 2021, the highest level in 7 years. Oil prices then fell in November and December 2021 to USD 81 and USD 74 per barrel respectively following the spread of Omicron and associated unclarities about the demand outlook. Yet, the price level is still relatively high.

Figure 11: *Brent prices, USD/barrel*



Source: *EIA*


WFP/Mohammad El Batah

26 Source: https://www.fao.org/worldfoodsituation/csdb/en/
27 The correlation coefficient is based on observations over the past 2 years.


WFP/Zakaria Thlaij

The impact of the global food price increase on domestic prices in individual countries is examined through focusing on two main commodities: Vegetable oils and wheat (flour). These two food commodities are key staples in the diet of most households across all countries in the region and were recording the highest average annual increase in H2 2021, excluding Sugar[28].

The final impact on each country will vary according to different risk factors including:

- Wheat/vegetable oils domestic production vs imports
  - Domestic production levels
  - Import dependency ratios[29]
- Leading exporting countries
- Rate of change in domestic prices

28 We excluded Sugar from the analysis becase wheat and vegetable oils are the two key staples in the diet of most housheolds.
29 Import dependency ratio is a ratio that measures the degree by which domestic demand is met through imports. The lower is the domestic production level, the higher is the import level, and consequently the higher is the import dependency ratio. Import dependency ratio = (imports/(production+imports-exports)

b. Wheat

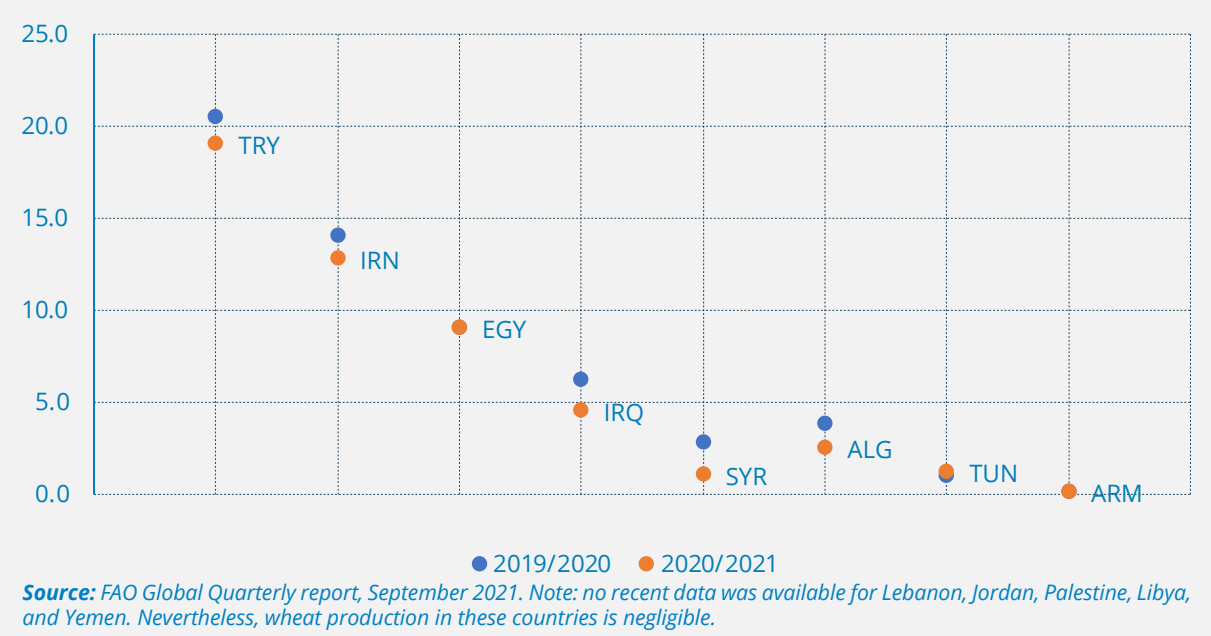
b.1. Domestic Production vs imports

b.1.1. Domestic Production Levels

Turkey followed by **Iran** and **Egypt** are the top wheat producers in the region, comprising nearly 80 percent of total regional wheat production. **Egypt** reserved the same level of wheat production y-o-y, yet Turkey and Iran recorded a 7 and 9 percent yearly decline respectively[30].

