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SPECIAL REPORT

2024 FAO/WFP CROP AND FOOD SECURITY ASSESSMENT MISSION (CFSAM) TO THE LEBANESE REPUBLIC

November 2024

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ABBREVIATIONS

AOAD	Arab Organization for Agricultural Development
AFI	Acute Food Insecurity
CAS	Central Administration of Statistics
CFSAM	Crop and Food Security Assessment Mission
CNRS	National Council for Scientific Research
COVID-19	coronavirus disease 2019
CREAL	*Centre de Recherches et d'Études Agricoles Libanais*
DIEM	Data in Emergencies
ESSN/AMAN	Emergency Social Safety Net (also known as AMAN)
FAO	Food and Agriculture Organization of the United Nations
FGD	focus group discussion
GDP	gross domestic product
ha	hectare
IDAL	Investment Development Authority of Lebanon
IDP	internally displaced person
ILO	International Labour Organization
IMF	International Monetary Fund
IOM	International Organization for Migration
IPC	Integrated Phase Classification
IPM	integrated pest management
ISTA	International Seed Testing Association
kg	kilogram
KII	Key Informant Interview
LARI	Lebanese Agriculture Research Institute
LBP	Lebanese pound, also known as the Lira
LTA	long-term average
LVAP	Lebanon Vulnerability Assessment Panel Survey
MoA	Ministry of Agriculture
masl	meters above sea level
MEB	minimum expenditure basket
MFI	Market Functionality Index
Météo Liban	Lebanon Meteorological Services
MoET	Ministry of Economy and Trade
MoSA	Ministry of Social Affairs
mVAM	Mobile Vulnerability and Assessment Survey
NDVI	Normalized Difference Vegetation Index
NFS	non-food services
NFI	non-food items
NPTP	National Poverty Targeting Programme

NSA	National Agriculture Strategy
PRL	Palestine Refugees in Lebanon
PRS	Palestine Refugees from Syria
rCSI	Reduced Coping Strategy Index
RTE	ready-to-eat
RTM	real time food security monitoring
SAR	Small Agriculture Regions
SMEB	survival minimum expenditure basket
SSP	single superphosphate
TSP	triple superphosphate
t	tonnes
UNHCR	United Nations High Commissioner for Refugees
USD	United States dollar
VAM	Vulnerability Analysis and Mapping
VASyR	Vulnerability Assessment of Syrian Refugees in Lebanon
WFP	World Food Programme

HIGHLIGHTS

IMPORTANT: *The Crop and Food Security Assessment Mission (CFSAM) was conducted in July 2024, prior to the intensification of the conflict in September 2024. Although this report does not address the full impact of this escalation, it identifies some key mechanisms through which the conflict has already affected agriculture and food security.*


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- The escalating conflict since September 2024 poses serious risks to agricultural production, which has been an important source of income and employment since the financial collapse which started in October 2019, endangering its ability to support livelihoods, especially for vulnerable communities.

- A confluence of factors, including adverse weather conditions, the conflict and a lack of regulations in the seed sector, resulted in a below-average staple cereal harvest in 2024.

- Excessive use of agrochemicals and poor agricultural practices have also undermined crop productivity and harmed water quality, with the conflict adding additional serious food safety risks.

- Cereal production in 2024 is expected to decline steeply, with the combined wheat and barley harvest estimated at 113 700 tonnes, about 40 percent below average. Potato production in 2024 is forecast at 610 700 tonnes, about 8 percent below average, and production of pulses remains low, estimated at 4 900 tonnes.

- Given an anticipated annual utilization of 1.48 million tonnes of cereals and potatoes (in cereal equivalent), the import requirement for the 2024/25 marketing year (July/June) is forecast at 664 000 tonnes of wheat, 57 000 tonnes of barley, 488 000 tonnes of maize for feed and 72 000 tonnes of potatoes (in cereal equivalent). This represents a 3 percent increase in cereals imports compared to the five-year average.

- Although currency stabilization since late 2023 and low international food commodity prices have helped to ease domestic food inflation in 2024, prices are still at elevated levels and, along with reduced incomes, food access constraints remain a serious impediment for many households. As of July 2024, the survival minimum expenditure basket (SMEB) for a family of five reached USD 450, a 190 percent increase since March 2021, the lowest registered cost for the basket during the crisis.

- Despite multiple crises, food markets have remained functional, with generally stable supply chains from August 2023 to August 2024 for essential goods. However, the intensifying conflict is likely to disrupt supply chains, particularly in the southern and eastern regions where attacks have been mostly concentrated.

- The current food security situation in Lebanon is extremely fluid. This is the result of the recent intensification at the end of September 2024 of the ongoing southern border conflict in Lebanon, which has spread to new areas across the country, including Central, Beqaa and the southern suburbs of Beirut.

- The country was already experiencing severe acute food insecurity, driven by a prolonged economic crisis and conflict since late 2023, compounded by recent cuts to humanitarian food assistance. An estimated 1.26 million people (23 percent of the population) were facing acute food insecurity (IPC Phase 3 [Crisis] and above) as of mid-2024 and a further deterioration is expected due to the escalation of the conflict that has moved beyond southern governorates.

- The situation is highly likely to worsen. The conflict has caused large-scale population displacements, food shortages and restricted humanitarian access. This is occurring in a situation where nearly one-quarter of the Lebanese population was already suffering from poor food consumption patterns, whilst about 50 percent of Syrian refugees are experiencing acute food insecurity and rely on low-quality diets.

- In response to the shocks, Lebanese households have resorted to negative coping strategies, including reducing the number of meals and purchasing lower-quality foods. Syrian refugees, largely dependent on humanitarian aid and informal labour, continue to face income instability and high levels of acute food insecurity, often relying on negative coping mechanisms.

OVERVIEW

At the request of the Ministry of Agriculture (MoA), a joint FAO/WFP CFSAM visited the country from 15 to 28 July 2024 to estimate the 2024 crop production, identify factors that affected production, forecast staple food import requirements for the 2024/25 marketing year (July/June), analyse the domestic food market and assess the acute food security situation. The Mission identified measures to address some of the most pressing challenges in the agriculture sector with the aim of improving national food security and safety as well as strengthening the performance of the sector in line with the Lebanon National Agriculture Strategy (NAS) 2021–2025.[1]


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The Mission held structured meetings with key institutions, in both the private and public sectors, to evaluate the impact of the crisis on the agriculture sector and the food security situation (see Annex 1 for the full list of institutions). The Mission was organized into six teams that visited all governorates, including seven districts in the main crop producing regions.[a] The districts were selected to ensure a representative sample of crops, livestock, agroclimatic conditions and livelihood zones. Prior to the Mission's visit, national consultants were recruited to assess crop conditions in the main agricultural-producing areas (Bekaa Valley, Akkar and North), while subnational offices of the MoA compiled reports for South and Nabatieh governorates, where access was restricted due to the conflict in south of Lebanon.

Since 2019, the country has been grappling with a series of complex and interrelated shocks. The most significant and the first in the sequence was the financial collapse (ranked among the top 10 most severe economic crisis globally since 1900).[2] The resulting sharp economic downturn was compounded by several subsequent shocks: the COVID-19 pandemic, the explosion in the Port of Beirut, the war in Ukraine and, more recently, the conflict in the south of the country. Despite these severe challenges, the agriculture sector has shown resilience. It was one of the few sectors that remained stable or posted growth, albeit modest, since the onset of the financial crisis.[3] The agriculture sector also created jobs, helping to partly mitigate the effects of the economic shocks, particularly for poor households, who form a large part of the agricultural labour force.

The domestic agrifood system is well integrated into global markets, with imports accounting for about half of the national food supply. This integration also helped lessen the impact of the economic crisis on the agriculture sector, with access to export markets helping

[a] The Mission visited the following districts:
Team 1 FAO: Akkar, North (Tripoli and Minieh-Donieh districts), Mount Lebanon (Matn districts).
Team 2 FAO: Baalbeck-Hermel (Baalbeck District), Bekaa (Zahle and West Bekaa districts), Mount Lebanon (Keserwan District).
Team 3 WFP: Akkar and North (Tripoli, Minieh Donieh, Zgharta and Koura districts).
Team 4 WFP: Beirut and Mount Lebanon (Baabda, Chouf, Keserwane, Jbeil and Matn districts).
Team 5 WFP: Baalbeck El Hermel and Bekaa (Zahle, Rachaya, West Beqaa districts).
Team 6 WFP: South (Saida, Sour, Nabatieh and Jezzine districts).

to absorb some surplus domestic production, as the crisis caused a contraction in domestic food demand from the service sector (notably restaurants and hotels).

At the institutional level, the financial crisis and the subsequent reduction in public revenue resulted in the discontinuation of key agricultural input subsidy programmes, extension services and the maintenance and investment in infrastructure, within an already underfunded sector. Critical services that were discontinued include the Ministry of Economy and Trade's (MoET) wheat production subsidy scheme, the production of certified seeds by the Lebanese Agriculture Research Institute (LARI), the promotion of agricultural exports by the Investment Development Authority of Lebanon (IDAL), the collection and distribution of data from Lebanon Meteorological Services (*Météo Liban*) and most of the MoA's agricultural extension capacity.

However, the reduction in access to agricultural inputs (seeds, fertilizers and pesticides) due to the financial crisis did not negatively affect crop productivity, principally due to the abundant application of agrochemicals in preceding years. However, the overuse of synthetic fertilizers and pesticides had a negative impact on the environment and led to soil degradation. A lack of awareness among farmers about the toxicity of agrochemicals, pesticides in particular, and the harm to human health, the environment and soil fertility when used improperly, is a significant concern.

Regarding staple food production in 2024, a combination of factors, including adverse weather conditions, an increase in the area cultivated with vegetables, the conflict in the south of the country and a lack of regulations in the seed sector, resulted in a significant decrease in staple food production compared to the recent average since the start of the crisis (2020–2023). The aggregate 2024 production of wheat, barley, maize and potatoes (in cereal equivalent)[b, 4] is forecast at 272 000 tonnes, 24 percent below the four-year average. Wheat and barley production are estimated at 93 700 tonnes and 20 000 tonnes, respectively, both nearly 40 percent below the previous four-year average. Potato production is estimated at 610 700 tonnes, about 8 percent below the recent four-year average.

Considering adequate availability of pasture, the implementation of a vast vaccination campaign in 2023 and an increase in animal feed imports in 2024, the Mission forecasts that livestock production (milk, meat and eggs) could increase in 2024. The Mission identified the dependence on animal feed imports as a main bottleneck in the livestock sector.

Driven by the effects of the steep currency depreciation since late 2019, the cost of meeting essential needs surged. As of July 2024, SMEB for a family of five reached USD 450 (LBP 40.6 million), a 190 percent increase since March 2021, the lowest registered cost since 2019. The steep rise was driven by soaring costs in non-food services (NFS), particularly rent, electricity and transport. The food SMEB alone reached USD 35 (LBP 3.2 million) per person in July 2024, more than double the costs of July 2020, the lowest registered level of the food SMEB since 2019, and already higher than its cost prior to the economic crisis in October 2019, when it stood at USD 32/person back then. Food and essential services have become increasingly unaffordable particularly for households in conflict-affected areas of southern Lebanon.

Despite economic challenges and conflict in southern Lebanon, market functionality and supply chains remained relatively robust. Between August 2023 and August 2024, the WFP Market Functionality Index (MFI) averaged 8.1 out of 10, indicating stable yet strained market conditions. Imports of wheat, supported by a conducive policy environment, also remained sufficient during the crisis period, ensuring national supply requirements, while overall stock levels of essential goods remained high. However, there has been a noticeable decline in the variety of essential goods in 2024, particularly in health and household items, which may limit households' ability to meet basic needs.

However, following the recent intensification of the conflict from mid-September 2024, market functionality has been impacted, especially in

[b] These four food items, on average, account for 37 percent of a person's total annual calorie intake (2020–2022).

the areas highly affected. By the third week of October 2024, 44 percent of shops surveyed by the World Food Programme (WFP) in South governorate, 69 percent of shops in the southern suburbs of Beirut, 82 percent in Nabatieh and 25 percent of shops in Baalbeck-Hermel were not operating.[c] The increasing demand due to people stocking up on food as well as the increased demand from the Internally displaced persons (IDPs) relocating to host regions has resulted in reduced stock levels for some shops across the country. Around half of the surveyed shops reported that they were informed about food delivery delays from their suppliers, as some were facing challenges to fully replenish stocks due to the sudden increase in demand in some areas. However, key supply routes outside of conflict areas remain operational and were expected to adapt to the demand.[5]

With an estimated total utilization of 1.48 million tonnes of cereals and potatoes (in cereal equivalent), the import requirement for the 2024/25 marketing year (July/June) is estimated at 1.28 million tonnes. This figure comprises 664 000 tonnes of wheat, 57 000 tonnes of barley, 488 000 tonnes of maize and 72 000 tonnes of potatoes (in cereal equivalent). Imports of wheat, maize and pulses would cover 88, 99 and 90 percent, respectively, of the total utilization, while potato imports represent only 9 percent of the total utilization. The domestic food deficit in 2024/25 is expected to be fully covered by commercial imports and stock levels are anticipated to remain unchanged year on year.

The current food security situation in Lebanon is extremely fluid. The country was already facing a growing challenge of severe acute food insecurity, affecting a large segment of the population and refugees, driven by the prolonged economic crisis, conflict and a reduction in the provision of humanitarian assistance. About 1.26 million people (23 percent of the population) were projected to face acute food insecurity (IPC Phase 3 [Crisis] or above) between March 2024 and September 2024. The escalation of conflict in September 2024, along with its expansion beyond the original conflict zones in the southern governorates, is anticipated to further worsen acute food insecurity.

Poor food consumption and dietary quality continues to be critical issues, with one in four Lebanese residents facing poor or borderline consumption levels as of May 2024. Acute food insecurity is particularly prevalent in the regions of Akkar and North, where poverty rates are high and there is a high dependency on agriculture. Households in these areas are consuming less diverse and less nutritious diets, raising concerns about long-term health impacts. Despite some slight improvements, over 50 percent of Syrian refugees still face acute food insecurity. Poor food quality and economic hardships have led to a reliance on monotonous diets, with an adverse impact on nutrition and health status of households.

Market access, prior to the recent intensification, remained relatively stable for Lebanese households, with over 80 percent sourcing their food from retail markets. However, rising food prices, combined with limited income-generating opportunities, have forced many households to reduce the number of meals or buy low-quality food. By August 2024, approximately 76 percent of households were employing medium or high food-related coping strategies and over 20 percent were resorting to critical livelihood coping strategies. Syrian refugees, mostly reliant on informal labour and aid, continue to face acute food insecurity and income instability, often resorting to negative coping mechanisms such as reducing health and education expenditures.

The ongoing and escalating conflict has significantly affected acute food insecurity. According to the Government of the Lebanese Republic, the conflict has caused over 2 412 deaths as of 17 October 2024, and displaced more than 1 million people. The southern regions, particularly Marjaayoun, Hasbaya, Nabatieh and Sour, are facing potential food shortages, while rising prices are being registered nationwide since the end of September 2024, further exacerbating the vulnerabilities of already at-risk populations. Humanitarian access to southern Lebanon is restricted, with 21 percent of the people reporting insufficient food consumption as of August 2024 in the conflict-affected areas, prior to the recent intensification.

[c] Based on a weekly rapid market assessment that WFP has started conducting with a non-representative sample of shops across the country, presenting indicative results of trends as a quick pulse of what the situation is.

IMPORTANT NOTE: *The escalation of the conflict since mid-September 2024 significantly increases the risk of damage and losses in the agriculture sector and raises serious concerns about a severe worsening of acute food insecurity. The latest Integrated Food Security Phase Classification (IPC) analysis, covering the period between April and September 2024, projected that 23 percent of the population, including Lebanese, Syrian refugees and Palestinian refugees, would face IPC Phase 3 (Crisis) or above levels of acute food insecurity.* ***Since the CFSAM data collection was conducted in July and August 2024, this report does not fully address the impact of the recent escalation.*** *Although the situation is extremely volatile and further assessments will be needed, outlined below are key mechanisms through which the ongoing conflict may have a negative impact on agriculture and food security:*

- ***Shortage of labour supply*** *– about 810 000 people have been displaced as of 20 October 2024, mostly from southern governorates of South and Nabatieh, where about 20 percent of national cropland is located. Harvesting season of olives and grapes, key crops in the south, stretch from September to November, and labour shortages could significantly reduce harvests. The wheat, barley and vegetable planting season, starting in November, is also at risk, as reduced labour supply may decrease the sown area, with a negative impact on production in 2025.*
- ***Damaged and abandoned land*** *– an estimated 230 hectares of cropland have been burned in the two southern governorates of South and Nabatieh since October 2023. Recent attacks in key agricultural areas of the eastern governorates of Baalbeck-Hermel and Beqaa Valley may lead to cropland abandonment and deter sowing operations for the 2025 winter cereal crops, reflecting the serious risks of losses and damages.*
- ***Hindering of humanitarian access*** *– the ongoing conflict in southern Lebanon is resulting in limited humanitarian access to affected communities. As the need for assistance grows, the escalation of violence has hindered the delivery of humanitarian aid and restricted the operations of organizations trying to support those impacted, especially in hard-to-reach border towns.*
- ***Disruptions to supply chains*** *– the destruction of infrastructure may restrict internal trade flows, with higher risk in South, Nabatieh, Beqaa and Baalbeck-Hermel governorates, hindering the movement of agricultural produce, labour and the delivery of essential goods. For external trade, while the Port of Beirut continues to receive vessels that were previously scheduled, the heightened risk environment could increase lead times, raise freight costs and, ultimately, elevate import costs. Given the country's heavy reliance on imports, any reduction in import flows could lead to critical shortages of essential goods.*
- ***Population displacement*** *– The food security situation in Lebanon is currently extremely fluid, especially with the mass displacement of different population groups following the intensification of the conflict. National authorities estimate that over 1 million people are now directly affected and/or displaced due to the conflict. The International Organization for Migration (IOM) Displacement Tracking Matrix reports a total of around 810 000 displaced people from 8 October 2023 to 20 October 2024, with new displacements continuing to be reported. Displaced populations sought safety in 1 100 locations across 899 cadasters across Lebanon. To date, 1 094 centres have been opened to receive displaced persons in public schools, educational complexes, vocational institutes and universities designated by the Ministry of Education and Higher Education, and institutes affiliated with the MoA, as well as in private schools, clubs and private halls. More than 80 percent of these centres have already reached their maximum capacity. A total of 192 000 IDPs have been hosted in shelters as of mid-October 2024. IDPs do not have access to their normal livelihoods, income sources and assets, increasing their vulnerability and severely restricting their ability to access foods and other essential goods and services.*

- ***Price hikes*** *– disruptions to supply chains, combined with demand-side pressure reflecting displacements and increased population density in some areas, are likely to create upward pressure on prices of essential goods, including food and housing, with adverse implications for acute food insecurity. Based on WFP's preliminary market data, the cost of the food SMEB per person on a weekly basis has increased from around USD 35.8 during the third week of September 2024, at the start of the intensification of the conflict, to up to USD 37.4 by the second week of October 2024, a 4.5 percent increase.*
- ***Reduced incomes*** *– the conflict and regional instability have already had a significant negative impact on national economic activities, notably causing a substantial decline in tourism arrivals in 2024, a key contributor to the economy. Most households have already experienced steep income declines and further reductions would severely limit their ability to access food and other essential products and services.*


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SOCIOECONOMIC CONTEXT

Economic growth

Lebanon has experienced a sharp economic downturn since 2019, triggered by a collapse of the financial sector and compounded by structural economic weaknesses and political instability.

A central aspect of the financial collapse was the persistent accumulation of public debt, built up since the end of the civil war in 1989. By 2019, public debt exceeded 170 percent of the country's gross domestic product (GDP), one of the highest rates globally, and by 2020 the country defaulted on a sovereign debt. The government's large borrowing needs were also a key factor underpinning economic vulnerability, exacerbated by a chronic current account deficit. This deficit, reflecting the heavy reliance on imports and limited export earnings, placed constant fiscal pressure on the economy; foreign earnings have been largely derived from remittances, tourism and investments in the banking sector, the latter two considered to be relatively more volatile sources of income. Since 2011, the war in the Syrian Arab Republic and persisting regional and internal political turmoil created heightened economic risks in the country, driving investors away and leading to a downturn in capital inflows, including remittances. The situation led to the rapid depletion of foreign currency reserves.

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The direct consequence of foreign currency liquidity pressures was the collapse of the financial system, including the fixed exchange rate, which had been a cornerstone of Lebanon's economy. As a result, a parallel foreign exchange market emerged and the value of the currency collapsed abruptly from 2020. The dual exchange rate system, with the government maintaining the official fixed rate, created economic distortions, whilst the currency depreciation on the parallel market triggered hyperinflation in consideration of Lebanon's high reliance on imports. Foreign-exchange shortages also severely disrupted the electricity supply, as the state supplier, *Electricité du Liban* (EdL), struggled to import the necessary fuel

Table 1: Lebanon – Financial collapse in 2019 drives a sharp and persistent economic downturn
Key economic indicators

	2018	2019	2020	2021	2022	2023	2024 (f'cast)
GDP annual growth (percent)	1.0	(7.2)	(21.4)	(7.0)	(0.6)	(0.8)	(8.0)
Trade deficit (in USD billion)	(14.7)	(11.1)	(5.5)	(6.2)	(9.5)	(6.5)	-
Inflation rate (percent)	6.1	2.9	84.9	154.8	171.2	221.3	53.8

Sources: GDP growth 2018–2023, trade deficit 2018–2023: WORLD BANK. 2024. *World Bank Open Data*. The World Bank Group. Washington, D.C. [Cited September 2024]. https://data.worldbank.org/.
Inflation rate 2018–2023: CAS. 2024. *Lebanese Republic*. Central Administration of Statistics (CAS). Presidency of the Council of Ministers. Central Administration of Statistics. Beirut. [Cited September 2024]. http://www.cas.gov.lb/.
GDP growth 2024, inflation rate 2024: EIU. 2024. *The EIU View*. Economist Intelligence Unit (EIU). The Economist Newspaper Limited. [Cited September 2024]. https://viewpoint-eiu-com.fao.idm.oclc.org/analysis.

quantities in which the energy sector was reliant. Resultantly, and notwithstanding reduced demand due to the economic downturn, EdL's energy supply fell well short of domestic needs (electricity supply was limited to about 2 hours/day from July 2021), impeding economic activity and growth. Businesses and households turned to diesel-run generators, both costly and highly polluting, while there was also an increase in solar panel installations, but this was insufficient to bridge the energy supply gap. Whilst challenges with energy supply are a severe impediment to overall economic growth, the associated higher costs of running household-level generators are putting a significant financial burden on households, contributing to monetary poverty.