The yearly decline in wheat production in 2020/2021 was observed in most countries in the region with the highest decline recorded in **Syria** (63 percent decline in wheat production) followed by **Algeria** and **Iraq**. Drought, high production and transportation costs as well as lack of quality inputs are the key challenges reported by Syrian farmers.

Figure 12: Domestic Wheat production in the region, in million tonnes



Source: *FAO Global Quarterly report, September 2021. Note: no recent data was available for Lebanon, Jordan, Palestine, Libya, and Yemen. Nevertheless, wheat production in these countries is negligible.*

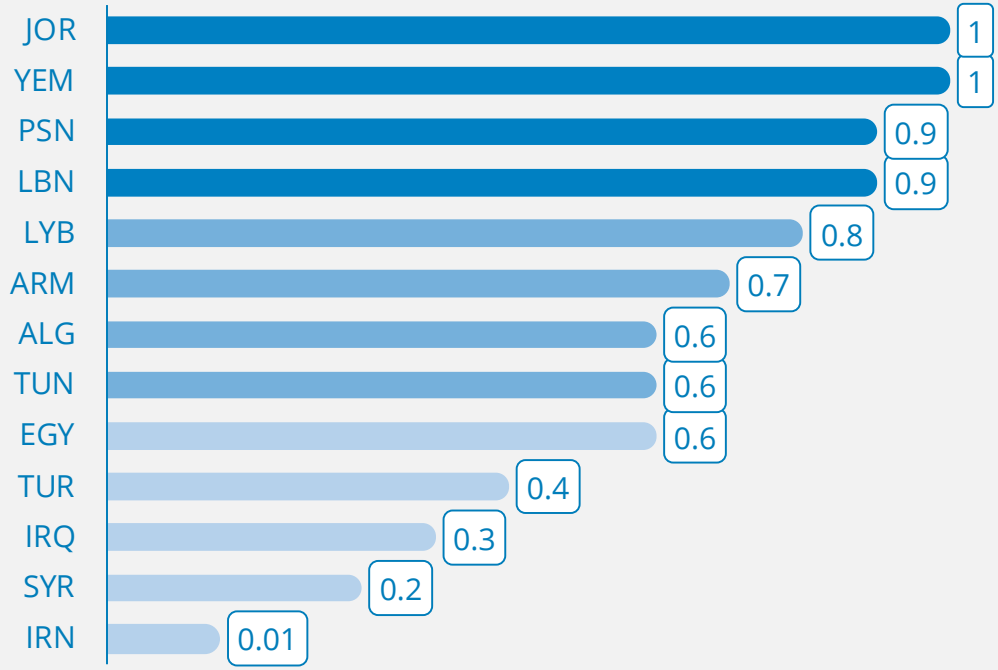

WFP/ Hussam Al-Saleh

30 *Source: FAO Global Quarterly report, September 2021, Link*

b.1.2. Wheat Imports Dependency Ratio

In terms of reliance on imports to meet local demand, **Yemen**, **Jordan**, **Palestine**, **Lebanon** and **Libya** rely heavily on imports to meet local demand for wheat; on average more than 80 percent of local demand is met through import. This indicates the higher vulnerability of these countries to global price spikes. On the contrary, **Iran**, **Syria**, **Iraq**, and **Turkey** are less vulnerable to global risks, for their considerable domestic production[31]. Yet, there are other factors that could affect availability and prices of wheat in a country despite a relatively low import dependency ratio. **Syria** is one of the major wheat producers in the region, however it witnessed a drastic decline in wheat production after unfavourable weather. The economic challenges faced by the country (depleting foreign reserves, inflationary pressures, and currency depreciation) could limit the ability of the country to finance shortages of production if the country could not afford higher import costs especially that global food prices have increased. In this situation, **Syria** could end being more vulnerable than **Jordan**, whose production is negligible, because **Jordan** could be able to afford higher import costs of wheat and hence there will be no shortages of wheat in **Jordan**.

Figure 13: *Wheat Import Dependency Ratios, 2019-Latest Available*



Source: *FAO and WFP calculations*

WFP/Deniz Akkus

31 In Syria, we assume that import dependency ratio in 2021 is higher than 2019 ratio (0.2) for the notable annual decline in wheat production levels (63 percent decline)

b.1.3. Leading Exporting Countries

Russia is the leading wheat producer worldwide and the top exporter to most countries in the region. **Ukraine**, **France**, and **Canada** are also leading exporting countries to the region[32] . **Russia** witnessed a yearly decline of 9 percent in wheat production, **Ukraine** and EU witnessed a growth, and wheat production in **Canada** was hit hard by over 40 percent decline. **Canada** is the second top exporter to **Algeria** and **Tunisia**. This implies that **Algeria** and **Tunisia** are at higher risk of reduced wheat supply in case of any supply disruptions or delays from **Canada**, the second top exporter. Nevertheless, considerable wheat domestic production in these two countries and the reliance on **Ukraine**/**France** as top exporters to **Tunisia**/**Algeria** mitigate to an extent the risk.

Table 13: Wheat Production in top Exporting Countries to the Region

	Wheat production (in Million tonnes)		RATE OF CHANGE
	2019/2020	2020/2021	
Russia	85.9	78	-9%
Ukraine	24.9	29.5	18%
France/EU	125.3	136.4	9%
Canada	35.2	20.2	-43%

Source: *FAO Global Quarterly report, September 2021 and Trade Map.*

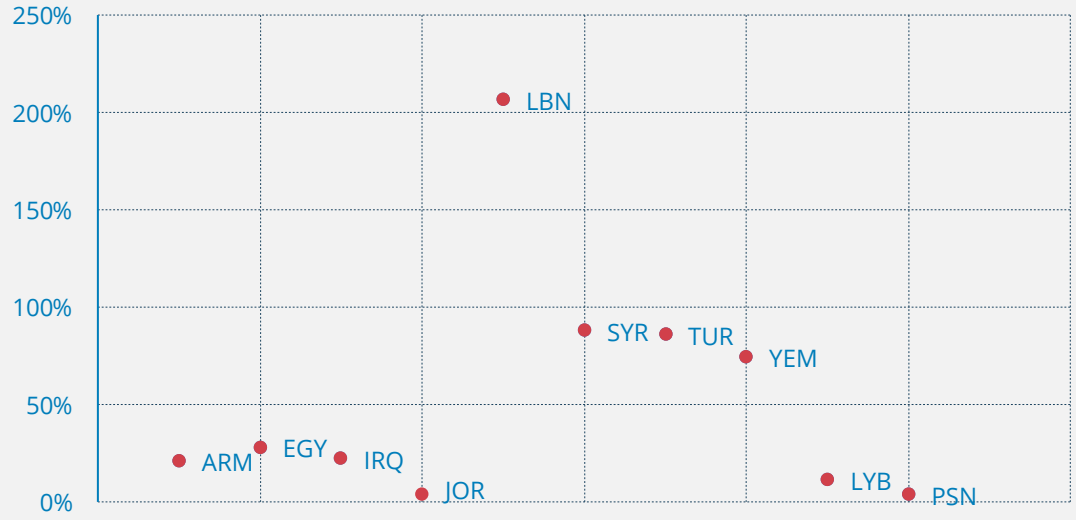
b.1.4. Local Wheat Flour Prices

The price of local wheat flour prices witnessed an annual increase across most countries in the region following the global food price increases. The annual increase ranged from 2 percent in **Jordan** to an alarming 207 percent increase in **Lebanon** followed by 88 percent increase in **Syria**, 86 percent increase in **Turkey**, and 75 percent in **Yemen** in December 2021. Exceptional price increases in those four countries are mainly attributed to the existing economic crises: notable currency depreciation, high reliance on imports in the case of **Lebanon** and **Yemen**, in addition to drought and high price of inputs in **Syria**. The sharp depreciation in Turkish Lira is the key driver behind exceptionally high increase in wheat flour prices.