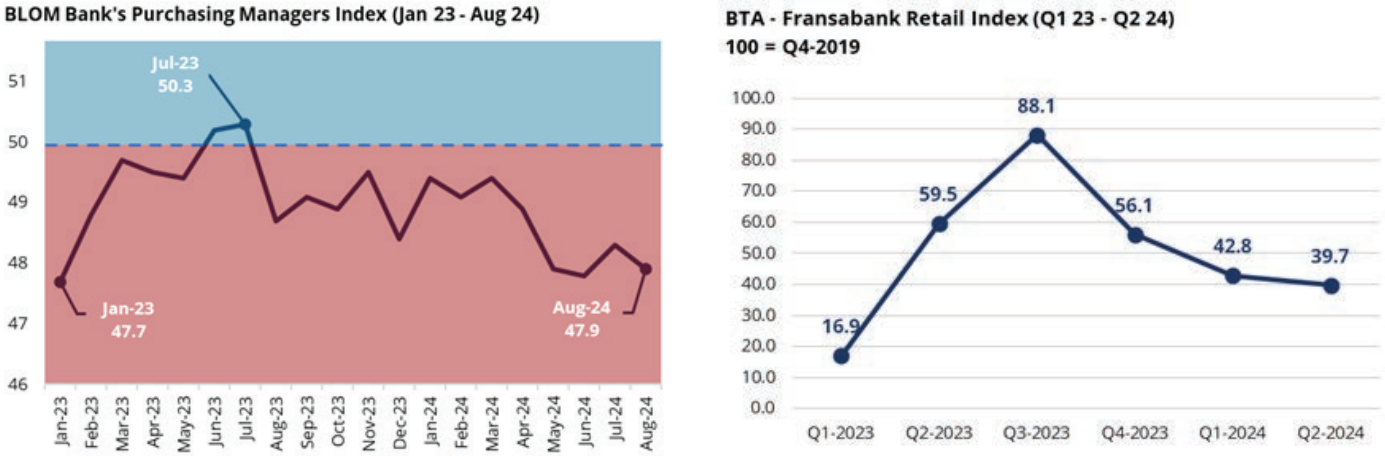
Another key factor contributing to the economic downturn and inhibiting near-term prospects, is the conflict, with hostilities largely concentrated in southern Lebanon, prior to the escalation in September 2024. As well as the direct effects of population displacements and destruction of productive assets, the tourism sector, a key source of revenue, has experienced a sharp decline. Passenger inflows dropped 18 percent year on year as of July 2024, making the seventh consecutive monthly decline. The loss in the tourism sector for the 2024 summer season is estimated to exceed USD 3 billion.[6] During 2022 and 2023 following the easing of restrictions related to the COVID-19 pandemic, there was a rebound in tourist numbers, and revenues from tourism averaged USD 5.4 billion/year.[7]

The industrial, trade, and construction sectors were similarly affected, especially in southern Lebanon. Business survey findings for the fourth quarter of 2023 from the *Banque Du Liban* (BdL) revealed a stark contrast in outlook and performance between southern Lebanon and the rest of the country. Most notably, respondents in the South governorate reported, on average, a 64 percent decrease in industrial production, a 46 percent decrease in sales volumes in the trade sector and an 80 percent decrease in general construction and public works activity in the fourth quarter of 2023 compared to the same period the year before. These figures were markedly higher than the national average.[8]

Reflecting the effects of the conflict, between May and August 2024, the BLOM Bank Lebanon PMI survey (Figure 1), which measures private sector activity, recorded its four lowest levels since January 2023. Lower intakes of new business weighed on activity levels, primarily reflecting the adverse effects from the war in the Gaza Strip (Palestine) and the conflict in the south of the country, hindering sales and restricting output across the country. The subcomponents dragging the index down were contractions in production (47.6 yearly average) and new orders (47.5 yearly average). Most notably, the Future Output Index, an indicator of business expectations for the next 12 months, dropped to 19.5 in August 2024, compared to an average of 23.3 for the preceding 12 months.

Figure 1: Lebanon – Businesses were expecting a deterioration in economic conditions

Business survey results, 2023–2024



Source: BLOMINVEST BANK. 2024. *Brite – Inicators and trends*. Beirut. [Cited September 2024]. https://brite.blominvestbank.com/.

The BTA-Fransabank Retail Index, a measure of business sentiment, further confirmed the recessionary trend of the economy due to the negative impact of the conflict, which has caused a slowdown in local consumption. The index declined to 39.7 in the second quarter of 2024, down from 59.5 in the second quarter of 2023.

External shocks, principally the COVID-19 pandemic and the effects of the war in Ukraine on international commodity prices, had exacerbated domestic vulnerabilities, further underpinning the steep economic downturn.

As a result of these multiple interconnected factors, Lebanon's GDP contracted by an estimated 65 percent between 2019 and 2023. Latest forecasts for 2024 predict a further annual contraction in GDP, and the intensification of the conflict in September could engender an annual downturn of more than 5 percent.[9]

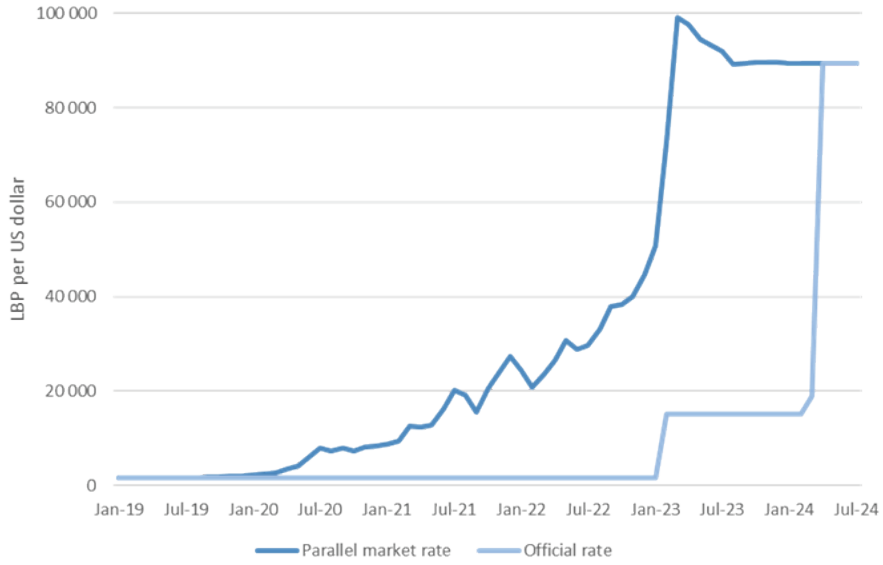
Exchange rate

The abrupt currency depreciation has been a central aspect of the economic crisis and a key factor aggravating food insecurity, channelled through steep price growth. For decades, Lebanon maintained a fixed-pegged foreign exchange rate system that required significant reserves of United States dollars (USD) reserves to uphold the currency's value. The rapid depletion of these reserves since 2019 was, therefore, a primary catalyst for the currency depreciation. Between 2019 and 2023, the value of the Lebanese pound (LBP) on the parallel market fell from LBP 1 500 to 89 500/USD 1. Over the same period, the official rate was maintained at about LBP 1 500, and only devalued once in February 2023 to LBP 15 000/USD 1.

To address market distortions and reduce the large discrepancy between the parallel and official rates, the BdL established an electronic foreign exchange rate platform (known as Sayrafa) in June 2021, intended to provide greater oversight and management of the currency. A further key aim of the platform was to provide access to subsidized exchange rates for the importation of essential goods, including wheat, fuel and medicine. Access to foreign currency using the official rate somewhat buffered the effects of the currency depreciation on domestic prices of these essential goods, in part mitigating the negative welfare impacts of price increases on households. However, the platform failed to halt currency volatility, and in July 2023, the BdL announced the discontinuation of the Sayrafa platform.[10]

Figure 2: Lebanon – Exchange rate stabilizes in early 2024, after a sharp and persistent depreciation

Official and unofficial exchange rates, January 2019–August 2024



Sources: BdL. 2024. *Index*. Banque Du Liban. Beirut. [Cited September 2024]. https://www.bdl.gov.lb/index.php.
LIMS. 2024. *LIMS Lebanon*. Tripoli. [Cited September 2024]. https://limslb.com/?lang=en.

Since the mid-2023, the currency has stabilized, underpinned by an increase in remittances and a rebound in the tourism sector that bolstered foreign currency reserves. To provide further currency stability, the BdL set the official rate at LBP 89 500/USD 1 in January 2024, effectively closing the gap between the parallel and official rates. The currency stability has contributed to lessening inflationary pressure in 2024.

Inflation

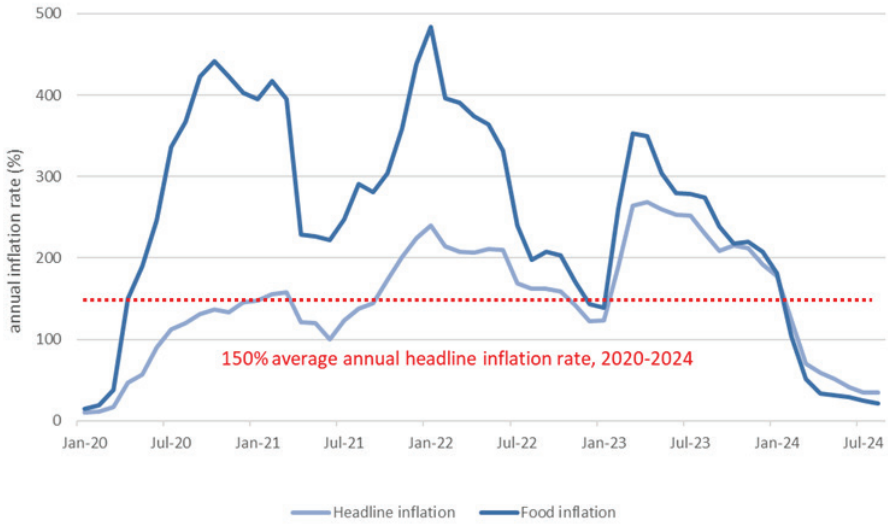
Lebanon has faced significantly high inflation rates since 2020, driven primarily by currency depreciation and external shocks. Between 2020 and 2024, the headline inflation rate averaged 150 percent, peaking at 269 percent in May 2023. The currency depreciation was the fundamental driver, while secondary factors include spikes in global commodity prices (largely attributed to the war in Ukraine) and higher shipping costs, amid an upturn in global demand following the COVID-19 pandemic, as well as the impact of insecurity in the Red Sea.

Lebanon's heavy reliance on food imports, particularly for wheat, the national staple, rendered the country especially susceptible to exchange rate volatility and global market fluctuations, and led to a high degree of exchange rate pass-through, significantly impacting domestic prices.[11] Reflecting the large weight of food prices in the consumer price index (CPI) and the aforementioned factors, the rising prices of food have been the main contributor to price growth since 2019, with the annual nominal food inflation rate peaking at 483 percent in February 2022. However, the stabilization of the exchange rate and declining prices of food commodities on the international market have somewhat tempered domestic food price growth, with price increases between January and June 2024 significantly lower than the year-to-year rate (Figure 4).

Transport and energy prices are additional key contributors to inflation rates, and the removal of exchange rate subsidies for fuel in 2021 (introduced in mid-2020) intensified price increases. Importantly, high fuel costs have also contributed to supporting increases in prices of wheat flour, reflecting the higher transport and production costs.[12] Based on the Mission's observations, farmers frequently cited high energy costs as a significant factor preventing the use of, and investment in, irrigation. This has been a significant factor prohibiting an expansion in crop production and limiting agricultural productive capacities. Illustrated in Figure 4, increases in energy and transport costs have been key drivers of inflation in the first semester of 2024; food prices are less significant (<10 percent).

Figure 3: Lebanon – Inflationary pressure weakens in 2024 in response to exchange rate stabilization

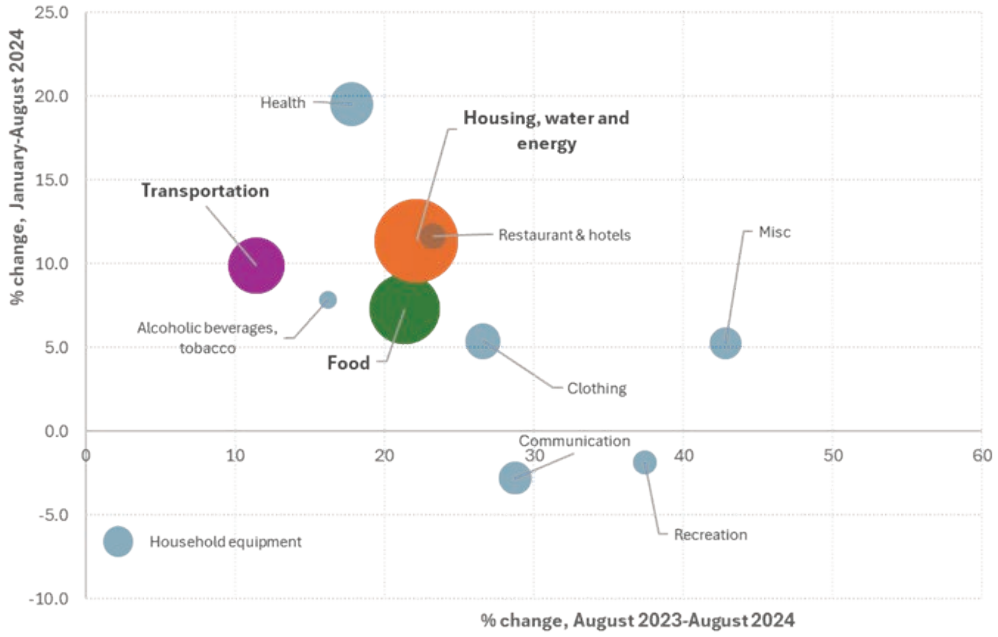
Headline and food inflation rates, January 2020–August 2024



Source: CAS. 2024. *Lebanese Republic*. Central Administration of Statistics (CAS). Presidency of the Council of Ministers. Central Administration of Statistics. Beirut. [Cited September 2024]. http://www.cas.gov.lb/.

Figure 4: Lebanon – Energy and transport key drivers of inflation in 2024 as food inflation slowed

Contribution to overall inflation in 2024



Note: Size of circle represents weight in CPI basket.

Source: CAS. 2024. *Lebanese Republic*. Central Administration of Statistics (CAS). Presidency of the Council of Ministers. Central Administration of Statistics. Beirut. [Cited September 2024]. http://www.cas.gov.lb/.

The headline inflation rate returned to double digits in April 2024 for the first time since July 2020.[13] The disinflation came amid the increased stability of the exchange rate, in consideration of the country's high exposure to imported inflation. Declining prices of key food staples on the international market have also contributed to lessening pressure on domestic food prices.[14] However, prices remain prohibitively high for large segments of the population. WFP's SMEBs, which serve as a benchmark cost for food and other basic needs, increased by more than 3.5 times between August 2022 and August 2024, in LBP terms, while it increased by 68 percent in USD terms during the same period.[15]

Moreover, risks of inflationary pressure remain acute. The escalation of the conflict in the south and continued regional insecurity, are key factors that could reignite abrupt price growth, and cause price spikes in areas where supply routes have been severely disrupted.

Household income and poverty rates

As well as high inflation rates, households have also faced the financial burden of widespread job cuts and reduced income levels, further eroding purchasing power.[16] By 2023, GDP per capita dropped to its lowest in the past two decades, estimated at USD 3 350. According to a World Bank poverty assessment in 2023, the poorest households (those in the lowest level income quintile) who mainly rely on daily wages and social transfers were hardest hit by the economic crisis, while high-income households, who mainly derive their income from self-employment and remittances, were less affected. Consequently, income inequality has widened; measured by the Gini index, the level of inequality has increased by 50 percent from 0.4 in 2012 to 0.6 in 2022 (0 indicating complete income equality and 1 indicating the inverse).[17] This steep rise highlights the expanding disparity between the richest and the poorest. The unequal distribution of wealth can contribute to curbing economic growth and sustainability, and foster social instability, conditions that can undermine an economic recovery.[18]

Reflecting the dual effects of high inflation rates and reduced incomes, the prevalence of monetary poverty has increased significantly from 12 percent in 2012 to 44 percent in 2022.[19] In northern regions, particularly in Akkar, where agriculture and construction sectors are the main livelihoods, the poverty rate increased to 70 percent over the same period.

Key consequences of rising levels of poverty are the increasing prevalence of households adopting negative coping strategies, including drawing down savings and cutting back on expenditures, including food. On average, households allocate about 49 percent of their expenditure to food.[20, 21, 22] As a result of high prices and reduced incomes, diets have changed, with negative consequences for food insecurity and nutrient intake. Households in the lowest income quintile have cut back expenditure on higher-priced meats and seafood, and instead shifted consumption to cheaper alternatives, notably cereals.[23]

The collapse of the financial system has also contributed to a transition to a dollarized, cash-based economy, reducing tax inflows for the government. This led to underfunded public services, pressuring social protective systems and causing a substantial decline in public sector employees' real incomes. Many people require more than one source of income to sustain the high cost of living.

Map 1: Lebanon – Administrative divisions

Disclaimer: *The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.*

Source: WFP Lebanon. 2022. *Lebanon GIS Portal*. https://gis.lbn.wfp.org/portal/apps/sites/#/lebanon-gis-portal.

Geographic and administrative context

Lebanon, with a total area of 10 452 km^2, is situated east of the Mediterranean Sea and bordered by the Syrian Arab Republic to the north and east, and by Israel to the south. It is a mountainous country, stretching about 60 km in width from west to east and about 225 km along the Mediterranean coast from north to south.

The territory of Lebanon is divided into eight *mohafazats* or governorates (Beirut, Akkar, North, Mount Lebanon, Bekaa, Baalbeck-Hermel, South and Nabatieh), which are subdivided into 26 districts, known locally as *cazas*. The governorates of Beirut and Akkar are not subdivided. The districts are subdivided into over 1 000 municipalities.

Population

The national population is estimated by Central Administration of Statistics (CAS), using the 2018 labour force and household living condition survey.[d]

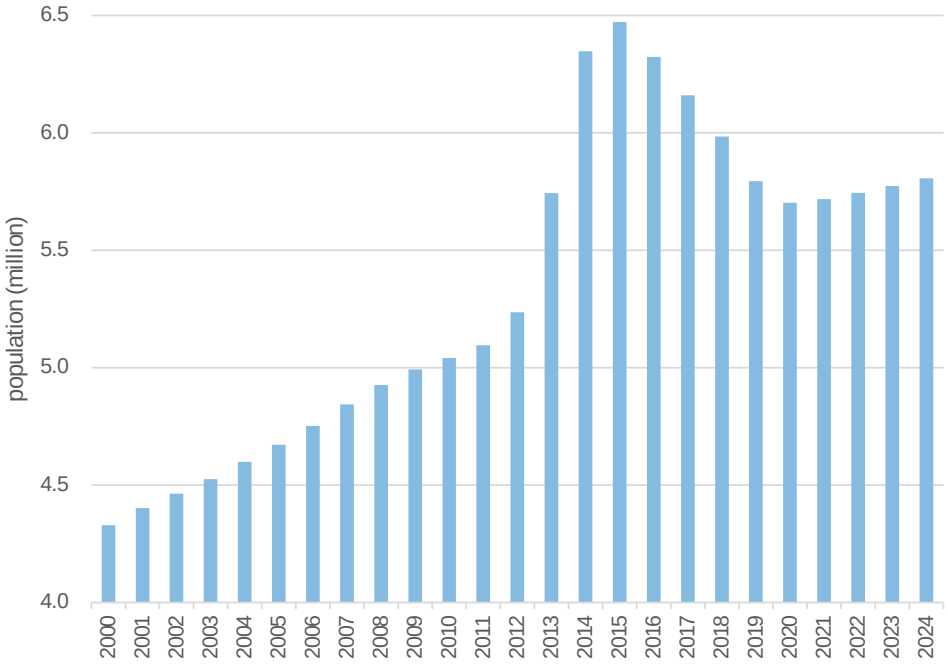
In 2023, the national population is estimated at 5.77 million, according to the United Nations Department of Economic and Social Affairs Population Division, including refugees mainly from the Syrian Arab Republic and Palestine. The total population decreased from 2015 and started to rebound in 2021 (Figure 5). The average population density is around 564 people/km^2.[24]

Rapid urbanization has been a major factor affecting living conditions and the environment in Lebanon. The pattern of urbanization changed during the war period, which caused a rapid expansion of the peripheral areas around cities, mainly Beirut, Zahle, Tripoli and Saida. The rural population accounts for only 11 percent of the total population in 2023.[25]

According to the IOM, since the start of the southern hostilities in October 2023 until 16 October 2024, an estimated 780 000 have been displaced. There are no data on agriculture producers' displacements.

The Mission used a mid-year population estimate of 5.80 million for 2024/25.

Figure 5: Lebanon – Population trend, 2000–2024



Source: CAS. 2024. *Lebanese Republic*. Central Administration of Statistics (CAS). Presidency of the Council of Ministers. Central Administration of Statistics. Beirut. [Cited September 2024]. http://www.cas.gov.lb/.

[d] The last population census in Lebanon was carried out in 1932.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AGRICULTURE

General

Until the start of the financial crisis in 2019, the agriculture sector represented a small and declining share of the Lebanese economy, estimated at about 3 percent of the GDP during the five years prior to the crisis (2015–2019). Since the financial crisis, the agriculture sector's contribution increased to about 6 percent from 2020 onward,[26] which reflects both the resilience of the sector and a sharp contraction of other economic sectors.[27] In the immediate two years following the start of the economic crisis, the agriculture sector grew by 12 percent in 2020 and 9 percent in 2021.[28]


©MoA/Ali Jaafar

In the period immediately before the crisis (2018 and 2019), agriculture employed an estimated 57 000 people (3.6 percent of the total active labour force).[29] Following the financial crisis, there was a significant rise in the share of employment in agriculture among non-Lebanese from under 5 percent in 2019 to nearly 19 percent in 2023.[30] Among Lebanese residents, there was also an increase, but by a much smaller scale with just over 5 percent employed in the agriculture sector in 2023. The sector generated employment opportunities, partly mitigating the impact of the financial shock, particularly for poor non-Lebanese households. The Mission noted multiple anecdotal reports of residents engaging in farming activities during the crisis. Before the crisis, agriculture was already contributing to the livelihood of about one-quarter of the active working population.[31]

The agriculture sector largely, but not exclusively falls under the authority of Lebanon's MoA. The central government's budget allocation to the MoA was as small as 0.3 percent in 2024,[e, 32] down from 0.4 percent before the financial crisis. The agriculture sector continues to be under-funded with an agriculture orientation index as low as 0.05 in 2021, compared to a world average of 0.48.[f, 33] According to the BdL, investment in agriculture remained low, with the sector accounting for only 1.5 percent of all credit in 2022.[34]

Most agricultural products are imported, including cereals, meats and dairy products, considering the insufficient local production, amid limited arable land and input resources. Exports are primarily focused on fruits and vegetables due to their profitability and robust export demand. Nevertheless, the country faces various challenges from economic instability and trade barriers impacting overall trade.

In 2022, agricultural commodities exports amounted to USD 316 million, representing 10.5 percent of total exports. An estimated 86 percent of agriculture exports originated from crops, with the remaining exports largely animal-derived

[e] With an allocation of LBP 957 million.

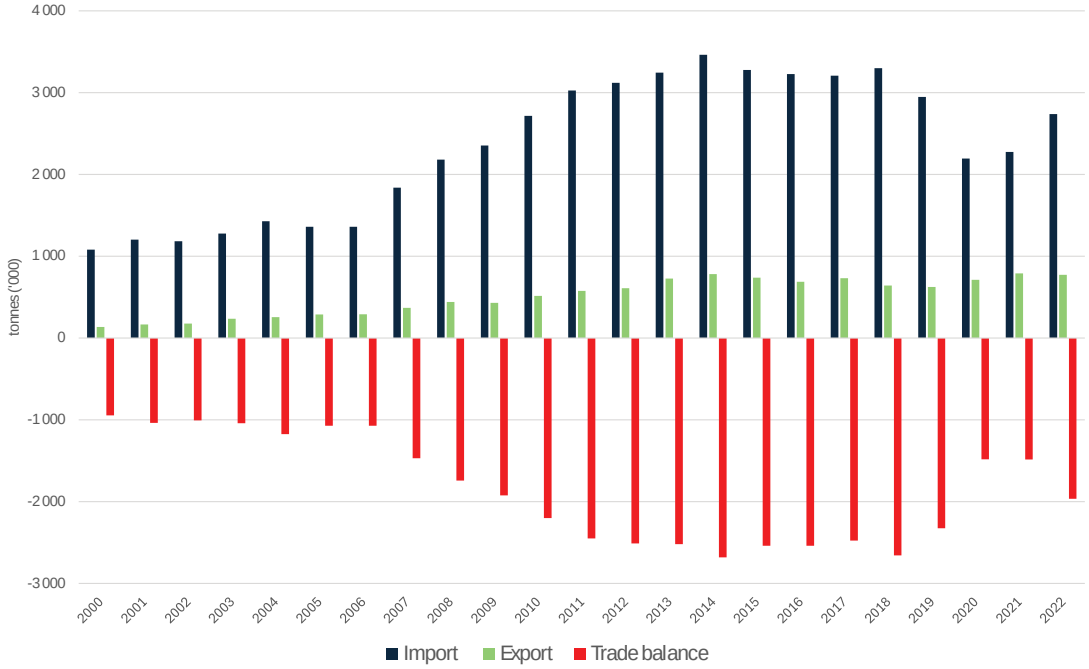
[f] The Agriculture Orientation Index (AOI) for government expenditures is defined as the agriculture share of government expenditures, divided by the agriculture share of GDP. This indicator measures progress towards SDG Target 2.a.

products. In the same year, food imports amounted to nearly USD 4 billion, 11 times higher than the export value and represented 21 percent of all imports to Lebanon.[35] Wheat imports amounted to USD 228 million in 2022, representing less than 6 percent of all food imports.[36]

On the other hand, Lebanon holds a very high self-sufficiency ratio for many non-cereal agricultural commodities, owing to its climatic/edaphic endowments, custom protection and dynamic large-scale farmers and food processors. In 2021, the country produced most of its consumption needs for potatoes (97 percent), vegetables (88 percent), fruits (100 percent), eggs (98 percent) and meat (78 percent). In addition, the country produced more than half the milk (52 percent) and over one-third of edible oils.

Figure 6: Lebanon – Food import values more than doubled in the last two decades, while agricultural export earnings lagged

Agricultural commodity imports, exports and trade balance, 1995–2022



Sources: Author's elabouratio based on data from FAOSTAT. 2024. *Food Balances (2010)*. Rome. [Cited 11 July 2024]. https://www.fao.org/faostat/en/#data/FBS. and Lebanese Customs. 2024. Customs Administration. Beirut. [Cited September 2024]. http://www.customs.gov.lb/home.aspx.

Figure 7: Lebanon – Self-sufficiency for fruits and vegetables, but cereals and pulses are mainly imported

Production, import and export quantities of main agricultural commodities, 2014–2021 (thousand tonnes)

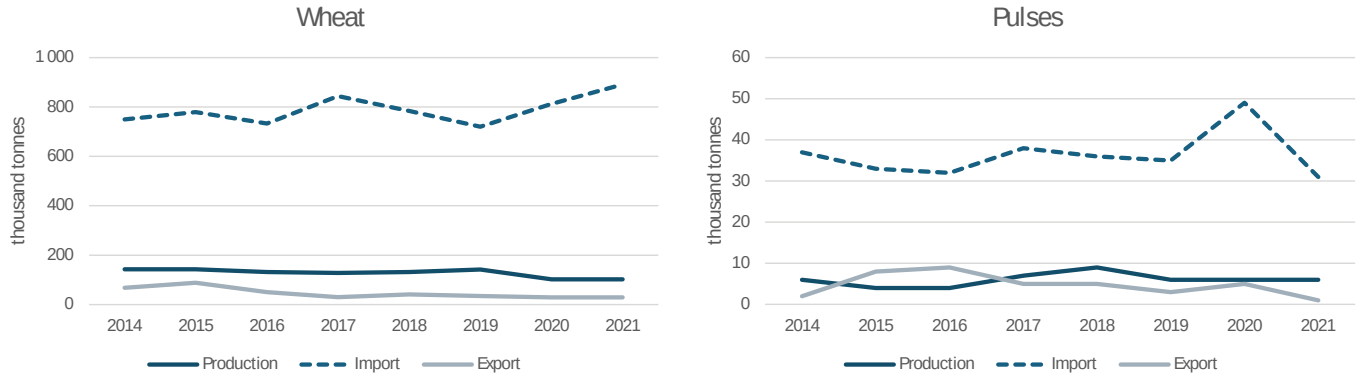
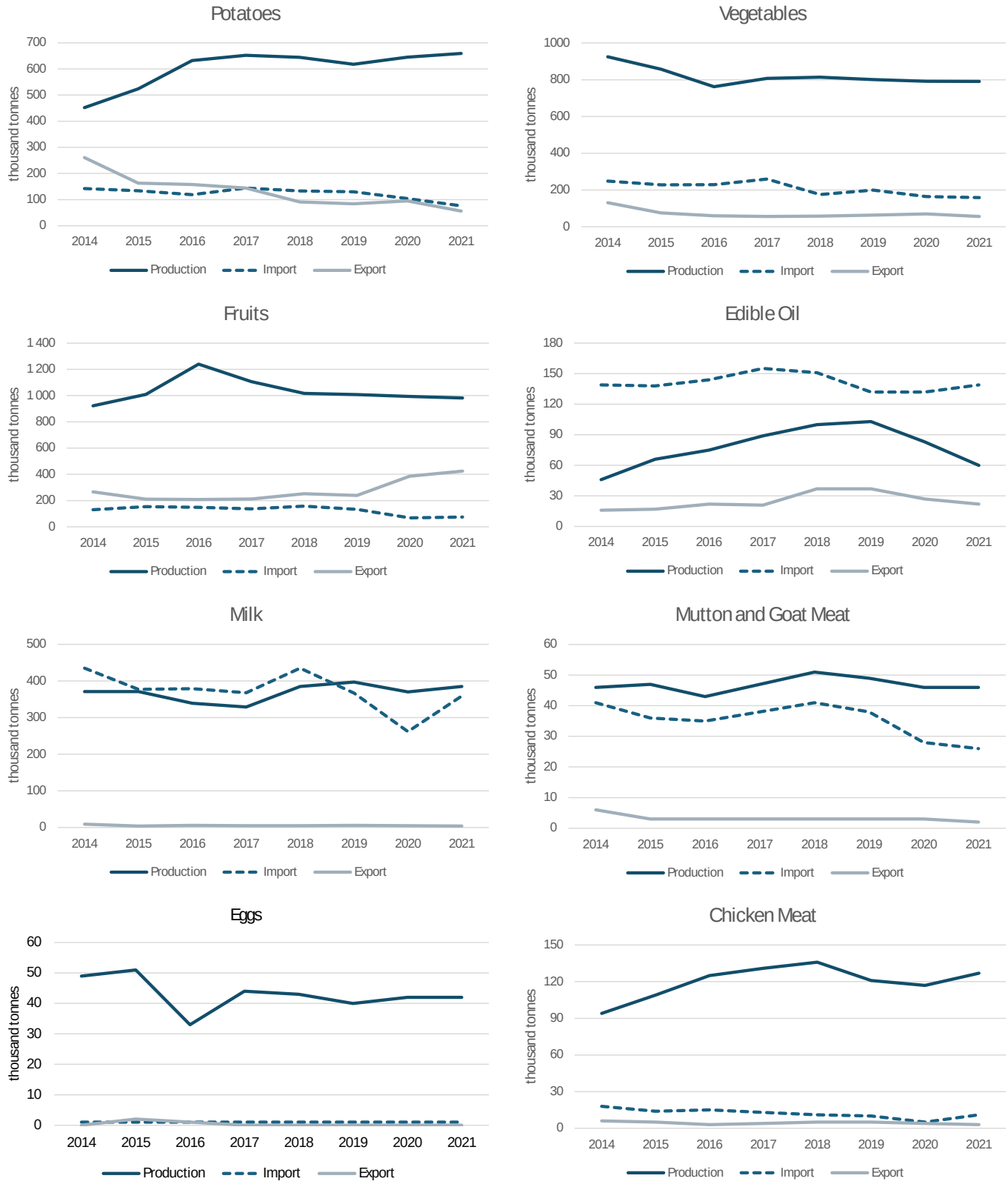


Figure 7: Lebanon – Self-sufficiency for fruits and vegetables, but cereals and pulses are mainly imported *(Cont'd)*

Production, import and export quantities of main agricultural commodities, 2014–2021 (thousand tonnes)



Source: Author's elaboration based on data from FAOSTAT. 2024. *Food Balances (2010)*. Rome. [Cited 11 July 2024]. https://www.fao.org/faostat/en/#data/FBS.

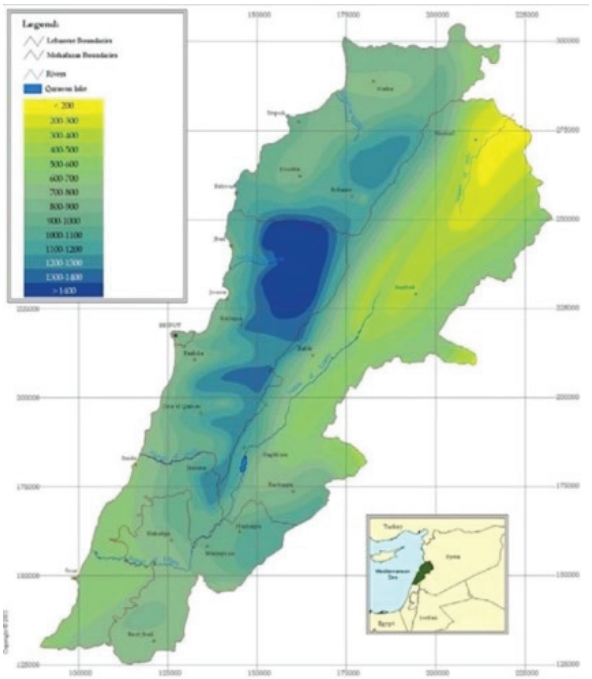
Soil, climate and river basins

The country is characterized by four main geomorphological units: a narrow coastal plain, two mountainous chains (Mount Lebanon and Anti Lebanon) separated by a fertile, relatively elevated depression (700 to 1 100 metres above sea level), and the Bekaa Valley. Lying northeast to southwest, the two mountain chains occupy around 70 percent of the Lebanese territory. The soils of Lebanon are generally calcareous except for the sandy soils of Akkar Plain and the alluvial soils of central and western Bekaa Valley. The pH values across Lebanon's soil types range from 7.5 to 8, altering the availability of some soil nutrients, while soil organic matter content ranges from 0.7 to 4.7 percent.[37] The high slope gradient is a major physical factor, exacerbating water erosion of the upper layer of the soil and leading to a weak structure and reduced water-holding capacity.[38]

The climate of Lebanon is typically Mediterranean, with heavy rains in the winter season (November to May) and dry and arid conditions in the remaining five months of the year. The influence of the Mediterranean Sea, the topographic features and the Syrian Desert in the north creates a variety of microclimates within the country with contrasting temperatures and rainfall distribution. While the coastal and mountainous areas are characterized by abundant rainfall (up to 1 400 mm), the Bekaa Valley has a semi-arid to continental climate with unpredictable rainfall and recurrent drought, since it is separated from the sea effect by the presence of a high mountain chain exceeding 3 000 masl. The northern part of the Valley is arid (below 200 mm) while southern Bekaa benefits from higher and more reliable rainfall. Precipitation in dry years can be as little as 50 percent of the average. Above 2 000 metres, precipitation is essentially niveous and helps sustain a base yield for rivers and springs during the dry period.

On the coast, the average annual temperature is 20°C, ranging from 13°C in winter to 27°C in summer, whereas the average annual temperature in the Bekaa Valley is lower at 16°C, ranging from 5°C in winter to 26°C in summer. Evapotranspiration varies from 1 100 mm on the coast to 1 200 mm in the Bekaa Valley, with maximum values recorded in July.

Map 2: Lebanon – Annual precipitation distribution



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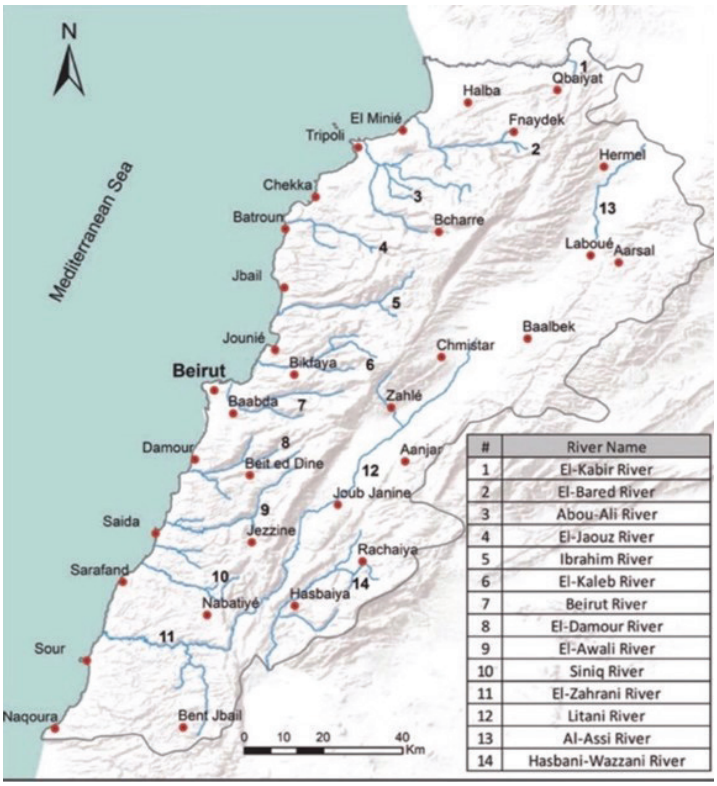
Source: MoA. 2023. *Lebanon – National Action Programme to Combat Desertification.* Lebanese Ministry of Agriculture. June 2023. https://faolex.fao.org/docs/pdf/leb189842E.pdf.

Lebanon is in a relatively favourable position in terms of water resources compared to other countries in the region. There are 14 to 17 rivers (depending on the sources), some of them are perennial while others are seasonal. The largest river is the Litani River, stretching 174 km from the Bekaa Valley and flowing southward into the Mediterranean Sea. Lebanon is also endowed with more than 2 000 springs, which are the primary source of water for rivers.[39] However, these resources are characterized by spatial and temporal limitations. About 75 percent of the annual stream flow occurs in the five-month period from January to May, 16 percent from June to July and only 9 percent in the remaining five months from August to December.[40] The overall water resources demand is outstripping supply, leading to local conflicts about water, pollution and over abstraction. Water scarcity is accelerated by climate change and increasing demographic pressure.[41] The agriculture sector accounts for between 50–60 percent of total water consumption.[42]

Most of the water in springs is derived from snow melt that enters the subsurface through karstified bedrocks.[9] Snow shares to 50–60 percent of the water volume in rivers and springs, and then in feeding groundwater aquifers. [43] Therefore, winter snowfalls play a crucial role in the performance of the irrigated agriculture sector, while spring rainfalls are critical for rainfed crops. There is currently no national snow monitoring programme which would support both annual crop condition monitoring and agricultural planning.

Map 3: Lebanon – Rivers of Lebanon



#	River Name
1	El-Kabir River
2	El-Bared River
3	Abou-Ali River
4	El-Jaouz River
5	Ibrahim River
6	El-Kaleb River
7	Beirut River
8	El-Damour River
9	El-Awali River
10	Siniq River
11	El-Zahrani River
12	Litani River
13	Al-Assi River
14	Hasbani-Wazzani River

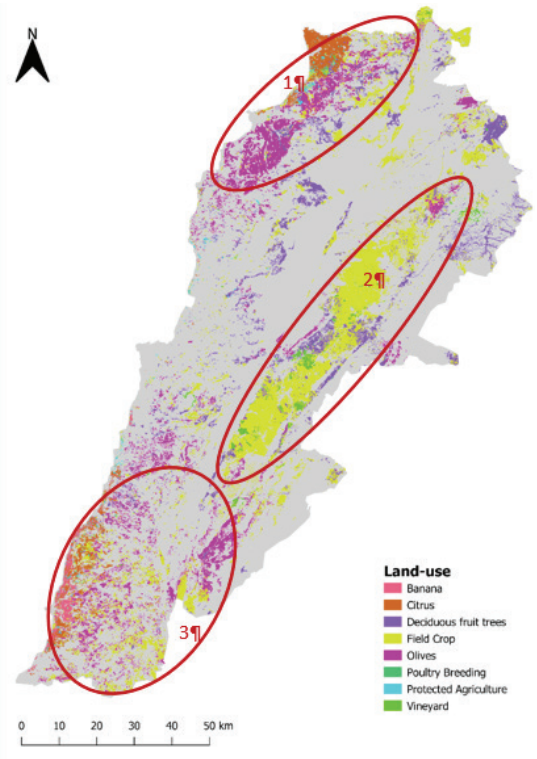
Disclaimer: *The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.*

Source: A. Shaban. 2010. *Shared Water Resources of Lebanon.* World Water Resources. Vol. 7. Springer Nature. National Council for Scientific Research. Beirut. [Cited September 2024]. https://www.researchgate.net/figure/Watershed-of-the-Lebanese-rivers_fig39_319980038.

[9] About three-quarters of the Lebanese territory is composed of exposed carbonate rocks where limestone, dolomitic limestone and dolomite are widespread on terrain surfaces. More than 85 percent of these carbonate rocks are karstified and the dissolution of carbonates is well pronounced with a variety of aspects including surface and sub-surface rocks.

Map 4: Lebanon – Three key cropland areas in the north, east and south

Agricultural land use



Legends: 1. Akkar plain; 2. Bekaa Valley; 3. Southern Lebanon.

Disclaimer: *The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.*

Source: WFP and AUB. 2022. *Climate change, agriculture, & livelihoods in Lebanon: Consolidated livelihoods exercise for analyzing resilience*. Beirut. 26 April 2022. https://www.aub.edu.lb/ifi/news/Pages/20220426-lebanon-clear-study-climate-change-and-livelihoods.aspx.

Cropping systems and crop calendar

Based on the FAO 2010 agricultural census,[44] agricultural arable land covers 385 000 hectares, approximately 37 percent of the country's total surface area. In 2021, some 271 000 hectares were cultivated, of which 50 percent are under permanent crops (fruit trees and olives), 49 percent under temporary crops and 1 percent under greenhouses. The Bekaa Valley, the plain of Akkar and the coastal areas of North and South governorates of Lebanon are the main agriculture areas (Table 2).

There are two broad cropping systems: irrigated and rainfed. Main irrigated crops include wheat, sweet and fodder maize, potatoes, vegetables, as well as most fruit trees and table grapes. Main rainfed crops include barley, pulses, sesame, olive trees, wine grapes, cherries, almonds, pines and carobs. Rainfed agriculture accounts for about half of the cultivated area.[45] Table 3 presents the irrigation ratio by crop. Rainfed agriculture in Lebanon is risky due to low and variable precipitation and, therefore, outputs vary substantially from one year to the other. In 2017, the latest year with disaggregated data available, irrigated staple crop yields were 26 to 259 percent higher than rainfed (Table 3).

The country is endowed with a diversity of agro-ecological conditions suitable for a wide range of agricultural products. Crops are cultivated at an elevation ranging from sea level to about 1 700 metres. The latest agriculture production survey (2021) listed as many as 84 crops cultivated; cereals (6), pulses (7), vegetables and herbs (34), forage crops (3), industrial crops (2), fruits (32). In 2021, crops accounted for approximately 70 percent of the value of agriculture production, while livestock accounted for 30 percent.[46]

Table 2: Lebanon – crop production mostly concentrated in the fertile eastern valleys
Distribution of cropland by governorates, 2021 (hectares)

Governorates	Cropland	Temporary crops	Permanent crops[1/]	Greenhouses
Baalbeck-Hermel	72 086	46 347	25 520	219
Bekaa	54 786	41 736	12 974	76
Akkar	44 329	21 877	20 254	2 198
Nabatieh	28 021	13 471	14 436	114
South	27 808	6 388	20 816	604
North	25 725	2 056	23 237	432
Mt Lebanon	19 842	3 079	16 695	68
Total	**272 597**	**134 954**	**133 932**	**3 711**

1/ Fruit trees and olives.

Source: Author's own elaboration based on data from MoA and FAO. 2022. *Lebanon Agriculture Production Survey 2021. PART 1- Report of the Survey Results.* [Unpublished]. FAO, 2024.

Table 3: Lebanon – Widespread use of irrigation, mainly for vegetable crops
Irrigation ratio and yields for temporary crops, 2017

Temporary crops	Irrigation ratio (percent)	Yields; irrigated (tonnes/hectare)	Yields; rainfed (tonnes/hectare)
Hard wheat	54	4.1	2.4
Soft wheat	30	3.4	1.9
Barley	26	3.8	2.0
Maize	87	5.0	1.4
Potato	100	29.3	-
Cucumber/Gherkins	44	20.5	11.5
Egg plants	72	19.9	16.0
Tomato	100	3.5	-
Chickpeas	40	1.2	0.8
Lentils	73	1.9	1.5
Alfalfa	91	14.6	5.9
National average	**60**	**-**	**-**

Source: Author's own elaboration based on data from MoA and FAO. 2017. *Agriculture production survey dataset*. [Unpublished]. FAO, 2024.

Table 4: Lebanon – Irrigation ratio for permanent crops, 2017

Permanent crops	Irrigation ratio (percent)
Table grapes	81
Wine grapes	11
Apples	83
Apricots	78
Cherries	37
Peaches and plums	97
Lemons and limes	100
Oranges	100
Avocados	100
Bananas	100
Pines and carobs	3
National average	**74**

Source: Author's own elaboration based on data from MoA and FAO. 2017. *Agriculture production survey dataset*. [Unpublished]. FAO, 2024.

In 2021, cereals (mainly winter wheat), olive trees and other fruit trees (mainly citrus, apples, grapes and bananas) each accounted for approximately one-quarter of the total cropland (24, 26 and 23 percent, respectively). The remaining quarter of cropland was cultivated with vegetables and potatoes (21 percent), while other crops, including pulses, industrial crops and fodder crops, accounted for about 2 percent each.

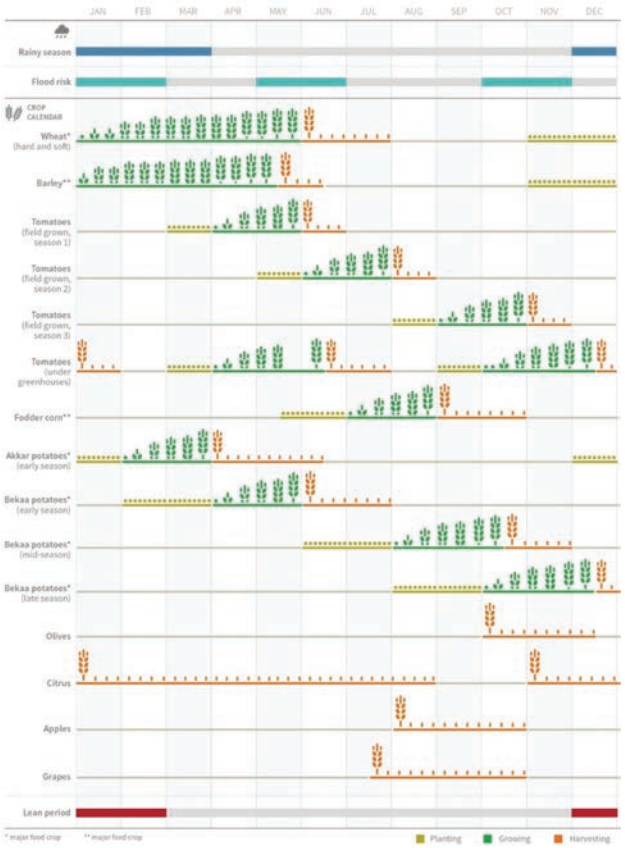
In terms of regional distribution, Baalbeck-Hermel, Bekaa and Akkar governorates account for 84 percent of the temporary crops (cereals, pulses and vegetables) production (Table 5). Cereals, pulses and vegetable production in North, Mount Lebanon, South, and Nabatieh governorates is more limited (accounting for 16 percent of the total), but these governorates account for 56 percent of permanent crops (mainly olives and fruits -Table 5).