WFP/Deniz Akkus

32 *This is based on the import values of each of the exporting countries to Middle East and North African countries in 2020. Source: TradeMap*

Figure 14: Annual Change in Local Wheat Flour Prices, December 2021

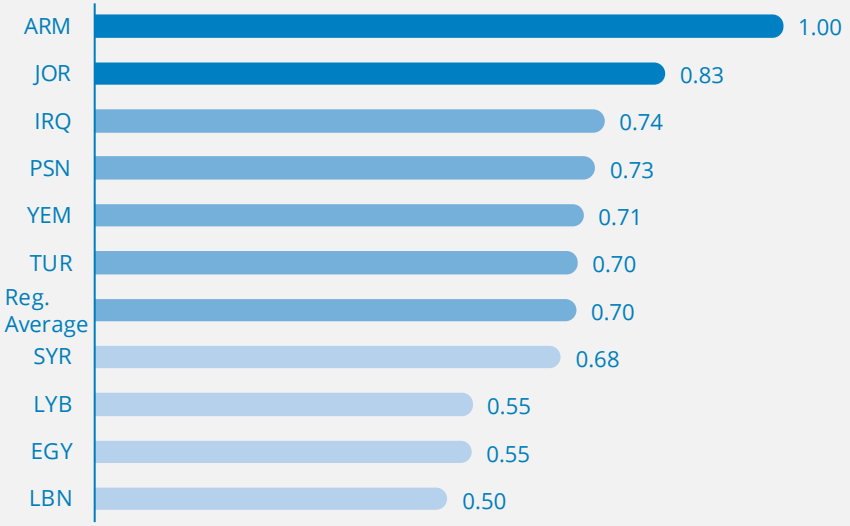


Source: *WFP field monitoring. No recent data was available for **Algeria**, **Iran**, and **Tunisia***

In terms of price levels in USD terms, **Armenia** followed by **Jordan** recorded the highest wheat flour prices in USD terms in December 2021 and in the second half of 2021. In addition, **Iraq**, **Palestine**, **Yemen**, and **Turkey** recorded relatively high wheat flour prices in USD, higher than the regional average. **Armenia**, **Jordan**, **Palestine**, and **Yemen** are heavily dependent on imports to meet their local demand and hence relatively more volatile to global changes, **Iraq** and **Turkey** are more reliant on their local production. Yet, the former devalued its currency late 2020 following budget deficits and decline in oil revenues back then and the latter, **Turkey**, is going through currency depreciation and inflationary pressures.

From WFP procurement perspective, WFP is paying the price of global trends. In the second half of 2021, WFP in the region faced a weighted average price increase of 40 percent for wheat flour compared with the corresponding period of 2020.

Figure 15: Wheat Flour Prices (in USD), December 2021



Source: *COs*

c. The Story Behind Vegetable Oils

Spiraling vegetable oils prices are attributed to various factors; increased demand from **China**, firmer price quotations for palm, soy, sunflower and rapeseed oils, concerns over subdued output in **Malaysia** due to ongoing migrant labour shortages, anticipated reduced yield in **Argentina** due to prolonged dryness[33], an increase in the biodiesel production of vegetable oils (4 percent increase in 2021 against 2020 led by **U.S.A** and **Brazil**).

c.1. Domestic production levels

Domestic production of vegetable oils is very limited in the region; 0.6 percent of world vegetable oil production in 2018. Limited domestic production levels are reflected in the relatively high import dependency ratios across the entire region (see below figure) and the hotter annual inflation rates of vegetable oils (an average of 78 percent in the region) compared to annual inflation rates of wheat flour (an average of 52 percent in the region[34])

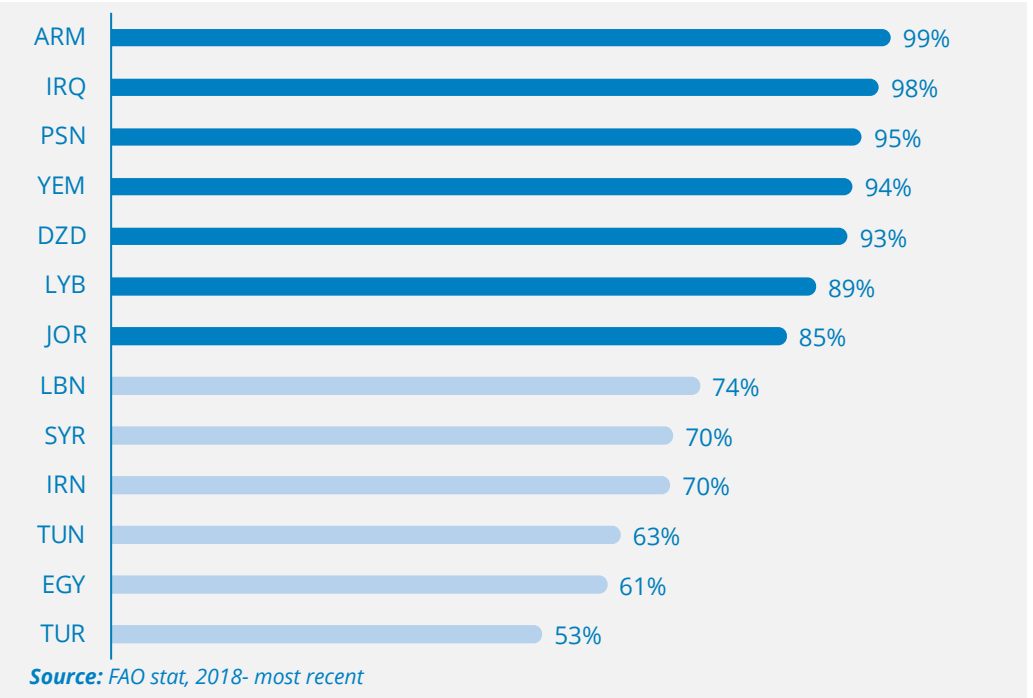
c.2. Vegetable oils imports' dependency ratio