Table 5: Lebanon – Agricultural production concentrated in eastern valleys
Distribution of temporary crops by governorates in 2021 (hectares)

Governorates	Cereals	Pulses	Vegetables	Fodder crops
Baalbeck-Hermel	25 351	2 603	15 750	784
Bekaa	16 757	891	22 979	740
Akkar	11 161	163	8 602	890
Nabatieh	8 314	736	1 621	417
South	2 589	245	1 737	31
North	704	17	1 198	9
Mount Lebanon	95	102	2 842	5
Total	**64 972**	**4 756**	**54 728**	**2 876**

Note: Temporary crops in this table exclude tobacco and oil seeds.
Source: MoA and FAO. 2022. *Lebanon Agriculture Production Survey 2021. PART 1- Report of the Survey Results*. [Unpublished]. FAO, 2024.

Figure 8: Lebanon – Crop calendar



Source: FAO. 2024. *Lebanon: DIEM – Data in Emergencies Monitoring brief, round 7 – Results and recommendations, September 2024*. Rome. https://openknowledge.fao.org/handle/20.500.14283/cd2313en.

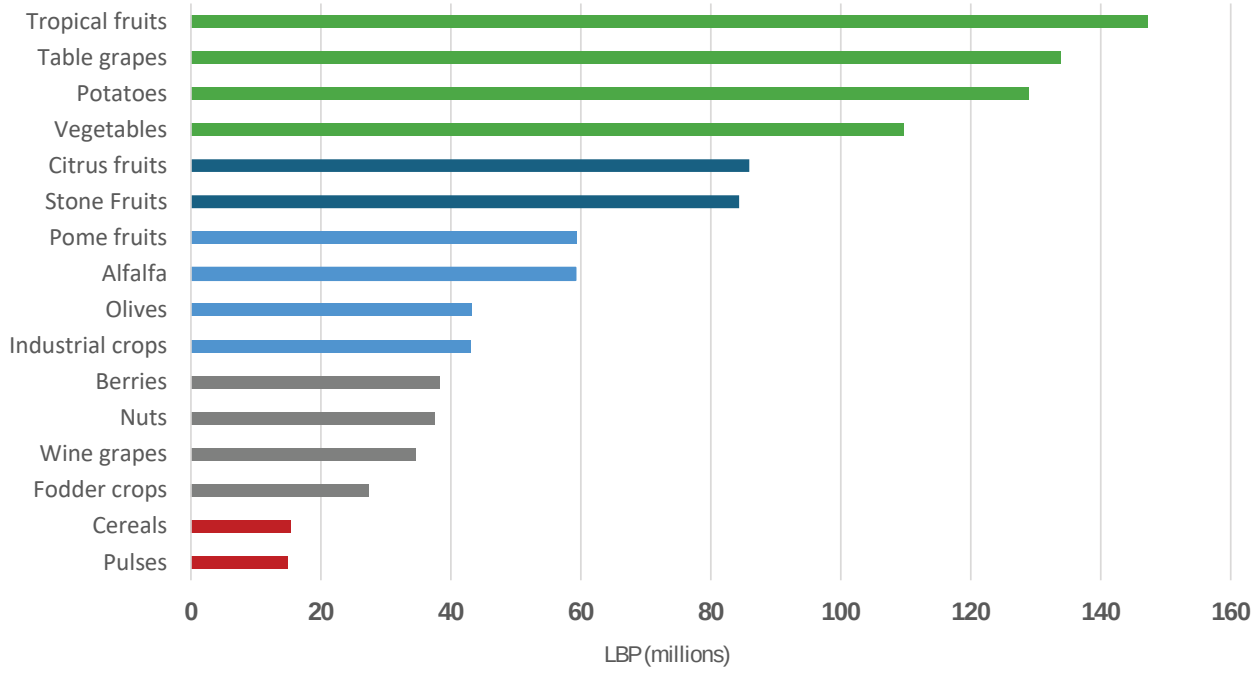
Broadly, there are three cropping seasons defined by the period of planting: autumn/winter (November to December), spring (February to March) and summer (from May onward). During the autumn/winter season, the main crops are wheat, barley, chickpeas, lentils and cumin. In spring, the main crops are early vegetables (carrots, tomatoes, zucchini, onion, cabbage and cowpeas). The summer season crops include cucumbers, eggplants, cabbage, sweet corn, beans and fodder maize. Potatoes can be planted in any of the three seasons. Figure 8 presents a simplified crop calendar covering major food and fodder crops in the main producing areas.

Crop production value

Figure 9 presents the average production value in 2021 by crops and groups of crops. The data indicates that high-value crops include tropical, citrus and stone fruits, potatoes, vegetables and table grapes. Olives, pome fruits, berries, nuts and alfalfa are medium-value crops. Some of these crops, however, are cultivated with low inputs and labour requirements (olives, nuts, alfalfa). Cereals and pulses are the lowest value crops with limited capacity to generate substantial income for farmers. Nonetheless, these cereals and pulses are important crops for farmers as they enter the crop rotation cycle on irrigated land along with higher value potatoes and vegetable crops. In Bekaa Valley, winters are cold, and the options for crop cultivation are limited; either farmers cultivate continuously two cycles of potatoes/vegetables in spring/summer, or they integrate a winter cereal or early pulses (chickpeas or lentils). The integration of winter cereals or chickpeas/lentils is beneficial to soil fertility and the performance of high-value crops. As such, the area expansion potential of these winter crops is intertwined with vegetable/potato area. In 2023, wheat and pulses accounted for approximately 60 000 hectares, while vegetables and potatoes accounted for 58 000 hectares. In rainfed land, cereals, pulses and some spices (cumin seeds) are the main options available to farmers for annual crops.

Figure 9: Lebanon – Fruits and vegetables production is key source of income for farmers; cereal crops less profitable

Production value by crop type and crop group, 2021



Source: Author's own elaboration based on data from MoA and FAO. 2022. *Lebanon Agriculture Production Survey 2021. PART 1- Report of the Survey Results.* [Unpublished]. FAO, 2024.

Main temporary crops

The main cereals cultivated are wheat (primarily hard and secondarily soft varieties), barley, sweet corn and fodder maize. Wheat and sweet corn are food crops, while barley is mainly cultivated as a fodder crop. Wheat represents 96 percent of the cereals cultivated as food crops. In 2021, more than three-quarters of wheat produced was hard varieties used for pasta and couscous, and about one-quarter was soft wheat used for bread.

About half of wheat and one-third of barley crops are produced under irrigation. Irrigation on wheat and barley crops is mainly supplementary in the spring to offset rainfall shortage. Wheat producers typically irrigate one to two times per season. Wheat is primarily irrigated in Bekaa Valley and Baalbeck-Hermel, while the rainfed wheat system prevails in Akkar, South and Nabatieh governorates.[47] In drier areas (rainfall <300 mm), barley is cultivated as a rainfed crop. In South and Nabatieh governorates, wheat production remains marginal. Local food industries transform hard wheat into semolina or cracked wheat (bulgur). A small proportion of hard wheat production is exported, about 3 percent of the total production in 2021.[48]

About 80 percent of barley is cultivated in the arid Baalbeck-Hermel governorate. A large part of the cultivated barley is left unharvested for grazing by small ruminants (sheep and goats). As for sweet maize, two-thirds of this crop is cultivated in Akkar governorate, while over 90 percent of fodder maize is cultivated in Bekaa and Akkar governorates. Potatoes are the second largest temporary crop after wheat. The main production areas are Bekaa Valley and Akkar Plain, which offer seasonal complementarities.

The main pulses cultivated include lentils, chickpeas, broad beans, beans and cowpeas. Lentils and chickpeas accounted for 96 percent of the pulses production in 2021. Baalbeck-Hermel is the main producing area.

Irrigation

Agriculture is by far the largest consumer of freshwater resources, accounting for an estimated 60 percent of total water consumption.[49] Based on the Ministry of Energy and Water (MoEW) inventory of irrigation schemes, the irrigated land area is 99 760 hectares.[50] According to the 2010 agriculture census,[51] the proportion of irrigated land is highest in South (91 percent), North (84 percent), Mount-Lebanon (79 percent), Akkar (75 percent) and Nabatieh (72 percent). The two governorates with the highest share of cropland, Bekaa and Baalbeck-Hermel, have a lower proportion of irrigated land (56 and 48 percent, respectively), while also being the driest governorates in Lebanon.

Irrigation is practiced by half of the agriculture holdings. About half of the agricultural area uses traditional flooding techniques, and the other half modern irrigation technology split equally between drip and sprinkler. About half of the irrigation water is supplied through wells; some are licensed, while many are illegal.[52] The other half is irrigated from surface water. In 2012, the number of unlicensed private wells (about 55 000 to 60 000) was almost three times higher than the number of licensed private wells (20 500).[53] There are no statistics regarding the depth and level of water extraction

Table 6: Lebanon – Domestic wheat production mostly comprised hard varieties for semolina and bulgur

Soft and hard wheat cultivated area and production, 2021

	Area (hectare)			Production (tonnes)			
	Rainfed	Irrigated	Total	Rainfed	Irrigated	Total	Percentage
Soft wheat	8 614	5 409	14 023	19 534	15 371	34 905	23.2
Hard wheat	22 719	14 781	37 500	44 144	71 183	115 327	76.8
Total	**31 333**	**20 190**	**51 522**	**63 678**	**86 554**	**150 232**	**100.0**

Source: Author's own elaboration based on data from MoA and FAO. 2017. *Agriculture production survey dataset*. [Unpublished]. FAO, 2024.

from wells. Many wells are used to dispose of sewage in the absence of functioning water treatment infrastructure. As a result, underground water is decreasing due to overextraction and is increasingly polluted.[54]

Over the last decade, the drilling of new wells has led to an expansion of irrigated agricultural land. The uncontrolled number of private wells and the uncontrolled extraction of groundwater from these wells have dramatically decreased the flows discharged by springs. These developments are observed in newly reclaimed areas on hillsides. According to MoEW, these new schemes often compensate for a decrease in the irrigated area within the traditional farming systems, amid rapidly expanding urban development over fertile agricultural land.[55]

A large share of the current irrigation network comprises open channels, limiting the irrigation water efficiency.[56] Considering network losses and current irrigation practices, irrigation efficiency is low and around 50 to 60 percent. The average irrigation water requirement for a representative hectare of agricultural land is around 8 475 m³ per year (equivalent to 847 mm of irrigation water).[57] Conversely, in most of the recently drilled wells, modern irrigation equipment and practices are adopted, optimizing water use efficiency, crop production and energy (through the installation of photovoltaic solar panels). These modern schemes represent success stories and avenues of potential sustainable growth in the irrigation sector.

Farm structure and farmer organizations

The 2010 agricultural census identified nearly 170 000 agricultural holdings. FAO Data in Emergencies (DIEM) surveys, conducted from 2022 onward, used the 2010 list of agricultural holdings as a sampling frame and were able to contact over 70 percent of sampled farmers from the census. This suggests that census data, although old, are likely to continue reflecting the underlying structural features of the agriculture sector, although it may not capture production from recent land reclamation development with the drilling of new wells. Agricultural holdings are small, averaging 1.4 hectares. There is a wide disparity in the size of agricultural holdings, which can be categorized in three groups:

- 70 percent of farmers cultivate less than 1 hectare, covering 18 percent of total agricultural land;
- 26 percent cultivate an area between 1 to 6 hectares, covering 40 percent of total agricultural land;
- 4 percent operate on more than 6 hectares and cover 42 percent of total agricultural land. In this category, 1.8 percent of large commercial farmers have holdings of more than 10 hectares, but these farmers control one-third of the agricultural area.

The agriculture sector is dominated by small holders (in terms of numbers of farmers), some medium size farmers (2–6 hectares) producing mainly for the local market, and a few larger commercial enterprises focusing on export commodities and having access to adequate financial resources for investment, who own the largest segment of agricultural land. Large commercial farms often recruit agriculture professionals and generally implement good agricultural practices.

In contrast, small holders are characteristic of agricultural systems dedicated to the preservation of cultural and family real estate heritage, in a context of rapid urbanization. As such, agricultural activity is often a source of a supplementary income for the family. In hilly and mountainous regions, where much of real estate development is taking place, agriculture is characterized by small plots, where farming is often carried out on agricultural terraces, which have been used for centuries to exploit the mountain slopes. There are anecdotal reports that, with the financial crisis, families owning small plots of agricultural land decided to invest in agricultural production to generate additional income.

Due to rapid urbanization, the category of small holders is characterized by a vast inequality of wealth, ranging from poor smallholders to wealthy families maintaining their agriculture land, possibly in view of a future land transaction. The Mission gathered that the

price of agricultural land per *dunum*[h] is comparatively very high and varied between USD 50 in the areas along the Litani River and USD 200–250 in the vicinity of urban centres in Bekaa Valley. Agriculture land in Mount Lebanon varies from USD 100 to 600/*dunum* in Keserwan district. In this context, there are strong incentives for low-income smallholders to sell their agriculture land to real estate developers.

Medium size farmers typically rely on agriculture as their main source of income. Frequently, medium-sized farmers attempt to enlarge their land holdings through seasonal or annual land leases, mostly from small landholders. Based on the Mission's interviews with farmers, medium size farmers faced challenges in accessing sufficient agricultural land, as small landholders are less inclined to lease land, largely an effect of the financial crisis.

The coverage of farmers' organizations is relatively low, representing 4.5 percent of farmers nationwide, while only about one-third of the 1 229 registered agricultural cooperatives are deemed active.[58, 59] Lebanon's cooperatives are largely focused on securing funds from government sources and international donors and, sometimes, facilitation of sales to local markets. Most cooperatives operate at a local scale and have limited market access.[60] Yet, cooperatives offer an important venue for the development of high-potential agrifood value chains, through innovation and best practices for improved technical, organizational, business and financial services for farmers.[61]

Livestock

According to the 2010 agriculture census, raising livestock (cattle, sheep, goats and pigs) is practiced by around 15 800 farmers, representing 9 percent of the total number of agricultural producers. Based on the latest MoA agriculture production survey, the number of cattle heads was estimated at 88 700 in 2021, an increase of about 20 000 heads from 2010. An estimated 57 percent of the cattle heads were milking cows, many raised on large farms. Dairy cattle production systems are largely landless and vary in size, with smallholder systems owning two to ten cows, medium size units with 11 to 30 animals, but also large and modern units integrated into industrial processing units. The smallholder system has largely declined but remained common in Akkar governorate.

The beef industry is dominated by frozen and live cattle imports. Live cattle importers own vessels and source beef from as far as Brazil. Live cattle are sold within two weeks to wholesalers and slaughtering houses. Importers have established or rented *transit* farms for live cattle on the coast and in Bekaa Valley. Local beef production is a by-product of the cattle dairy industry and supplied some 20 percent of the national demand in 2021.[62]

Grazing areas are almost restricted to small ruminants since cattle are mainly raised in large farms. Sheep and goats raised on the western slopes of Mount Lebanon move from the coast in winter towards the mountains in the spring and summer. Herds that used to come from the Syrian Desert are now unable to travel to Bekaa Valley during the summer period, while Lebanese shepherds no longer take their herds to the Syrian Arab Republic in the winter.[i, 63] As a result, small ruminants are now more dependent on fodder production and crop residues from local agriculture, as well as expensive imported feed. Small ruminants in Baalbeck-Hermel primarily graze on crop residues and on hay composed of barley mixed with vetch from the end of June until the spring. The number of goat heads was estimated at 347 100 in 2021, down from 403 900 in 2010. During the same period, the number of sheep increased by 65 percent, from 265 300 to 437 600. Nearly two-thirds of the sheep and 41 percent of the goats are found in Bekaa Valley and adjacent slopes.[64]

The bulk of livestock farms are *informal*, meaning they lack the certification that would allow them to operate legitimately. Without supporting services and mechanisms that would support farmers to comply with laws and regulations,

[h] 1 *dunum* = 0.1 hectares.

[i] In addition, the Syrian war triggered a large influx of small ruminants as displaced Syrian crossed the border with their herds. The total number of sheep and goats to have crossed from Syria was estimated at 30 percent of the Lebanese small ruminant's population in 2014. Many were sold at discounted price for slaughtering.

Table 7: Lebanon – Livestock production concentrated in eastern valleys
Livestock distribution by governorates, 2021

Governorates	Cattle	Sheep	Goats
Baalbeck-Hermel	27 068	142 962	59 472
Bekaa	18 525	133 986	85 767
Akkar	16 571	28 792	18 906
North	8 415	47 927	42 943
South	6 824	26 618	28 517
Nabatieh	5 925	29 892	52 793
Mount Lebanon	5 335	27 406	58 715
Total	**88 663**	**437 583**	**347 113**

Source: MoA & FAO. 2022. *Lebanon Agriculture Production Survey 2021. PART 1- Report of the Survey Results*. [Unpublished]. FAO, 2024.

such as maintaining a minimum distance between settlements and the existence of water sources, farmers are unable to obtain certification to rear livestock. Inhabitants in rural areas can shut down uncertified livestock farms if they find them to be a nuisance (noise, smell). Uncertified farms can still be supported by government programmes such as vaccinations or input distributions.[65]

The poultry sector is a success story, as meat and eggs production now meet local market demand. The poultry sector is composed of a few large poultry producers controlling the largest share of the market and more than 2 000 poultry farms. Traditional free-range poultry, whereby the animals have access to outdoor space, feeding on grass and insects represents 1 percent of the total number of heads.[66] The four main poultry producers operate a fully integrated production; meaning that they have their own feed mill, farms, slaughterhouses, distribution channels and branding. They cover all the steps of the process: breeding, hatching of eggs, vaccination, raising of day-old chicks and slaughtering.[67]

Long-term agricultural production trends

Wheat and barley production have stagnated over the past two decades despite government subsidies (Figure 10). While wheat production increased in the late 1990s, production has been

Figure 10: Lebanon – Production of milk and potatoes increased, growth was limited for other key agricultural commodities
Long-term production trends of main agricultural commodities, 2000–2022 (tonnes)

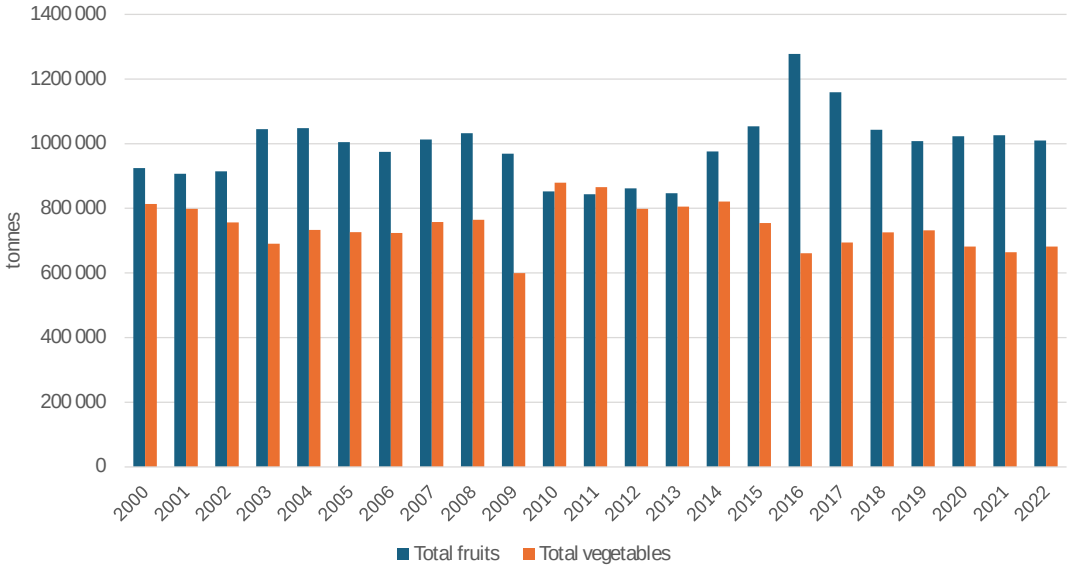
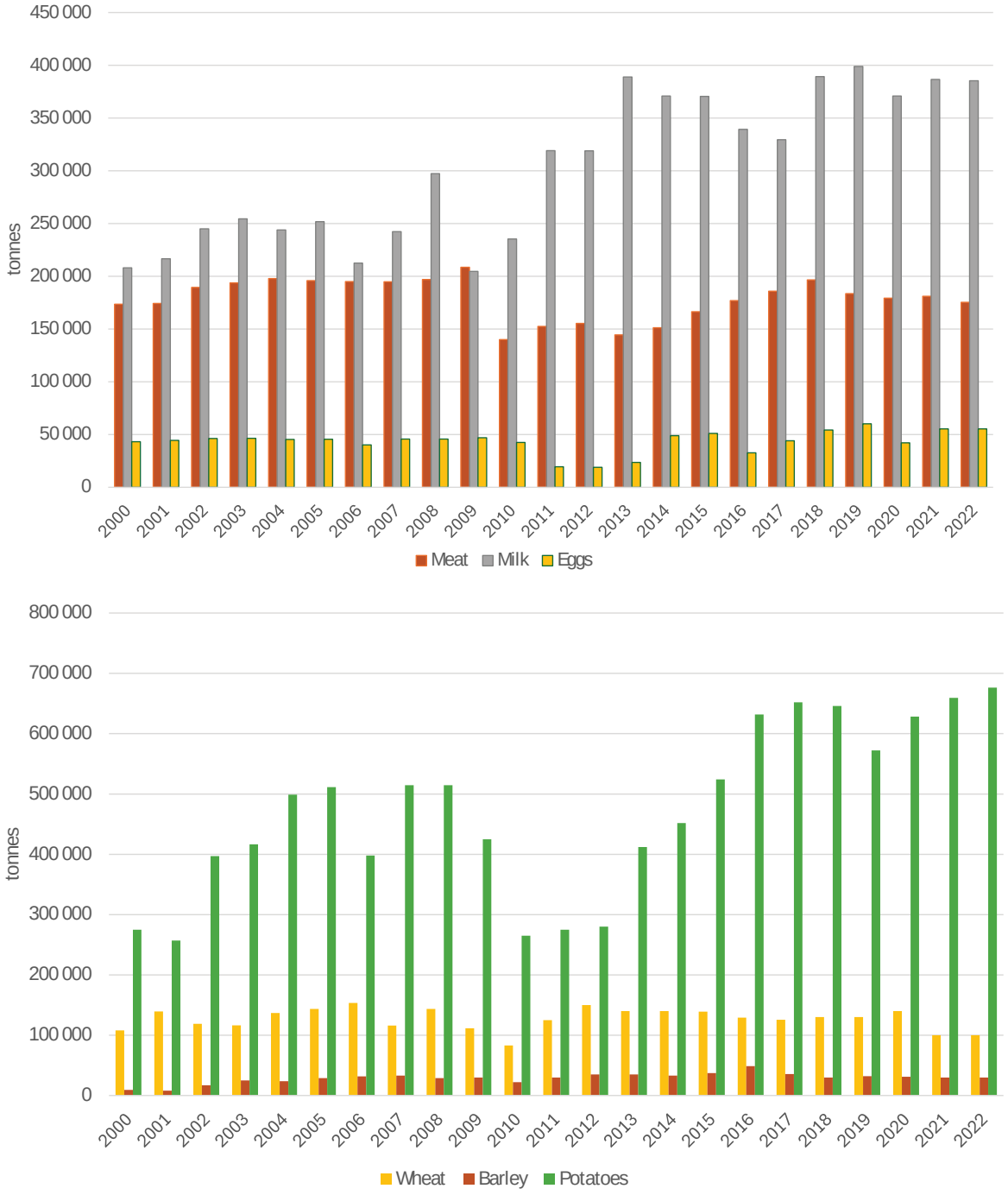


Figure 10: Lebanon – Production of milk and potatoes increased, growth was limited for other key agricultural commodities *(Cont'd)*

Long-term production trends of main agricultural commodities, 2000–2022 (tonnes)



Source: Author's own elaboration based on data from FAOSTAT. 2024. *Crops and livestock products.* Rome. [Cited 9 July 2024]. https://www.fao.org/faostat/en/#data/QCL.

on a downward trend over the last ten years. The production of pulses decreased five-fold between the mid-1990s and mid-2000s, and then gradually increased thereafter. By contrast, the production of potatoes, livestock products (meat, milk and eggs), fruits and olive oil has significantly increased over the last decades. The composition of agricultural production has, therefore, shifted away from cereals to specialized high-value fruits and vegetables, as well as livestock production.

Gender in the agriculture sector

The gender gap is very pronounced in Lebanon, including in the agriculture sector, with the country ranking 132 out of 146 countries according to the Global Gender Gap Index 2023. In 2010, only 9 percent of farms were headed and operated by females, and only 5 percent of the total agricultural area was cultivated by females. Women face discrimination in land ownership, with only 9 percent of farms owned by females. The agriculture sector employs 4.4 percent of men and 1.6 percent of women.[68, 69] The main roles of females in agriculture are labour-intensive and time-consuming manual tasks, such as sowing, weeding, harvesting and processing.[70]

However, women play a prominent role in smallholder animal production. They are responsible for all aspects of animal husbandry, especially on farms with fewer than three cows and 10–50 backyard small chickens. Their tasks include milking, feeding, providing water, fodder collection, preparing feed rations, and feeding and care for the animals. Women process milk into cheese, yogurt, labneh and other dairy products. Marketing tasks performed by women include selling fresh milk, eggs and processed dairy products from their doorstep to people coming from within their same villages or nearby villages or to middlemen.[71]

Agricultural information systems

There are two sources of official agricultural statistics in Lebanon: 1) MoA and 2) CAS; however, the MoA is the government entity mandated to generate agricultural statistics. With technical assistance from FAO and financial support from country donors, the MoA implemented intermittent agriculture production surveys from 2004 to 2009, between 2015 and 2018, and in 2021. The non-consistent implementation of surveys has resulted in gaps in agricultural statistics time series data, particularly in recent years. MoA agricultural statistics are also not systematically published and made publicly available.

MoA annual production surveys use the 2010 Lebanon Agricultural Census list of agriculture holdings as the sampling frame. The census established a list of nearly 170 000 agricultural holdings. Both the census and the annual agriculture production surveys rely exclusively on farmers' reports. No measurement of land size or crop yield at harvesting time has been implemented. Due to COVID-19, the 2021 agriculture production survey was conducted through phone interviews.

CAS has been generating national accounts since 2011. In the absence of continuous agricultural statistics from the MoA, CAS uses data from *Centre de Recherches et d'Études Agricoles Libanais* (CREAL), a private agricultural consultancy institute that has produced continuous agricultural statistics for the past seven decades.[j] For the national accounts, CAS uses and publishes the aggregate production values for crops, livestock, forestry and fishery.[72] Disaggregated agricultural data for the national accounts are not published by CAS.

To generate agriculture information, CREAL has subdivided Lebanese territory in 93 small agriculture regions (SAR) and maintained a network of 23 trained field engineers/agents who observe and report on the situation in each SAR.[k] On average, each field agent observes four SARs and monitors agriculture activities of some 7 200 agriculture holdings (on average 1 800 agriculture holdings per SAR). Reports from each SAR are delivered four times a year. CREAL agriculture information system covers some 294 crop campaigns and five groups of animal products. For each crop and animal product, CREAL has established a network of *key farmers*, defined as *farmers who are best informed about specific value chains* within their respective SAR. Estimates on area planted and production are collected from *key farmers* and triangulated by the engineers/agents with local markets information and field observations. Quarterly reports from the 93 SARs are aggregated at district, governorate and national levels. In addition to production data, CREAL collects various agricultural data, covering cost of production and farm-gate prices as well as other agriculture

[j] In previous years, the Grand Serail was estimating the national account, using MoA data until 2009 and then switched to CREAL's.

[k] 170 000 agriculture holdings divided by 93 SARs.

information on seeds, inputs, labour or markets. As such, CREAL agriculture information system provides the only consistent time series upon which studies and analysis can be conducted to inform agriculture policies and strategies.

CREAL data are not available to the public. Yet, CREAL kindly offered the Mission with agriculture data aggregated at national level for the years 2017 to 2023 (Annex 2). The comparison between CREAL and MoA data indicates that CREAL estimates are substantially lower for planted area as well as crop and milk production, while yield tends to be estimated at higher level (Annex 3).

In the absence of accessible official agriculture statistics, various international and regional organizations have produced their own estimates, mostly using proxy indicators to evaluate trends. There are significant discrepancies between sources. As an illustration, Table 8 and Figure 11 below compare the planted wheat area and production from the main international and national sources of agricultural data.

Regarding agrometeorological data, since the onset of the financial crisis at the end of 2019, only four out of 37 meteorological stations (35 automatic and two manned stations) are fully operational. This principally reflects resource shortfalls at the *Météo Liban*, limiting their capacity to maintain stations. Seasonal weather data from operational stations are also not published.

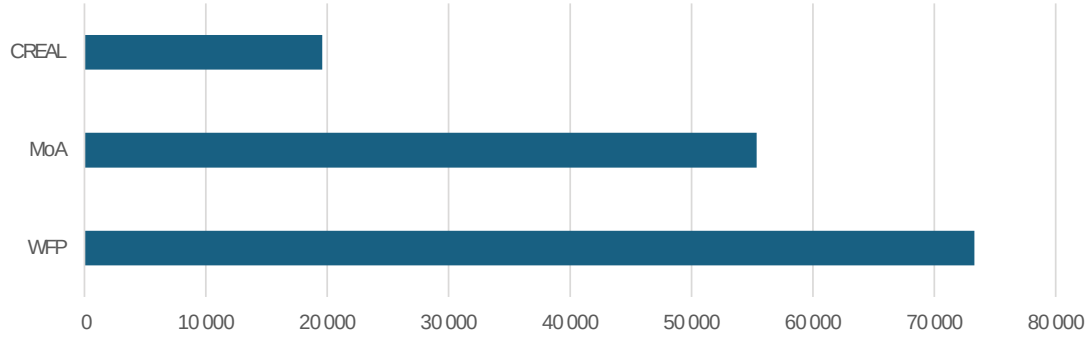
Table 8: Lebanon – Comparison of wheat production estimates from main sources of agricultural statistics, 2014-2023 (tonnes)

Year	MoA	CAS/CREAL	FAOSTAT[1/]	USDA[2/]	AOAD[3/]
2014	-	-	140 000	140 000	140 000
2015	117 212	-	139 000	139 000	110 065
2016	129 037	-	129 037	140 000	130 080
2017	125 797	80 839	125 797	130 000	130 000
2018	131 977	69 425	130 000	130 000	130 000
2019	-	50 812	130 000	140 000	130 000
2020	-	69 985	140 000	145 000	140 000
2021	150 232	72 474	100 000	135 000	100 000
2022	-	73 750	100 000	140 000	-
2023	-	76 585	-	140 000	-

Source: Author's own elaboration based on data from: MoA, CAS & CREAL. 2024. Beirut. [Cited July 2024]. https://creallb.com/.
[1/] FAOSTAT. 2024. *Crops and livestock products.* Rome. [Cited July 2024]. https://www.fao.org/faostat/en/#data/QCL. Until 2018, FAOSTAT used official data reported by MoA. After this date, no reports were received from the Government of the Lebanese Republic and figures from international organizations were used.
[2/] USDA. 2024. *Country Summary - Lebanon, wheat*. [Cited July 2024]. https://ipad.fas.usda.gov/countrysummary/default.aspx?id=LE&crop=Wheat. Until 2018, FAOSTAT used official data reported by MoA. After this date, no reports were received from the Government of the Lebanese Republic and figures from international organizations were used.
[3/] AOAD. 2009. *Database.* Arab Organization for Agricultural Development (AOAD). [Cited July 2024]. https://www.aoad.org/database_en.htm.

Figure 11: Lebanon – Wheat area discrepancies between sources raises challenges for planning and investment

Wheat area estimates for crop, 2023 (hectares)



Note: WFP area estimates are based on remote sensing analysis, while CREAL and MOA estimates are derived from field-level assessments and farmer surveys.
Source: Author's own elaboration based on data from WFP. 2023. *Lebanon Crop Type Mapping*.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Main factors affecting agricultural production in 2023/24

Weather conditions

Generally, the country has benefited from well above-average rainfall amounts during the northern hemisphere autumn and winter months in 2023/24,[l] particularly in November, December and February (Figures 12), creating favourable conditions for land preparation and replenishing aquifers. Rangeland conditions benefited from this rainfall. However, heavy rainfall in February 2024 caused flooding events in Akkar. Winter was particularly warm, causing a higher-than-usual snowfall limit (the elevation at which snow sticks on the ground after falling). Consequently, snow cover was limited in lower elevations but significantly higher than average at high altitudes (>1 800m). Water from spring and river flows for irrigation has largely been available for the agriculture sector in 2024. With a warm winter, some apple orchards on the eastern side of Mount Lebanon did not meet their minimum chilling requirements, impacting yields.

Rainfall quantities during the spring months were generally below average, as illustrated by Figure 12. Heat waves during the first decade of May 2024 adversely affected crops, particularly cereal crops at flowering and grain filling stages. The Normalized Difference Vegetation Index (NDVI)[m] captured these stresses on agriculture land in the Bekaa Valley in particular (Map 5). Cereal crops reached physiological maturity earlier than normal and, owing to the good availability of combine harvesters, crops were harvested two to three weeks earlier than usual. Spring frosts were reported in Baalbeck-Hermel, mainly affecting fruit trees (apricots, peaches and cherries).


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Agricultural inputs and in-kind credit mechanism

The agriculture sector is highly dependent on imports for inputs,[n, 73, 74] including seeds, fertilizers and pesticides, as well as energy requirements. The import structure of agricultural inputs has been described as oligopolistic, with a high concentration of import suppliers.[75] Before the financial crisis, access to credit in foreign currency was fundamental to organize the import and distribution of large

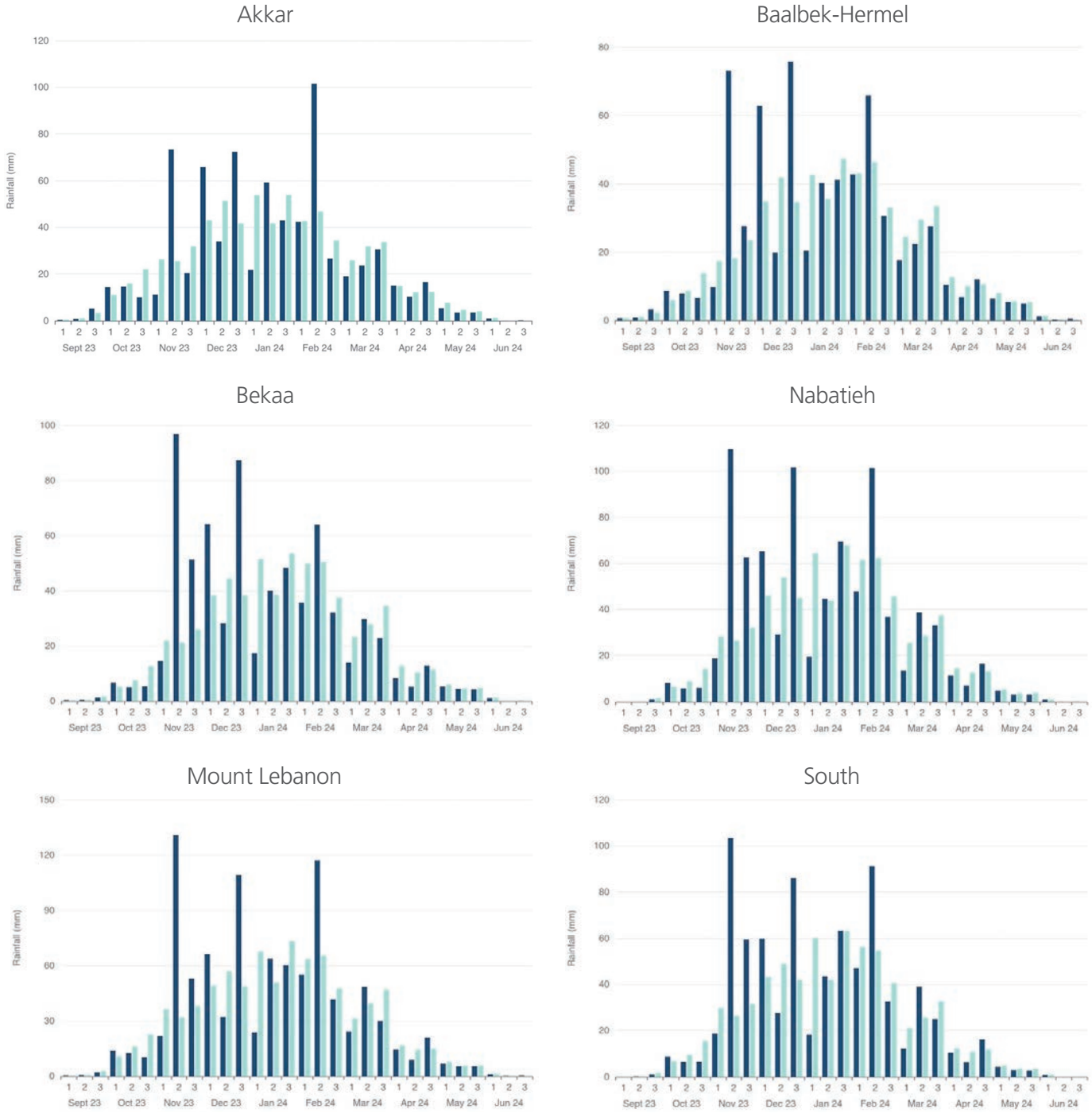
[l] According to *Météo Liban*, total rainfall this year in Beirut was 1 051 mm, compared to the long-term average (LTA) of 780 mm/year. For Tripoli, 1 229 mm rainfall was received (LTA 825 mm) and in Zahle rainfall was estimated at 749 mm (LTA 627 mm). Annual rainfall in Lebanon is measured from September to August.

[m] NDVI measures the *greenness* of ground cover and is used as a proxy to indicate the density and health of vegetation. NDVI values range from +1 to -1, with high positive values corresponding to dense and healthy vegetation, and low and/or negative NDVI values indicating poor vegetation conditions or sparse vegetative cover. The NDVI anomaly indicates the variation of the current dekad to the LTA.

[n] Historically, farmers obtained their agricultural inputs (fertilizer, seeds and pesticides) from the Syrian Arab Republic, where these were subsidized. However, the conflict in the Syrian Arab Republic has forced input dealers to seek alternative sources, pressuring prices of urea fertilizer. Informal trade with the Syrian Arab Republic, mainly when fuel was still subsidized, have also affected the availability of energy sources.

Figure 12: Lebanon – Excessive winter rains and reduced spring rainfall adversely impacted crop yields

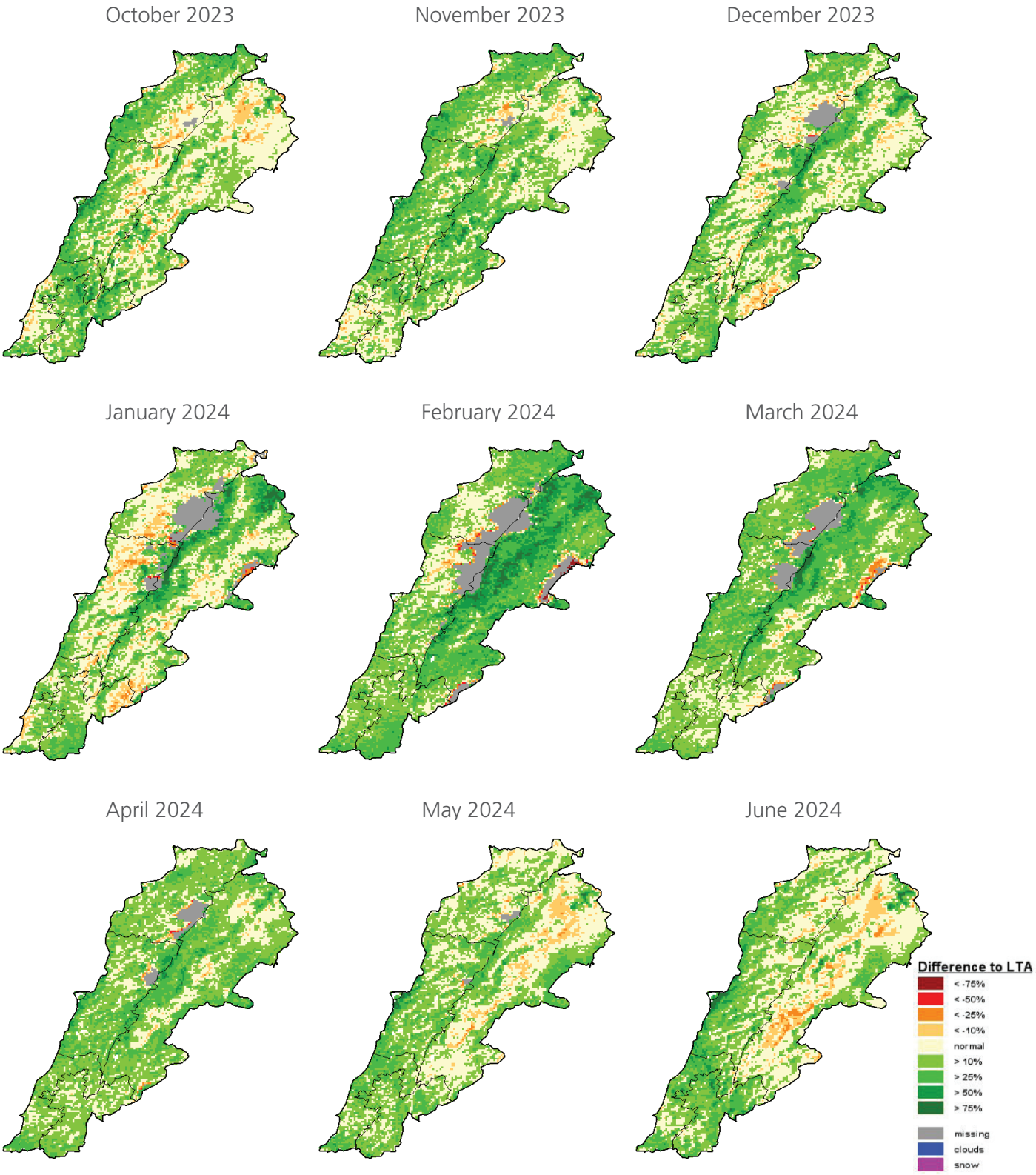
Rainfall estimates, September 2023–June 2024 (mm)



Source: WFP. 2024. *Data* – Seasonal Explorer, 2023–2024. Vulnerability Analysis and Mapping (VAM) of WFP. Rome. [Cited July 2024]. https://dataviz.vam.wfp.org/.

Map 5: Lebanon – Low rainfall quantities and heatwaves spring months worsened vegetation conditions in key eastern agricultural areas, 2024

Normalized Difference Vegetation Index (NDVI), October 2023–June 2024



Disclaimer: *The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.*

Source: FAO. 2024. Earth Observation. Global Information and Early Warning System on Food and Agriculture (GIEWS). Rome. [Cited June 2024]. http://www.fao.org/giews/earthobservation/index.jsp?lang=en.

quantities of agricultural inputs. In turn, agricultural input importers provided in-kind credit down the supply chain to farmers and thus played a major role in financing agricultural campaigns.

The most common source of credit for the purchase of inputs by medium and large-scale farmers are input suppliers.[o] A farmer usually receives credit from a single input supplier; the amount depends on the farmer's credit history, their relationship with the input supplier, their reputation and the size of their farm.[76] Moreover, given the limited access to agricultural training, information and extension services, many farmers rely on input suppliers as the main source of technical advice, which might not be fully reliable given their self-interest in generating revenues by selling more agrochemicals. This dynamic can undermine food production and food safety.

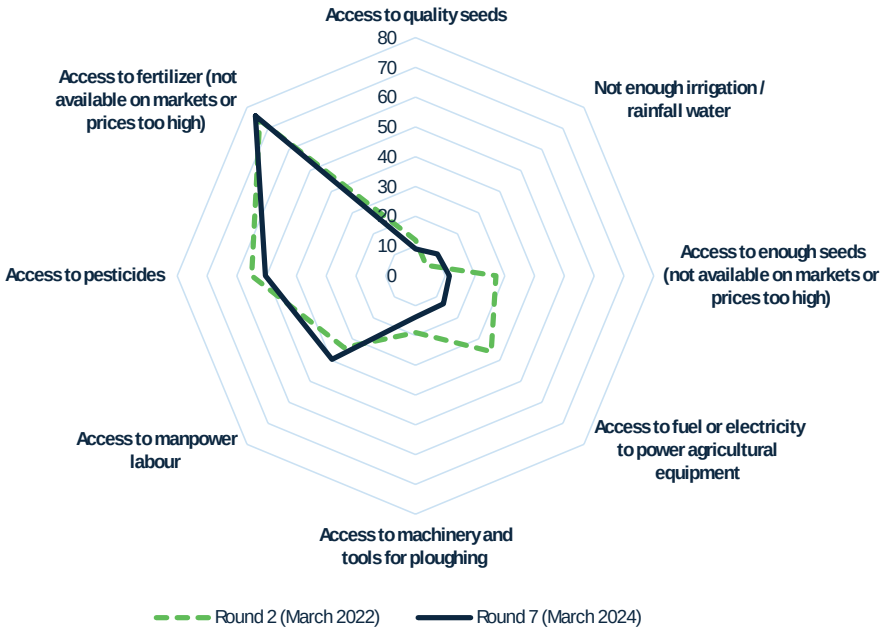
Prior to the financial crisis, access to credit in foreign currency by importers, estimated at USD 200 million,[77] underpinned the financial system of the agriculture sector. In turn, agricultural input importers provided seasonal working capital to input retailers and farmers. In October 2019, CREAL estimated that farmers' debts to input retailers amounted to USD 80 million, and retailers' debts to importers reached USD 60 million.[78]

The financial crisis in 2019 led to the collapse of the entire credit system within the agriculture sector, transmitting through the supply chain down to farmers. From 2020 onward, all farmers needed to cover farming expenses through immediate cash payments rather than on credit and making end-of-season payments.