In terms of imports, the entire region is heavily reliant on vegetable oil imports to meet local demand. Import dependency ratio ranges from 53 percent in **Turkey** to 99 percent in **Armenia**. This entails the very high risk of all countries in the region to the escalation in global prices.

c.3. Leading exporting countries

Brazil, **Canada**, and **United States of America** are top producers and exporters of Vegetable oils[35] to the region and the world. According to the International Grains Council (IGC), Vegetable oils production is foreseen to progress in 2021/2022 worldwide and particularly in these three countries. From the supply perspective, countries in the region should be able to maintain same imports levels, assuming that there are no global supply disruptions or delays in deliveries and that countries in the region are able to fund their import costs

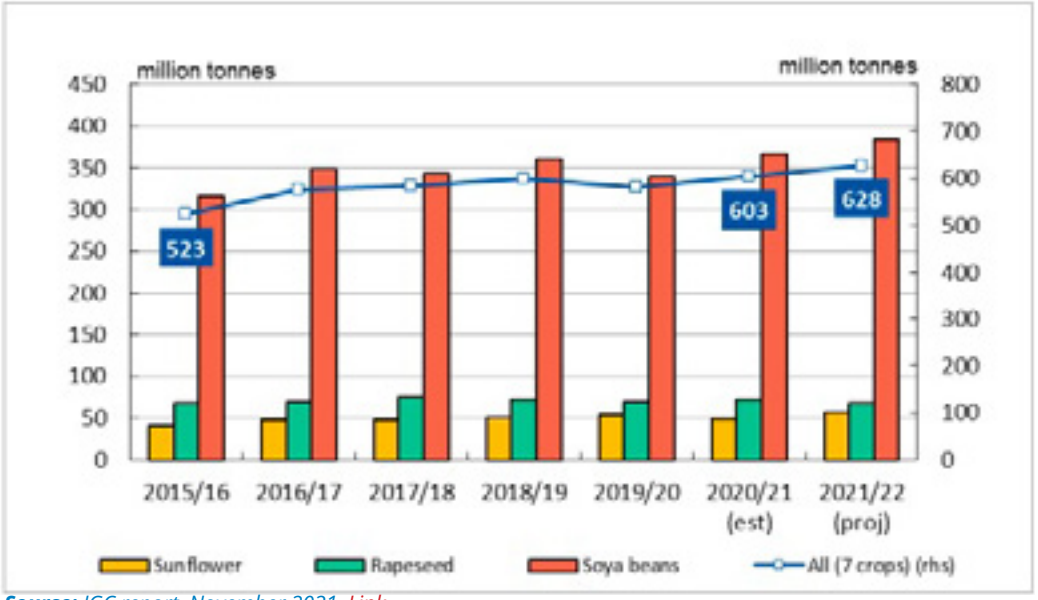
Figure 16: Vegetable Oils Import Dependency Ratios, 2018 (Latest Available)