Surveys of agricultural households conducted by FAO and MoA in 2022 and 2024 reveal that the three main reported difficulties by farmers are access to fertilizers, pesticides and labour (Figure 13), primarily reflecting high prices. Whilst access to fuel and electricity was a key challenge in 2022, it was a less cited issue in 2024.

Figure 13: Lebanon – Constrained access to fertilizers and pesticides are key challenges affecting farmers

FAO farmer survey results, March 2022 and March 2024 (percent)



Note: Numbers indicate the percentage of farmers reporting each challenge.

Source: FAO. 2024. *Lebanon: DIEM – Data in Emergencies Monitoring brief, round 7 – Results and recommendations, September 2024*. Rome. https://openknowledge.fao.org/handle/20.500.14283/cd2313en.

[o] To a lesser extent, wholesalers may also provide credits to farmers.

The Mission identified several strategies adopted by farmers to reduce input costs following the onset of the financial crisis:

- Increase of planted area of low-input crops such as wheat, barley, pulses or cumin seeds.
- Decrease the planting area of high-input crops such as potatoes and vegetables.
- Increase the use of straight fertilizers rather than compound NPK fertilizers.
- Increase the utilization of lower-cost imported products from China (mainland) or Türkiye.
- Increased reliance on remittances[p, 79] to finance the procurement of agricultural inputs, particularly for small and medium size farmers.
- Decrease the quantity of inputs applied to crops, particularly perennial crops.

Responding to the situation, under the Lebanon Response Plan (LRP) for 2024, the food security and agriculture sector partners interventions aim at enhancing the technical and operational capacities of small-scale farmers through the provision of agricultural inputs (in-kind or vouchers), the promotion of agricultural investments (grants) as well as supporting agricultural cooperatives and MSMEs for improved production and productivity in addition to the provision of training and capacity building. Between 2021 and 2023, the sector reached 64 057 small-scale farmers (3 300 in 2020, 1 413 in 2021, 37 148 in 2022 and 22 196 in 2023).[r]

Imports of agricultural inputs decreased significantly in 2020 but subsequently increased, although remaining at pre-crisis levels in 2021, 2022 and 2023. In 2020, input supply companies were facing 50 percent reduction in their business turnover.[80] Agricultural input importers reported to the Mission that their level of activity reached pre-crisis levels in 2024, suggesting a normalization of the situation. Import data indicate an increase in quantities in 2023, and a further upturn in the pace of imports during the first four months of 2024 (Figure 16).

The Mission also observed that farmers and input dealers have resumed the provision of agricultural inputs on a credit basis to farmers with a trusted credit history, but sometimes at a premium price. The Mission also received reports of increased competition as, in the absence of credit facilities in foreign currency, there has been an increase in entrants into the agricultural inputs market.

Seeds

Planting material is mostly imported and farmers generally procure planting material from agricultural input dealers at the start of each cropping season. Currently, Lebanon does not implement a seed certification system and seed testing laboratories are not accredited by the International Seed Testing Association (ISTA). A LARI seeds laboratory in Bekaa is operational and well maintained, and implements seed testing for imported material following ISTA rules. The capacity to check the quality of imported seeds is available but is insufficient for seed exports.[s] The MoA Decree No 781/1 (2011), concerning the importation of seeds for planting purposes, provides the minimum analytical parametres for vegetable, sugar beet and forage crops. The importation of wheat seed is not regulated. The sector is constrained by the absence of a seed law. In 2013/14, the MoA drafted a seed law[81] but was reportedly withdrawn from the parliament for revisions and has not since been resubmitted.

At the peak of the programme, LARI produced 8 000 tonnes of certified seeds (mainly wheat: 80 percent hard wheat and 20 percent soft wheat, but also barley, chickpeas and lentils), which were retailed at a subsidized price. However, the process of seed production collapsed in 2019, amid the currency depreciation, as government-set seed prices diverged from the black market rates, discouraging farmers from selling to LARI's seed multiplication centre.[82] Consequently, wheat farmers have been left with limited option: plant their own saved seeds, source from neighbours with known origin, or procure seeds from local input suppliers.

[p] As a percentage of GDP, remittances have increased from an average of 13 percent between 2012 and 2019, to 19.8 percent in 2020, 26.4 percent in 2021, to 31.7 percent in 2022 respectively - largely owing to a denominator led effect of a decrease in USD nominal GDP.

[r] Agriculture and Food Security Sector annual dashboards.

[s] Lebanon exported 12 683 tonnes of locally produced maize seeds in 2023.

The private sector reacted swiftly to fill the seed supply gap left by LARI and at least four companies are importing wheat seeds. In the absence of seed import regulations, any variety can be imported. Some imported wheat seed varieties identified by the Mission are winter wheat, which have higher vernalization requirement and may not adapt to the climatic conditions of Lebanon. FAO distributed, in coordination with the MoA, 178 and 342 tonnes of high-quality soft wheat seeds imported from the Arab Centre for the Studies of Arid Zones and Drylands (ACSAD) in 2022 and 2023, respectively. ACSAD varieties were tested earlier by LARI. Commercially imported wheat seeds are not tested before being released on the market. Issues of quality and adaptability of seeds procured on the local market were raised by farmers and stakeholders.

Regarding potatoes, farmers procure imported potato seeds (Figure 14), mostly from Europe, for the early season in Akkar and Bekaa Valley (Crop calendar, Figure 8). Produce from the early season can capture a higher market price. For the second planting season in Bekaa Valley, farmers procure small size tubers from Akkar's early production to be used as seeds. Imported potato tubers are generally large in size (55–65 mm) and cut into two to four pieces by farmers prior to planting to reduce costs. Prices of imported potato seeds have substantially increased this year, quoted between USD 1 200 to 1 450/tonne, driven by supply shortages from Europe.[83, 84]

For chickpeas and lentils, farmers mostly use their own seeds. Agriculture input dealers are importing small quantities of hybrid varieties. Most vegetable and sweet maize seeds are hybrid varieties, generally imported from Europe. They are widely available in agriculture input shops at a price comparable to last year.

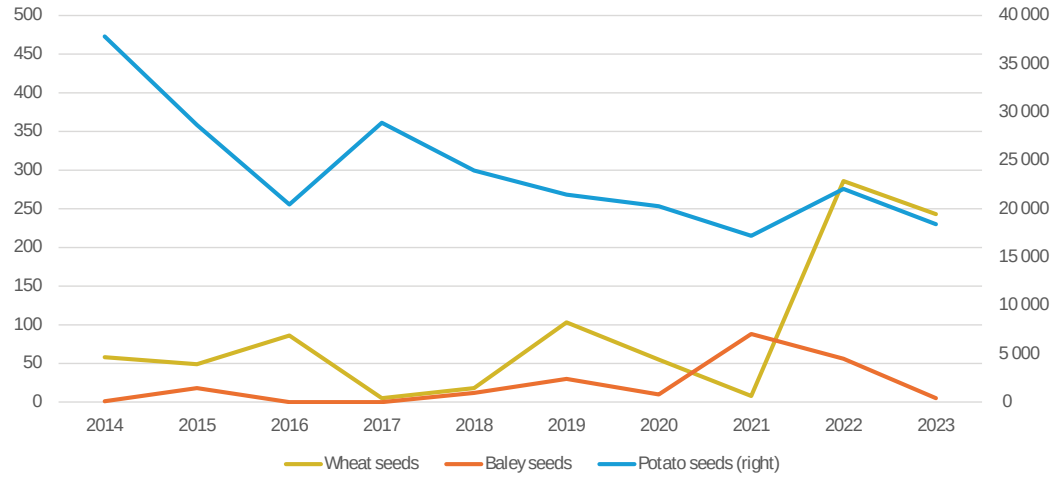
Fertilizers

All fertilizers used in Lebanon are imported or manufactured with imported raw materials. Two companies are manufacturing fertilizers; one manufacturing triple superphosphate (TSP) and single superphosphate (SSP),[85] exclusively for the export market and the other manufacturing combined fertilizers targeting vegetable and potato farmers.[86] Given the scale of TSP and SSP production, Lebanon is a net fertilizer exporter. The three main chemical fertilizers imported and used in Lebanon are ammonium sulfate, urea and compound fertilizers containing three of the fertilizing elements nitrogen, phosphorus and potassium (NPK).

High fertilizer prices and reduced incomes, compounded by the lack of access to credit, resulted in a decrease in fertilizer use and a shift from compound NPK fertilizers to straight fertilizers. On average, the proportion of straight fertilizers (urea

Figure 14: Lebanon – Wheat seed imports surged in 2022, amid shortfalls in domestic seed production

Import quantities of wheat and barley seeds and seed potatoes, 2014–2023 (tonnes)



Source: Author's own elaboration based on data from Lebanese Customs. 2024. *Customs Administration*. Beirut. [Cited July 2024]. http://www.customs.gov.lb/home.aspx.

and ammonium sulphate) increased from 6 and 26 percent to 14 and 37 percent, respectively, of the total chemical fertilizer imports.[87]

Fertilizer imports decreased by 47 percent between 2019 and 2022, before slightly recovering in 2023. The financial crisis coincided with record-high fertilizer prices on the international market in 2022, which saw urea prices soar between 2019 and 2022. Urea and other fertilizer prices on the global market decreased sharply until mid-2023. The international reference price for urea, widely used in Lebanon, decreased by 49 percent in 2023 compared to the average level in 2022. On the local market, prices of fertilizer have decreased by about one-third compared to last year, boosting farmers' access in 2024.

Reflecting the stabilization of the exchange rate and falling international prices (Figure 16), imports of fertilizers increased by 55 percent between January and April 2024, compared to the same period in 2023 (Figure 15). Assuming a continuation of this trend for the remainder of 2024, fertilizers' imports would reach pre-crisis level, corroborating input suppliers' assessments.

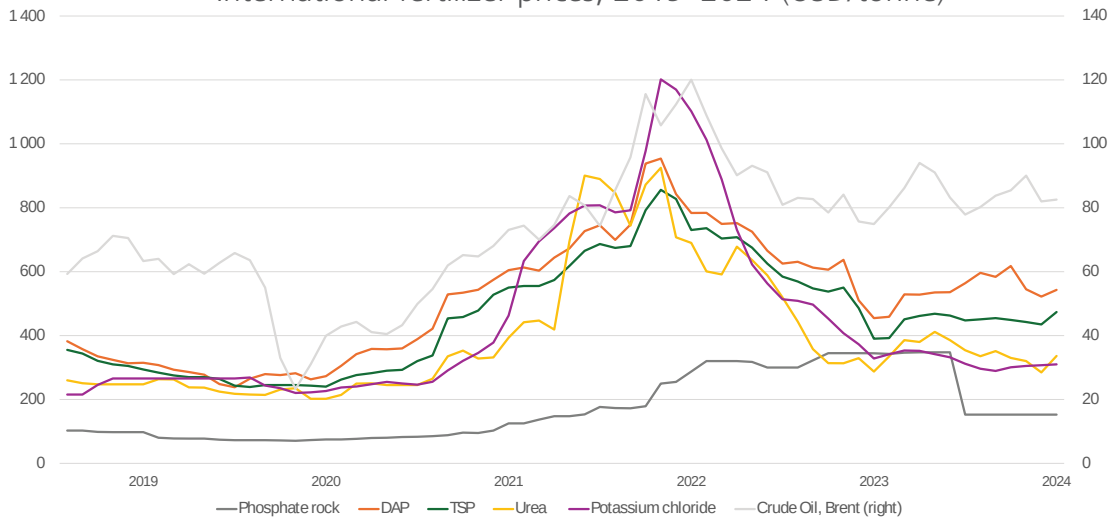
Figure 15: Lebanon – Import quantities of fertilizers rebounded in 2023, and the import pace quickened further in early 2024

Import quantities of fertilizers, 2014–2023 and monthly quantities, January–April 2023 and 2024 (tonnes)

Source: Author's own elaboration based on data from Global Trade Tracker (GTT). [Cited July 2024]. https://www.globaltradetracker.com/.

Figure 16: Lebanon – International prices of fertilizers declined from peaks of 2021

International fertilizer prices, 2019–2024 (USD/tonne)



Source: Author's own elaboration based on data from World Bank. 2024. *Commodity Markets*. The World Bank Group. Washington, D.C. [Cited July 2024]. https://www.worldbank.org/en/research/commodity-markets#1.

Excessive use of agrochemicals

Soil nutrition and plant protection are mismanaged, and Lebanon shows some of the highest rates of pesticides application (7 kg/hectare) in the world.[88] The Mission found a high prevalence of agricultural malpractices related to the utilization of pesticides and fertilizers. In particular, the Mission observed:

- Potato and vegetable farmers report applying pesticides through sprinklers at very high doses to ensure no pests are present in the root system. In 2022, farmers revealed to a groundwater quality assessment team the use of plant protection products every 15 days instead of every 35 days and mixing the pesticide solution at 100 times more than the manufacturer's recommended rate.[89]
- Farmers reported using multiple pesticide products on the same harvest, which might contribute to what is known as the 'cocktail effect' as pesticides can become more harmful to humans and the environment when combined.
- Potato farmers reported using fertilizer rates equivalent to recommended rates in straight fertilizers for yields above 60 tonnes/hectare, while yields were averaging 20 tonnes/hectare. The entire quantity of straight fertilizers (for example 350 kg of urea) is applied once at planting time. The Mission's observations were that farmers did not follow the recommended practice of splitting fertilizer application.
- Farmers reported soaking agricultural land before seeding vegetable crops (after ploughing and harrowing), to *rinse* pesticides and excess fertilizer on the soil surface and avoid toxic burning of the new vegetable seed germinating.

In addition, the Mission observed that raw sewage water is routinely used in some areas to irrigate agricultural land adjacent to urban areas.

A decrease in soil fertility in Bekaa Valley (the key production area) was reported to the Mission. As a result, some farmers are fallowing crop land every other year. The practice of inundating newly prepared land with irrigation water to wash off chemicals and excess fertilizer to prevent the burning of newly planted crop seeds was also reported by farmers. The Mission observed the ploughing of a green bean crop field that had failed. Due to the overuse of pesticides, the soil was devoid of any visible biotic life that maintains soil porosity. As a result, the soil structure had compacted and crop root systems struggled to develop. Crop residues from previous campaigns did not decompose, possibly due to excess application of pesticide residues and lack of soil porosity (anaerobic condition).

Several studies on pesticide residues on food and in water bodies, as well as human biomonitoring, highlight evidence of severe pollution of Lebanon's water resources and food by sewage, heavy metals and synthetic pesticides, as well as the presence of prohibited organochlorine pesticides. The excessive and uncontrolled use of pesticides has led to severe contamination of groundwater.[90, 91] Confirming this issue, LARI analyzed irrigation from the Litani River in 2019 and found that all samples were microbiologically and chemically contaminated, including traces of lead, cadmium and arsenic, while 67 percent of the sites were contaminated with mercury.[92] Furthermore, in 2018, Chbib et al.[93] assessed drinking water wells in Akkar and found a very high level of banned organochlorines (58.9 ug/litre) as well as a cocktail of other pesticides. Higher pesticide concentrations were detected in nearby vegetables and fruit crops.

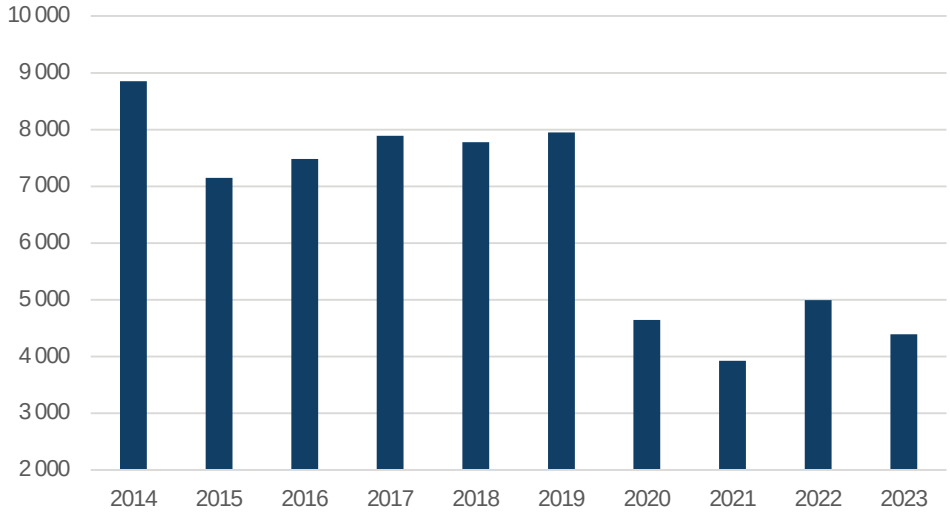
The Mission identified a lack of awareness amongst farmers about the toxicity of pesticide chemicals. Personal protection kits are not readily available at input dealer stores and are generally not used to mix and spray pesticides. Empty pesticide containers are not disposed of safely and are frequently found in the field, sewage, riverbanks and irrigation drainage canals.

The financial crisis led to a reduction in fertilizer and pesticide application. Pesticides' import decreased with the financial crisis and, in 2023, remained 55 percent below 2019 levels (Figure 17). Concurrently, based on the Mission's observations, the financial crisis led to an increase in the use of banned and cheaper pesticides.[t] Considering the widespread overuse of agrochemicals, the overall reduction in fertilizer and pesticide use

[t] CREAL estimates that the proportion of smuggled pesticides represents 70 percent of the utilization.

Figure 17: Lebanon – Pesticide imports drop, amid the economic crisis

Annual import quantities of pesticides, 2014–2023 (tonnes)



Source: Author's own elaboration based on data from Lebanese Customs. Customs Administration. http://www.customs.gov.lb/home.aspx, 2024.

did not negatively impact crop productivity. On the contrary, in some cases, productivity might have increased. FAO in Lebanon found that applying less fertilizer (50 percent) and pesticides (at least 60 percent) led to an increase in potato productivity.[94, 95, 96]

With the normalization of the agriculture input supply situation, there is evidence of increased malpractice in the use of agrochemicals that is negatively impacting crop yields and food safety.

Pests and diseases

The wet and warm 2023/24 winter season generally increased the pressure of pests and diseases on crops.

Table 9 presents the main pests observed during the Mission's field visits or reported by MoA. The pressure of yellow rust was particularly high, causing high yield losses on wheat in particular. Brown rust on hard wheat and black rust on both soft and hard wheat were reported in Bekaa Valley.

For olives, the pressure of peacock eye disease increased significantly in all regions in 2024, reducing yield potential. Regarding bananas, *Fusarium wilt* continued spreading in southern Lebanon in 2024, forcing farmers to change crops. *Tuta absoluta* (tomato) and thrips (tomato, cucumber/gherkin) are the main pests impacting greenhouse vegetables.

Table 9: Lebanon – Main pests observed and reported during the CFSAM field work

Crop	Main pests observed
Wheat and barley	Yellow, brown and black rusts, loose smut, sunn pest
Potatoes	Potato blight (*Phytophthora*), *Rhizoctonia*, aphids
Olives	Peacock eye, olive fruit fly, psylla
Fruits	*Fusarium wilt* (bananas), codling moth (apples, walnuts, apricots), apple scab, wood canker (peaces, cherries, apples), aphids, Mediterranean fruit fly
Grapes	Powdery mildew
Vegetables	*Tuta absoluta* (tomatoes), thrips (tomatoes, cucumbers/gherkins), whiteflies, spider mites, aphids, (cucumbers/gherkins)

Source: Author's own elaboration based on data collected during the 2024 FAO Crop and Food Supply Assessment Mission (CFSAM) to the Lebanese Republic.

Agricultural labour

The Lebanese agriculture sector relies heavily on the Syrian population for labour. In 2021, the International Labour Organization (ILO) estimated that 14 percent of employed Syrian refugees were working in agriculture, representing 72 percent of the agricultural labour force.[97] Following the financial crisis, there was a significant rise in the share of employment in the agriculture sector. According to the World Bank, the share of non-Lebanese employed in agriculture increased from under 3 percent in 2019 to nearly 19 percent in 2023.[u] For Lebanese, their share of employment in agriculture increased from 3 percent to slightly more than 5 percent during the same period.[98] The agriculture sector played an important role in partly mitigating the impact of the financial crisis by generating new employment opportunities, mostly taken by Syrians. The agri-food sector is the second highest employer of displaced Syrians, second to the construction sector.

The agriculture sector has the highest percentage of informal employment in Lebanon, with less than 2 percent of agricultural workers formally employed.[99] Various informal arrangements exist, from daily or weekly casual labours hired for specific farm operations to longer term arrangements where Syrian refugees reside on the farm and enter crop sharing agreements with landowners.

The agricultural labour wage in 2024 has increased by 20 to 50 percent compared to last year, amid a fall in labour supply and higher demand from other sectors, notably construction. The increase in the wage rate is in the higher range for daily/weekly casual labourers, and in the lower range for longer term arrangements. There are significant variations in daily wages between regions, typically USD 6–10/day[v, 100] in Akkar and Bekaa Valley, while up to USD 20/day in Mount Lebanon. The rate varies depending on the hardship of the tasks and on gender, where women workers get paid nearly 20 percent less than men.

Agricultural services and infrastructures

The collapse of the financial system that has caused a transition to a dollarized, cash-based economy, had reduced tax inflows for the government. This led to underfunded public services, severely hindering the effective planning, implementation and maintenance of essential government functions and related infrastructure assets.

The drastic reduction of public funding resulted in the discontinuation of the MoET wheat production subsidy scheme, LARI cereal and pulses certified seed production and distribution scheme, IDAL agriculture export promotion scheme, as well as the disconnection of most of *Meteo Liban's* meteorological stations. Without renewed public investments in the agriculture sector, many of these damages to services and infrastructures might become irreversible.

Furthermore, as MoA staff are paid in national currency, they suffered a significant decrease in real incomes. Most staff need to generate other sources of income to sustain the high cost of living. As a result, the limited extension services offered by MoA to farmers are now largely no longer available. The Mission observed remarkable personal commitments from MoA staff based in the governorates.

Conflict in southern Lebanon

The escalation in military confrontation in southern Lebanon has caused substantial damage to infrastructure and primarily affected the tourism and agriculture sectors. Due to the prevailing security situation, the Mission could not travel to areas affected by the conflict. At the time of the Mission, Lebanon continued to experience a surge in hostilities extended far beyond the southern border, where the most intense bombardments are concentrated.

Severe damage to water, electricity and telecommunications infrastructures, as well as

[u] Registered refugees are allowed to work in two sectors in the country: construction and agriculture.

[v] This is substantially lower than the minimum wages in the private sector set by the caretaker Minister of Labour in April 2024, set at LBP 27 million (USD 298) and the cash-for-work daily wage set by the livelihood sector.

roads, agricultural land and livestock barns in southern Lebanon, have been recorded. Using remote sensing technology, the National Council for Scientific Research (CNRS) identified 1 900 hectares of agricultural land and pasture burned as a result of bombs, primarily caused by white phosphorus (Table 10). In addition, according to the agriculture directorate in the South Governorate, some 60 greenhouses were burned due to shelling. The escalation of the conflict widened the burned agricultural areas in the south (Table 10), further impacting crop production, farmers' livelihoods and food security situation.

Lebanon's Council of the South, responsible for evaluating damages also reported that farmers were unable to harvest crops from 12 000 hectares of cropland (Table 11). In total, 12 200 hectares of cropland were either burned or could not be harvested due to the hostilities, representing 22 percent of the agricultural land in South and Nabatieh governorates.[101, 102] FAO DIEM survey identified that, at the district level, a significant decrease in harvest was reported by households in Marjayoun (84 percent), followed by Bent Jbeil (75 percent), Hasbaya (70 percent) and Nabatieh (62 percent).[103]

Table 10: Lebanon – conflict causes the destruction of forest, while smaller areas of temporary crops were damaged

Burned areas in southern governorates as of 28 September 2024 (hectares)

Forests	1 531
Olives	121
Fruit trees	15
Field crops	*16*
Citrus fruit trees	44
Bananas	37
Grasslands	145
Total	**1 909**

Source: Author's own elaboration based on data from CNRS. 2024. *Israeli Attacks on Lebanon. Assessment Report Summary, 7 October 2023–18 July 2024.*

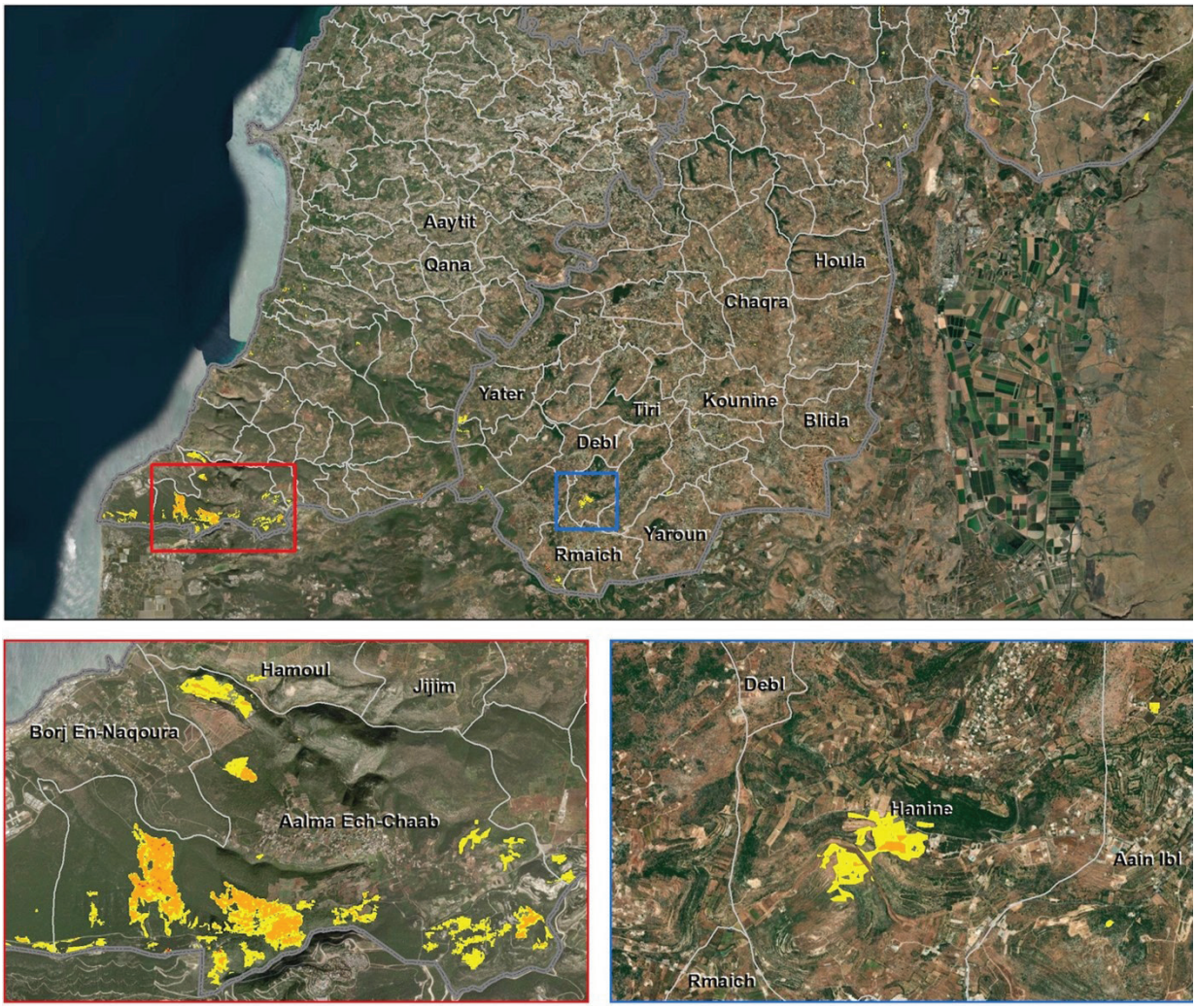
Table 11: Lebanon – Conflict has resulted in the abandonment of cropland, principally affected Nabatieh

Abandoned agricultural land by governorates and districts since October 2023 (hectares)

	Nabatieh			South	Total
	Bint Jbeil	Hasbaya	Marjaayoun	Sour	
Total agriculture land	3 347	113	2 655	930	7 045
Olives	1 600	431	1 647	962	4 640
Fruit trees	50	178	79	15	322
Bananas	-	-	4	25	29
Citrus	-	-	1	44	45
Vineyards	-	-	7		7
Total	**4 997**	**722**	**4 393**	**1 976**	**12 088**

Source: Author's own elaboration based on data from CNRS. 2024. *Israeli Attacks on Lebanon. Assessment Report Summary, 7 October 2023–18 July 2024.*

Map 6: Lebanon – Burned areas in Southern parts of the country



Legends: 1. Akkar plain; 2. Bekaa Valley; 3. Southern Lebanon.

Disclaimer: *The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.*

Source: CNRS. 2024. Prepared by CNRS for the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic (forecast).

The Lebanon's Council of the South estimated that 340 000 livestock were lost due to bombing or abandoned due to displacements of entire villages along the border.[104] The total livestock estimated by MoA for South and Nabatieh governorates is presented in Table 7.

Area planted in 2024

The MoA is mandated to generate agricultural statistics. However, there are gaps in their time series, particularly in recent years (2019, 2020, 2022 and 2023). To generate production estimates consistent with MoA data, the Mission applied the year-to-year rate of change in area and yield from CREAL to MoA time series data for each crop (Table 12). Neither MoA, nor CREAL produces crop planted area forecasts. Consequently, to generate forecasts for 2024, the Mission assessed the status of crops in the field and analyzed the impact of the various factors of crop production described in earlier sections. This included CNRS estimates of cropland burned and abandoned due to the conflict in southern Lebanon.

Table 13 compares estimates for the 2024 planted area with the last four years since the financial crisis (2020–2023) and the five-year average prior to the financial crisis (2015–2019). The total wheat area is estimated at 45 400 hectares, a 13 percent

decrease compared to the last four-year average, but a 6 percent increase compared to the situation before the crisis. The shift to low input-intensive crops accounts for most of the increase compared to the pre-crisis situation. As the situation normalizes, there is a trend toward high input-intensive irrigated crops, vegetables in particular. Barley cultivation has also decreased by 8 percent compared to the last four years, mostly due to an increase in cumin seeds cultivation in Baalbeck-Hermel.

The planted area for potatoes is forecast at 22 400 hectares, a 15 percent decrease compared to the last four-year average. High prices for seed potato tubers, mostly imported from Europe, are the primary reason for the decrease in the area planted. The planted area for pulses (4 100 hectares) represents only 7 percent of the area planted for cereals (57 600 hectares). The chickpea area decreased by 12 percent, while lentil cultivation contracted by 5 percent compared to the last four-year average. Low yield and high labour costs for manual harvesting are the main factors driving the decrease.

Compared to the last four years, the area planted with vegetables has increased by 5 percent, reaching an estimated 32 200 hectares, reflecting strong domestic demand. Onions account for most of the increase, boosted by high prices. Overall, the planted area for fruits has remained almost stable. The area planted with avocado trees has significantly increased over the last four years, driven by remunerative prices and robust export opportunities. Conversely, apple and orange orchards have been uprooted, particularly local or old varieties that fetch low prices. A decrease is also noted in banana plantations, mainly driven by the spread of *Fusarium wilt* disease. It is likely that some of the fruit orchards planted over the past years, boosted by newly established wells and agricultural holdings in Bekaa Valley, have not been captured by MoAs annual agricultural production surveys.[x] Table A3a in Annex 3 present the changes for the main vegetables and fruit area planted.

Yields in 2024

The Mission applied the same methodology to impute missing data for yields of 2019, 2020, 2022 and 2023, and forecast 2024 yields. Overall, yields of winter cereals and pulses have been low this year, resulting in a significant decrease in staple food production.

Wheat and barley yields in 2024 are estimated at 2.1 and 1.8 tonnes/hectare, respectively, 30 percent lower than the last four-year average. Several reasons explain the significant decrease in cereal yields:

- Unfavorable weather conditions, particularly high temperatures during May 2024 at the flowering and grain filling stage.
- Below-average spring rainfall primarily impacting rainfed cereal crops.
- Yellow rust disease on wheat crops.
- Inadaptability of some imported wheat varieties with higher vernalization requirements due to the discontinuation of the LARI certified cereal seed production scheme since 2020.[y]

For potatoes, the main factors affecting yields have been the excessive use of agrochemicals and irrigation, and the practice of cutting seed potato tubers. The above-average rainfall this winter has been favourable for early season potatoes. As farming practices are the main driving factors, there are significant local variations in potato yields. The average potato yield in 2024 is forecast at 27.3 tonnes/hectare, an 8 percent increase compared to the four-year average and a similar level to the

[x] The selection of sampled households for MoA annual production surveys are drawn from the 2010 agriculture census list of agricultural holdings and, therefore, new agricultural holdings established after 2010 are not accounted for.

[y] Vernalization is a physiological process with critical impacts on triggering reproductive growth for many winter crops. Variations in vernalization fulfilment affect the number of cereal leaves and tillers, floral initiation time, flowering phenology and spikelet formation, and thus contribute to winter cereal yields. Warmer temperatures during the vernalization period could slow the chilling accumulation and thus delay the onset of the reproductive stage, potentially increasing the risk of high temperature exposure for winter crops (e.g., winter wheat) during anthesis and consequent grain filling.

pre-crisis period. Chickpeas and lentil yields, mostly cultivated in rainfed areas, are forecast to increase by 12 and 6 percent, respectively.

Compared to the last four-year average, vegetable yields have increased and remain at similar levels to the pre-crisis period. The avocado yields increased significantly over the last four years, underpinned by the prevalence of developing young orchards moving into higher production. Conversely, apple and apricot yields substantially decreased in 2024 due to a warm winter affecting apple chilling requirements and a spring frost in Baalbeck-Hermel that affected stone fruits. Other fruit yields remained largely stable, while alternate bearing and pressure for peacock eye disease have affected olive production (Table A3a, Annex 3).

Production in 2024

Aggregated 2024 cereal production is forecast at 119 400 tonnes, about 38 percent below the previous four-year average. Wheat production is estimated at 93 700 tonnes, 39 percent below the four-year average and 23 percent below the pre-crisis level (2015–2019). Barley production is estimated at 20 000 tonnes, 38 percent below the previous four-year average.

Potato production is estimated at 610 700 tonnes in 2024, 8 percent below the four-year average. Pulses production is well below its agronomic potential and estimated at 4 900 tonnes, 6 percent below the average.

Vegetable production is forecast at 868 500 tonnes, 4 percent above the last four-year average. Compared to the pre-crisis level, the area cultivated has decreased but this has been largely offset by an increase in productivity, linked to more optimal use of agrochemicals. Fruit production is forecast at 867 000 tonnes, at the same level as the last four-year average, but masking different trends by fruit type. Avocado production is rapidly increasing, while apple, banana and apricot production are about 19 percent below the average, due to adverse climatic conditions as well as pests and diseases.[z] Olive production is anticipated to be slightly above (3 percent) the last four-year average (Table A3c, Annex 3).

Livestock and pasture

The main structural issue affecting the livestock sector is the dependence on imported animal feed for poultry, dairy, and beef industry, as well as for sheep and goats during the winter months. For poultry, animal feed imports represent about 70 percent of the cost of poultry production. In 2023, Lebanon imported 720 000 tonnes of animal feed, including 475 000 tonnes of maize, 50 000 tonnes of barley, 50 000 tonnes of soya beans and 145 000 tonnes of oil seed meals.[105]

The government previously subsidized animal feed imports, but these were gradually removed from mid-2021, driving a 25 percent year-on-year decrease in imports in 2021 (Figure 18). However, a plentiful carry-over stock secured livestock production for most of 2021. Quantities of animal feed imports have gradually increased since 2023 and a further recovery in 2024 is expected.

Animal diseases in Lebanon, including avian influenza, glanders, and lumpy skin disease (LSD), are known to cause mortality and can also trigger export restrictions, leading to significant losses in foreign exchange earnings and household income for pastoralists. With FAO support, MoA conducted two rounds of livestock vaccination campaigns in February-March and in November 2023, during which 1.55 million cattle, sheep and goats were vaccinated against foot-and-mouth disease, lumpy skin disease, *peste des petits* ruminants (PPS) and sheep and goat pox. These campaigns reached an estimated 12 609 farms across the country, improving the health status of livestock. In 2024, there has not been any unusual occurrence of animal diseases. Pastures were also found in good conditions, owing to above-average rainfall through the winter months.

Surveys of agricultural households conducted by FAO and MoA in March 2022 and March 2024 reveal that the main difficulty reported by livestock producers was access to livestock feed, followed by access to veterinary services and veterinary inputs (Figure 19).

[z] Insufficient chilling period due to warm winter on apples, spring frost on apricots and *Fusarium wilt* on bananas.

Table 12: Lebanon – Planted area of cereals, potatoes and pulses, five-year period prior to the financial crisis (2015–2019) and four-year period since the financial crisis, 2020–2023 (hectares)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average 2015/19	Average 2020/23	2024 forecast	Change prior crisis (percent)[1/]	Change since crisis (percent)[2/]
Wheat	40 156	40 977	41 715	44 937	47 198	49 393	51 522	53 362	55 368	42 997	52 411	45 400	6	-13
Barley	14 629	15 414	14 416	12 684	12 181	12 317	12 161	12 185	12 262	13 865	12 231	11 300	-19	-8
Maize/sorghum	1 214	674	1 078	1 413	1 291	1 343	976	1 016	905	1 134	1 060	900	-19	-13
Total cereals	**55 999**	**57 066**	**57 209**	**59 034**	**60 670**	**63 053**	**64 659**	**66 563**	**68 535**	**57 996**	**65 702**	**57 600**	**0**	**-12**
Potatoes	21 575	22 101	22 284	23 590	23 789	23 376	22 068	32 149	27 647	22 668	26 310	22 400	-1	-15
Chickpeas	2 397	1 914	2 601	1 038	1 399	2 182	2 219	2 188	2 080	1 870	2 167	1 900	2	-12
Beans	1 009	944	879	538	480	860	161	173	184	770	344	200	-72	-38
Lentils	533	902	1 218	480	1 103	1 637	2 349	2 310	1 989	847	2071	2 000	132	-5
Total pulses	**3 939**	**3 761**	**4 698**	**2 056**	**2 982**	**4 680**	**4 729**	**4 671**	**4 253**	**3 487**	**4 583**	**4 100**	**17**	**-11**

[1/] Average 2015–2019.
[2/] Average 2020–2023.
Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL and collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic (forecast), 2024.

Table 13: Lebanon – Crop yields of cereals, potatoes and pulses five-year period prior to the financial crisis (2015–2019) and four-year period since the financial crisis, 2020–2023 (tonnes/hectare)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average 2015/19	Average 2020/23	2024 forecast	Change prior crisis (percent)[1/]	Change since crisis (percent)[2/]
Wheat	2.9	3.1	3.0	2.9	2.2	3.0	2.9	2.9	2.9	2.8	2.9	2.1	-27	-30
Barley	2.0	1.0	2.5	1.8	2.3	2.7	2.7	2.8	2.2	1.9	2.6	1.8	-7	-32
Maize/sorghum	1.5	4.1	4.5	4.4	5.2	6.0	7.6	7.6	7.6	3.9	7.2	6.2	52	-14
Potatoes	28.2	28.6	29.3	32.1	19.1	27.1	24.1	25.9	23.7	27.4	25.2	27.3	-1	8
Chickpeas	0.8	0.7	1.1	1.0	1.3	1.1	1.6	1.6	1.6	1.0	1.5	1.6	68	12
Beans	3.2	3.9	3.7	1.6	1.4	2.0	1.6	1.3	1.0	2.8	1.5	1.3	-52	-10
Lentils	1.2	1.0	1.8	1.0	0.8	0.8	0.7	0.7	0.7	1.1	0.7	0.8	-33	6

[1/] Average 2015–2019.
[2/] Average 2020–2023.
Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL and collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic (forecast), 2024.

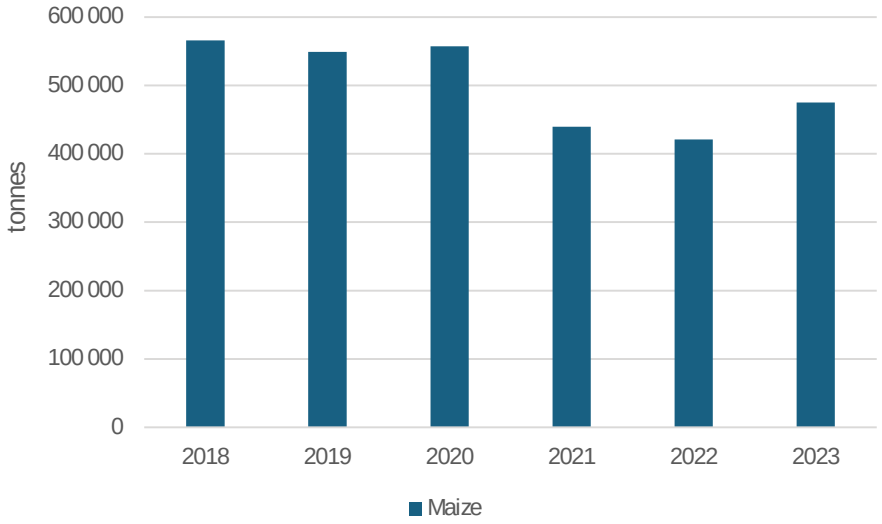
Table 14: Lebanon – Production of cereals, potatoes and pulses, five-year period prior to the financial crisis (2015–2019) and four-year period since the financial crisis, 2020–2023 (tonnes)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average 2015/19	Average 2020/23	2024 forecast	Change prior crisis (percent)[1/]	Change since crisis (percent)[2/]
Wheat	117 212	129 037	125 797	131 977	102 679	147 508	150 232	152 877	158 754	121 340	152 343	93 700	-23	-39
Barley	29 169	15 414	35 561	22 519	27 463	33 281	32 556	34 630	27 453	26 025	31 980	20 000	-23	-38
Maize/sorghum	1 847	2 745	4 864	6 161	6 663	8 101	7 369	7 670	6 843	4 456	7 496	5 700	23	-24
Total cereals	**149 228**	**147 196**	**166 222**	**160 657**	**136 805**	**188 889**	**190 157**	**195 177**	**193 050**	**152 022**	**191 819**	**119 400**	**-21**	**-38**
Potatoes	607 655	631 973	651 922	757 739	453 978	633 668	532 127	831 109	656 375	620 653	663 320	610 700	-2	-8
Chickpeas	1 941	1 383	2 783	1 038	1 750	2 480	3 467	3 418	3 271	1 779	3 159	3 100	76	-1
Beans	3 206	3 726	3 235	877	672	1 698	261	221	181	2 343	590	300	-88	-52
Lentils	635	862	2 151	481	847	1 278	1 645	1 619	1 389	995	1 483	1 500	51	1
Total pulses	**5 782**	**5 971**	**8 169**	**2 396**	**3 269**	**5 456**	**5 373**	**5 258**	**4 841**	**5 117**	**5 232**	**4 900**	**-4**	**-6.0**

[1/] Average 2015–2019.
[2/] Average 2020–2023.
Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL and collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic (forecast), 2024.

Figure 18: Lebanon – Animal feed imports show signs of recovery in 2023

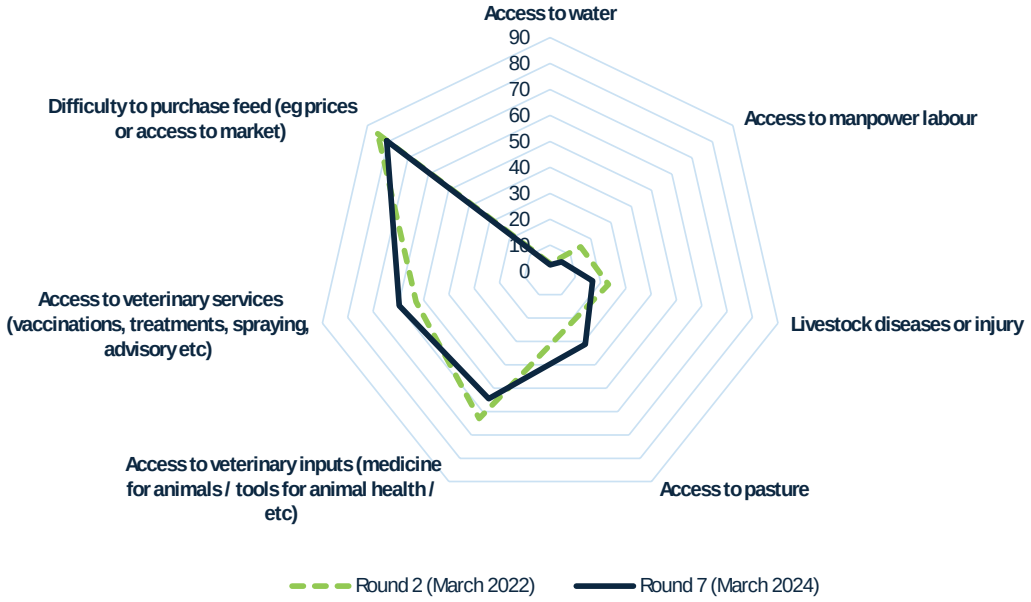
Import quantities of animal feed (maize), 2018–2023 (tonnes)



Source: Author's elaboration based on data from Lebanese Customs. *Customs Administration*. http://www.customs.gov.lb/home.aspx, 2024.

Figure 19: Lebanon – Animal feed imports show signs of recovery in 2023

Import quantities of animal feed (maize), 2018–2023 (tonnes)



Note: numbers represent the proportion of farmers citing each challenge.

Source: FAO. 2024. *Lebanon: DIEM – Data in Emergencies Monitoring brief, Round 7 – Results and recommendations, September 2024*. Rome. https://openknowledge.fao.org/handle/20.500.14283/cd2313en.

Considering the above, the Mission forecasts that livestock production (milk, meat, eggs) will increase in 2024. The Mission completed the MoA time series data on livestock production by imputing data for missing years (2019, 2020, 2022, 2023) using CREAL data trends,[aa] animal feed import data from the Lebanese Custom Administration and the anticipated impact of MoA vaccination campaigns in 2023 (tables 15 and 16).

[aa] CREAL livestock production timeseries for cattle, sheep and goats were adjusted in 2022, to account for the impact of the Ukrainian crisis.