Source: *FAO stat, 2018- most recent*

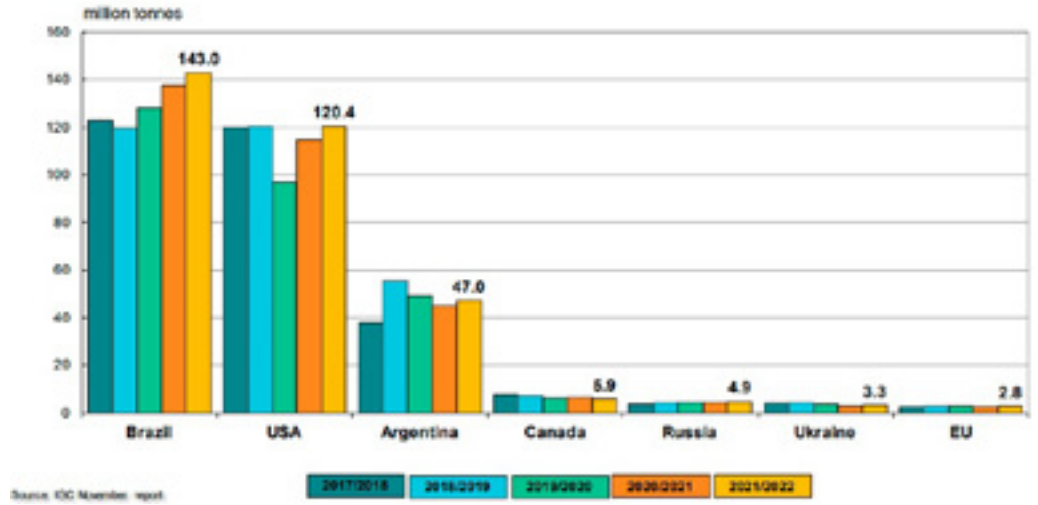
33 FAO monthly price update, November 2021, Link
*34 Price data for Iran was available for oil but not for flour. If we exclude **Iran** from the regional average of oil, the average annual increase of oil prices in the region will stand at 80 percent.*
35 Mainly soya beans

Figure 17: Vegetable oil's production forecast, million tonnes



Source: *IGC report, November 2021, Link*

Figure 18: Soya beans production forecast, million tonnes



Source: *IGC report, November 2021, Link*

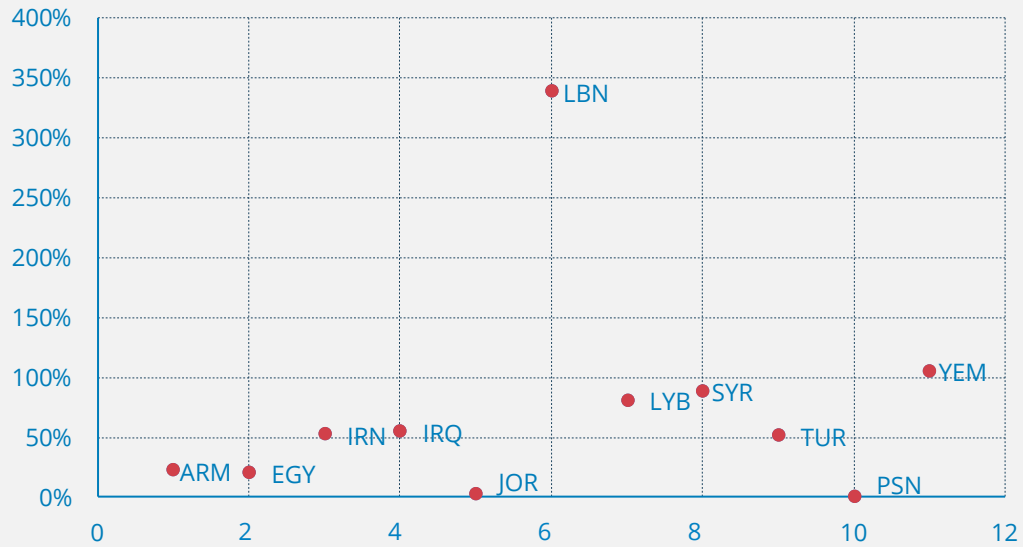

WFP/Deniz Akkus


WFP/Laure Chadraoui

c.4. Local Vegetable Oils Price

The high reliance of most countries in the region on vegetable oils imports are reflected in a high pass-through of escalated global prices on local oil prices across all countries for a regional average of 75 percent which is above the global increase (36 percent in December 2021). The regional average is led by **Lebanon** which recorded the highest annual increase in December 2021 (339 percent), followed with **Yemen**, **Syria**, and **Libya** at 106, 89, and 81 annual increase respectively.

Figure 19: Annual increase rate of vegetable oils prices, December 2021[36]



Source: *WFP field monitoring*

From procurement perspective, WFP is paying the price of global trends. In the second half of 2021, WFP in the region procured Sunflower[37] at a price that is 35-75% higher than the corresponding period of 2020, depending on the origin and time.

36 In contrary with wheat flour, there is no comparison for oil prices in USD terms due to the different types of oil across the region and hence the comparison could be irrelevant when comparing the available price of good quality oil in country x with an available price of relatively bad quality of oil in country y.
37 Almost 80 percent of the oils procured by WFP in the region are Sunflower oil.

d. Risk Classifications

Each country is assigned to a risk category based on recent annual inflation rates of wheat and vegetable oils and import dependency ratios of wheat and vegetable oils; the indicator that captures both import levels and domestic production levels.

As shown in the above table, no single country falls into the **Low-risk** category. **Lebanon**, **Syria**, **Yemen**, and **Libya** fell within the **High-risk** category for inflationary pressures and/or the relatively high import dependency ratios for wheat and/or vegetable oils. The remaining countries fall into the **Medium-risk** category.

Table 19: Risk categorizations in the region

Country	Country ISO Code	Final Risk categorization
Armenia	ARM	Medium
Egypt	EGY	Medium
Iraq	IRQ	Medium
Jordan	JOR	Medium
Lebanon	LBN	High
Syria	SYR	High
Turkey	TUR	Medium
Yemen	YEM	High
Libya	LYB	High
Palestine	PSN	Medium
Algeria	DZD	Medium
Tunisia	TUN	Medium
Iran	IRN	Medium

Source: *Regional Bureau of Cairo- VAM analysis*

WFP/Mohammad Batah

e. Annex

Table 20: Data for key indicators of risk categorizations

Country	Country ISO Code	Annual inflation rate of wheat flour, December 2021	Annual inflation rate of vegetable oils, December 2021	Import dependency ratio of wheat	Import dependency ratio of oil
Armenia	ARM	21%	22%	72%	99%
Egypt	EGY	29%	21%	56%	61%
Iraq	IRQ	23%	55%	32%	98%
Jordan	JOR	2%	3%	102%	85%
Lebanon	LBN	207%	339%	88%	74%
Syria	SYR	88%	89%	20%	70%
Turkey	TUR	86%	52%	42%	53%
Yemen	YEM	75%	106%	101%	94%
Libya	LYB	12%	81%	82%	89%
Palestine	PSN	4%	0%	91%	95%
Algeria	DZD	N/A	N/A	64%	93%
Tunisia	TUN	N/A	N/A	58%	63%
Iran	IRN	N/A	53%	1%	70%

Table 21: Risk Categories

Risk category	Category color code	Category range for inflation rates	Category range for import dependency ratios
Low		less than 15 percent	0 to less than 50 percent
Medium		30 -15 percent	50 to less than 80 percent
High		Above 30 percent	80 percent or more
No Data			

Table 22: Risk Categorization in the Region by Indicator

	Country ISO Code	Annual inflation rate of wheat flour, December 2021	Annual inflation rate of vegetable oils, December 2021	Import dependency ratio of wheat	Import dependency ratio of oil
Armenia	ARM	Medium	Medium	Medium	High
Egypt	EGY	Medium	Medium	Medium	Medium
Iraq	IRQ	Medium	High	Low	High
Jordan	JOR	Low	Low	High	High
Lebanon	LBN	High	High	High	Medium
Syria	SYR	High	High	Low	Medium
Turkey	TUR	High	High	Low	Medium
Yemen	YEM	High	High	High	High
Libya	LYB	Low	High	High	High
Palestine	PSN	Low	Low	High	High
Algeria	DZD			Medium	High
Tunisia	TUN			Medium	Medium
Iran	IRN		High	Low	Medium

Additional Sources

- https://www.fao.org/worldfoodsituation/csdb/en/
- https://stats.oecd.org/viewhtml.aspx?datasetcode=HIGH_AGLINK_2021&lang=en#
- https://app.amis-outlook.org/#/market-database/supply-and-demand-overview
- https://www.fao.org/3/cb6901en/cb6901en.pdf

WFP

World Food Programme

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