Table 15: Lebanon – Number of livestock, 2015–2023 (heads)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average 2015–2019	Average 2020–2023
Cattle	83 351	86265	85 169	86 392	87 256	88 128	88 663	80 198	74 602	85 687	82 898
of which dairy	51 803	53249	53 907	54 809	55 905	49 671	50 311	41 367	38 690	53 935	45 010
of which beef	18 299	20327	21 897	22 427	25 791	27 596	31 898	31 478	29 122	21 748	30 024
Sheep	439 215	428985	433 018	398 915	450 774	428 235	437 585	424 856	430 119	430 181	430 199
of which dairy	242 680	236571	252 342	235 383	240 091	268 902	257 559	245 150	250 598	241 413	255 552
Goats	526 987	499176	541 667	517 679	424 497	386 292	347 113	337 626	363 433	502 001	358 616
of which dairy	260 744	243568	304 771	322 991	258 393	224 802	184 841	171 902	185 055	278 093	191 650

Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL..

Table 16: Lebanon – Production of livestock products, 2015–2023

	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average 2015–2019	Average 2020–2023
Milk ('000 litres)											
Cows	199 948	287 916	276 306	315 203	269 208	245 959	245 457	201 820	188 761	269 716	220 499
Sheep	15 458	19 097	20 246	14 273	14 099	21 993	12 680	12 069	12 337	16 635	14 770
Goats	28 352	32 296	31 924	26 403	20 059	33 589	21 453	19 951	21 478	27 807	24 118
Total	**243 758**	**339 309**	**328 476**	**355 879**	**303 065**	**284 626**	**279 590**	**279 590**	**279 590**	**314 097**	**280 849**
Meat (tonnes)											
Beef	7 163	6 866	7 435	7 567	7 888	4 903	9 665	9 538	8 824	7 384	8 232
Lambs	7 019	7 537	6 758	6 262	5 988	7 457	5 098	5 047	5 060	6 713	5 665
Goats	5 238	6 392	5 326	4 430	9 920	5 330	3 243	3 293	3 544	6 261	3 852
Poultry	122 407	125 242	13 136	130 485	118 618	107 461	101 508	93 387	645 397	101 978	236 938
Total	**141 827**	**146 037**	**32 655**	**148 744**	**142 413**	**125 151**	**119 514**	**111 265**	**662 825**	**122 335**	**254 689**
Eggs ('000 units)											
	21 575	22 101	22 284	23 590	23 789	23 376	22 068	32 149	27 647	22 668	26 310
Laying hens	808 520	653460	664 450	697 600	767 360	728 992	728 610	546 458	513 670	718 278	629 432
Traditional poultry	44 520	48763	43 229	38 828	33 004	31 354	28 142	27 579	27 303	41 669	28 595
Total	**853 040**	**702223**	**707 679**	**736 428**	**800 364**	**760 346**	**756 752**	**574 037**	**540 973**	**759 947**	**658 027**

Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL..

MARKETS AND TRADE

Imports

Lebanon is heavily reliant on food imports to meet its national consumption requirements, due to insufficient local production constrained by limited arable land and inadequate input resources. As illustrated in figures 20 and 21, imports account for approximately 50 percent of the total food supply and 90 percent of the cereal supply. Wheat, the country's primary food staple, is largely sourced through imports, with soft wheat, used predominantly for Arabic bread, making up the bulk of supply. Local wheat production is minimal and consists mainly of durum wheat, which is used for products like bulgur, pasta and semolina.

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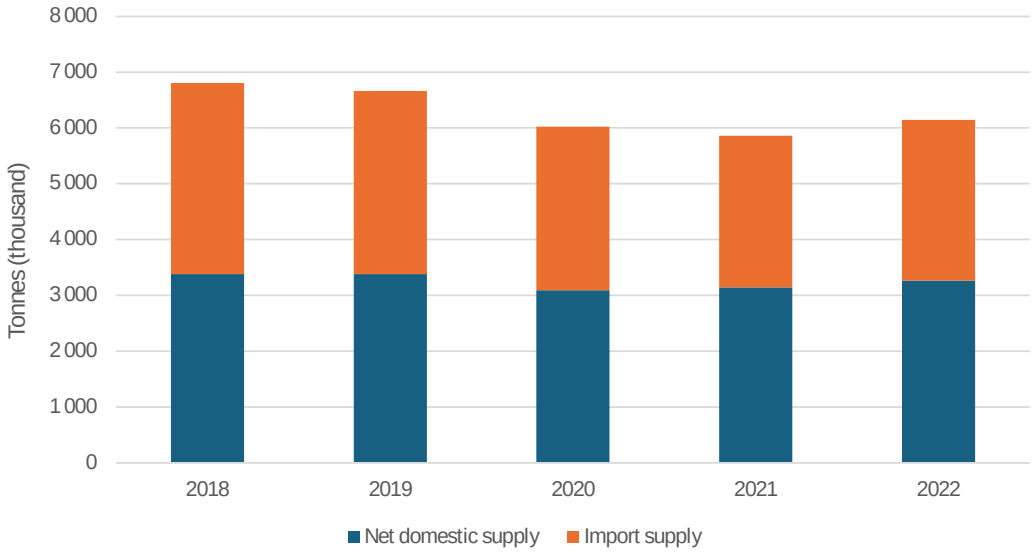
Between 2015 and 2019, during the pre-crisis period, wheat imports averaged approximately 580 000 tonnes, while from 2020 to 2023, the annual average was 645 000 tonnes.[106] This increase was driven by a variety of factors, but a key reason has been heightened demand as households increased consumption of lower-priced cereal products in response to the economic crisis.

Lebanon's sources of wheat imports are highly concentrated, with over 90 percent of total imports coming from four countries: Ukraine, the Russian Federation, Romania and Bulgaria. Since 2019,

Figure 20: Lebanon – Imports account for approximately half of the total national food supply

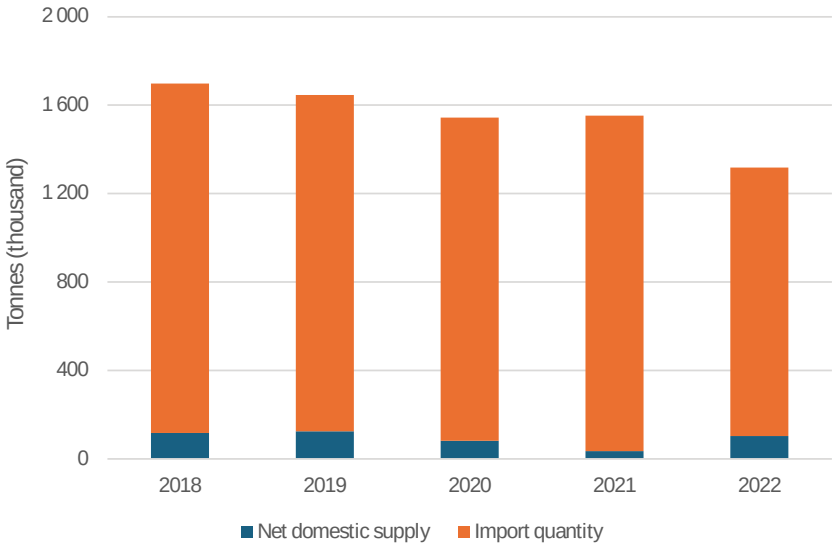
Composition of total domestic food supply, 2018–2022 (tonnes)



Source: Author's elaboration based on data from FAOSTAT. 2024. *Food Balances (2010)*. Rome. [Cited 11 July 2024]. https://www.fao.org/faostat/en/#data/FBS.

Figure 21: Lebanon – High dependency of cereal imports to meet consumption needs

Composition of domestic cereal supply, 2018–2022 (tonnes)



Source: Author's elaboration based on data from FAOSTAT. 2024. *Food Balances (2010)*. Rome. [Cited 11 July 2024]; https://www.fao.org/faostat/en/#data/FBS.

there has been a slight increase in import concentration, with a higher share of imports originating from Ukraine at the expense of reduced shipments from the Russian Federation.[ab] Despite the outbreak of the war in Ukraine, Lebanon did not face significant wheat supply shortages, as shipments continued from the less-affected smaller ports, including Reni and Izmail in Ukraine.[107]

Although the war in Ukraine had limited material effects on supply, it introduced significant price risks due to the country's high import dependency and steep currency depreciation. To mitigate these risks, the government sought assistance from the World Bank, which approved a USD150 million loan in May 2022 under the Wheat Supply Emergency Response Project. The loan provided subsidized foreign exchange to wheat importers, aiming to stabilize the price of Arabic bread (the primary food staple) at affordable levels for poor and vulnerable households, and to ensure sufficient domestic supplies. The project concluded in mid-September 2024, but the declining prices on the international market have helped to mitigate the risk of significant price increases following the end of the subsidy programme; international reference prices for wheat declined by about 12 percent between September 2023 and September 2024, and were 45 percent below the peaks reached in May 2022.[108] Following the complete utilization of subsidized wheat, in September 2024 the MoET set a ceiling retail price for a 850-gramme loaf of Arabic bread at LBP 65 000 bought from bakeries (Figure 22), in efforts to keep prices at affordable levels.

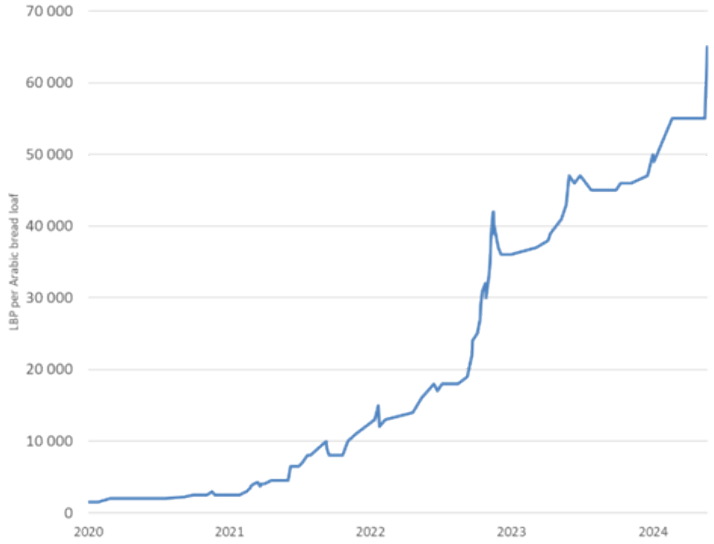
The August 2020 explosion at the Port of Beirut, which destroyed grain silos capable of storing six months of national wheat consumption, did not significantly impact the short-term domestic wheat supply. However, it weakened Lebanon's resilience to future shocks. The destruction of the silos forced importers and millers to maintain stocks at their own facilities, which are estimated to cover only one to two months of national consumption. Although no immediate concerns were raised regarding domestic wheat stability during the Mission's meetings, the absence of a national storage facility limits the country's ability to safeguard against future supply disruptions.

Despite the resilience of wheat demand and supply during the economic crisis, supported by timely government interventions, other food sectors, particularly meat, were significantly affected.

[ab] The Herfindahl-Hirschman Index (HHI) – a measure of market concentration – was estimated at 0.36 for the period 2015–2019 and increased to 0.40 for the period 2020–2023.

Figure 22: Lebanon – Arabic bread loaf price growth eased in 2023 prior to a ceiling price set in September 2024

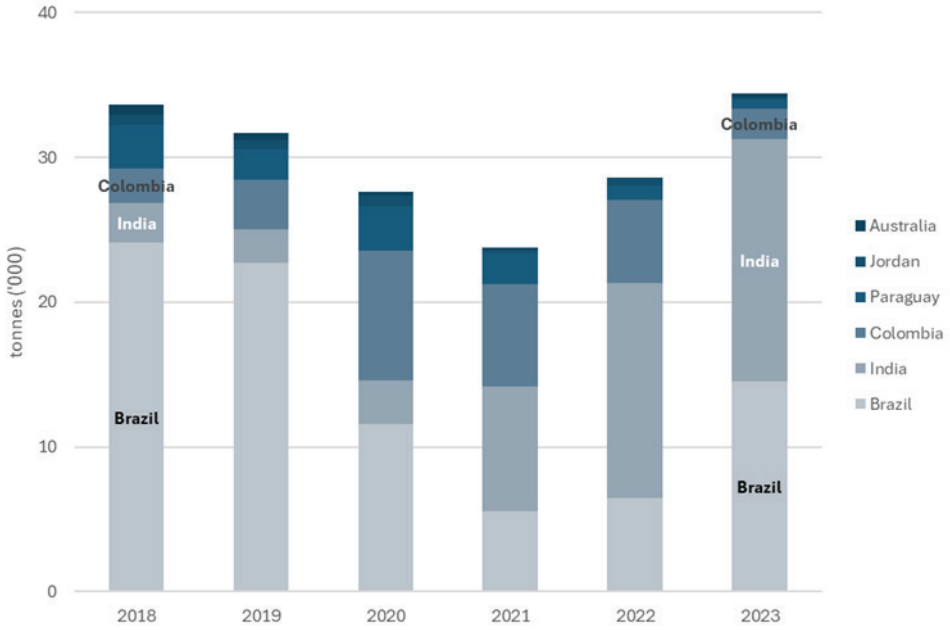
Bakery retail price of Arabic bread loaf, January 2022–September 2024 (LBP)



Source: Author's elaboration based on data from Ministry of Economy and Trade (MoET).

Figure 23: Lebanon – Economic downturn caused a contraction bovine meat imports, but signs of recovery from 2022

Import quantities of bovine meat, 2018–2023



Source: Author's own elaboration based on data from Global Trade Tracker (GTT). [Cited July 2024]. https://www.globaltradetracker.com/.

Declining household incomes and reduced purchasing power led to changes in consumption patterns, with households moving away from high-priced meats, resulting in reduced demand, especially for more expensive bovine meat. As depicted in Figure 23, there was a sharp decline in bovine meat imports after the 2019 crisis. Although there has been some recovery since 2022, imports have shifted towards more affordable suppliers, particularly India.

While some local agricultural value chains are sheltered from global competition through substantial import duties, key food staples, including wheat, some pulses and meats, face minimal or

no import duties. As shown in Table 17, olives, fruits, vegetables, potatoes and nuts are among the most protected food commodities, with import duties of up to 70 percent. As a result, farmers can earn remunerative farm gate prices for these commodities.

Container activity at the Port of Beirut, Lebanon's main gateway for imports, remained relatively stable between 2021 and 2024. However, container volumes were lower compared to the 2018–2019 levels. The three-month moving average indicates a trend of stabilization, but volumes are still significantly below those seen prior to the Beirut Port explosion in August 2020. Data from 2023 and the first half of 2024 show a slight improvement in container activity, but it remains well below the peak levels of earlier years. The average monthly container volume for the first half of 2024 is estimated at 42 500, compared to 46 000 in 2023 and 46 500 in 2022.

This reduction in trade throughput may lead to shortages of essential goods, affecting food security and the availability of critical supplies, as well as increasing lead times from suppliers to retailers. With lower container volumes, the market remains vulnerable to supply chain disruptions, price volatility and reduced product variety.

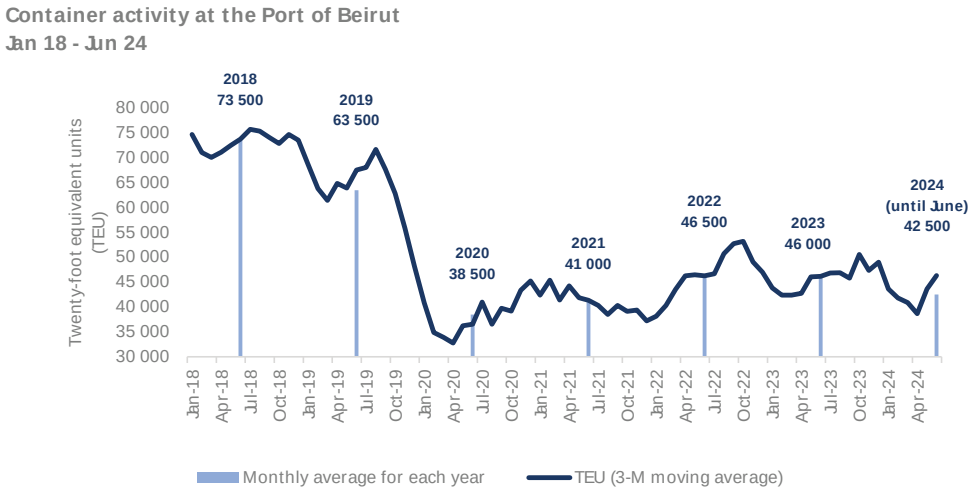
Table 17: Lebanon – Rates of import duty for key food commodities, 2024 (percent)

Staple food and animal products	Rate of duty (import)
Cereals:	
Wheat, wheat flour	0
Cereals preparations:	
Pasta, couscous	5
Bulgur	10
Pulses:	
Chickpeas, lentils	0
Beans (Vigna spp., Phaseolus spp.)	70
Other beans	0
Tubers:	
Potatoes	70
Meat (fresh or frozen):	
Poultry (including chicken and turkey)	20
Bovine, sheep, goats, swine and others	5
Live animals:	
Live bovine, sheep and swine	0
Live goats	5
Olives, vegetables and fruits	**Rate of duty (import)**
Olives	70
Vegetables:	
Tomatoes, cucumbers, eggplants, onions, cauliflowers, carrots, radishes, pumpkins, Swiss chard	70
Garlic	35
Chicory	25
Fruits:	
Apple, pears, apricots, peaches, cherries, kiwi, persimmons, pomegranates, watermelons, strawberries, bananas, avocados, citrus, guavas	70
Others	20–25
Nuts:	
Almonds, pine nuts, walnuts	70

Source: Author's elaboration based on data from Lebanese Customs. *Customs Administration*. http://www.customs.gov.lb/home.aspx, 2024.

Figure 24: Lebanon – Economic crisis caused a steep slump in container port activity from 2020, which has since remained stable

Container activity at the Port of Beirut, 2018-2024



Source: BLOMINVEST BANK. 2024. *Brite – Inicators and trends*. Beirut. [Cited September 2024]. https://brite.blominvestbank.com/.

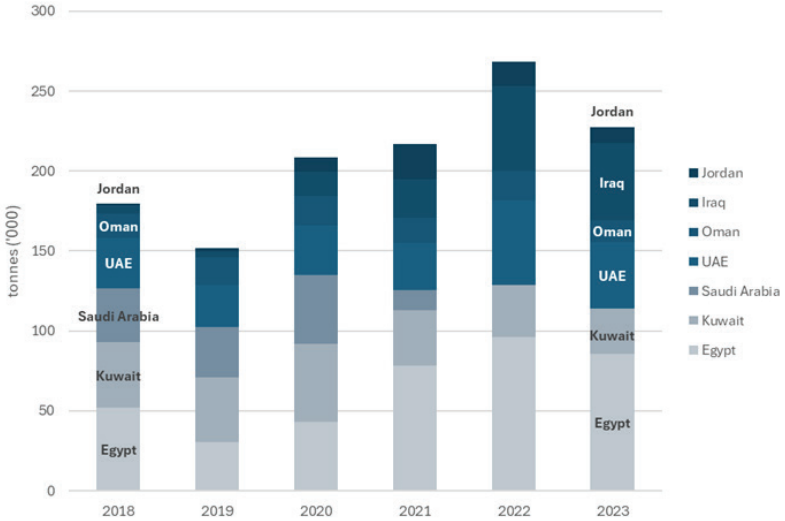
Exports

Lebanon's agricultural exports primarily consist of fruits and vegetables, including grapes, apples, potatoes and citrus fruits. Although agricultural exports represent a relatively small portion of the GDP, they provide an essential source of income for many Lebanese farmers. Exports of high-value crops increased after the financial crisis, with exports' markets providing an essential outlet to absorb surplus production, as domestic demand contracted.

However, Lebanon has faced export challenges. These mostly relate to the Gulf Cooperation Council (GCC)[ac] markets, notably Saudi Arabia where import restrictions were placed on fruits and vegetables, cutting a key export market for Lebanese produce at the end of 2021 (Figure 25).

Figure 25: Lebanon – Agricultural exports increased after the start of the crisis supporting domestic production

Aggregate export quantities of grapes, apples, potatoes and citrus fruits, 2018–2023 (tonnes)



Sources: Author's elaboration based on data from the Global Trade Tracker (GTT). [Cited July 2024]. https://www.globaltradetracker.com/ and Lebanese Customs. *Customs Administration*. http://www.customs.gov.lb/home.aspx, 2024.

[ac] Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

Additionally, the imposition of a transit tax on trucks travelling through the Syrian Arab Republic acted as a disincentivize of the export of commodities by road. As a result, increased volumes of agricultural commodities were exported by sea, extending the transit times and costs. According to CFSAM observations, sea shipments through the Port of Beirut to the United Arab Emirates would require approximately 25 to 50 days, while cargo by road transiting through the Syrian Arab Republic would require 12 to 15 days.[ad, 109] Despite these policy developments, increased trade with existing export markets, notably Egypt and Iraq, more than compensated for the reduction in trade with Saudi Arabia and other GCC countries.

Domestic markets and costs of essential products and services

The cost of essential goods in Lebanon has risen, putting severe pressure on households' food security. As of July 2024, SMEB for a family of five reached USD 450 (LBP 40.6 million), an 190 percent increase in United States dollar terms since March 2021. This sharp rise is largely driven by soaring non-food service costs, including rent, electricity and transport, which rose by 292 percent since March 2021. The cost of the food SMEB per person reached LBP 3.2 million (USD 35) in July 2024, with cereals and tubers contributing to a 44 percent food basket inflation since 2020, followed by dairy, vegetables and pulses. These inflationary pressures are exacerbating the financial strain on vulnerable households, particularly in areas heavily impacted by the conflict in the south.

Survival minimum expenditure baskets

The SMEBs were established in 2014 and serve as a benchmark to estimate the cost of food and other basic needs of a Syrian refugee family in Lebanon. While the minimum expenditure basket (MEB) defines what a household requires to meet its essential needs, the SMEB represents the absolute minimum amount required to cover lifesaving needs. The SMEBs are composed of three sub-baskets: food, non-food items (NFI) and NFS. Price data for the baskets' current composition of goods and services goes back to October 2019 for the SMEB and June 2022 for the MEB.

In July 2024, the full SMEB cost for a family of five reached LBP 40.6 million (USD 450). While the cost of the full SMEB in national currency has kept increasing since October 2019, the cost of the full SMEB in United States dollars dropped by 75 percent between October 2019 and March 2021, driven by a deteriorating exchange rate and subsidies in place back then, which led to an 86 percent decrease in the price of services, 55 percent decrease in the price of NFI and a 54 percent decrease in the cost of the food basket. Since then, however, the full basket has recorded a rebound as prices adjusted to the new, albeit fluctuating, exchange rate trends on the informal market. The cost of the full SMEB increased by 190 percent in United States dollars between March 2021 and July 2024, with services rising by 292 percent, food by 134 percent and non-food items by 119 percent. Around 57 percent of the increase in the cost of the full basket in United States dollars over this rebound period was due to the rise in the cost of NFS, which itself was driven by an increase in costs of rent, electricity, and transportation. These goods and services have also been the key drivers of inflation in 2024 (see Inflation section).

The cost of the full MEB for a family of five reached LBP 49 million (USD 543) in July 2024. Since its latest update in June 2022, the full basket has increased by 391 percent in national currency and by 56 percent in United States dollars. The bulk of the increase for the United States dollar-denominated MEB came from services, which increased by 163 percent between June 2022 and July 2024, followed by the food basket, which increased by 18 percent. NFI only increased by 2 percent in United States dollars over the same period, contributing only marginally to the rise in the cost of living.

[ad] In late September 2024, the Syrian Government reduced the transit tax by 50 percent. However, given the escalation of the conflict in September, including attacks on border areas with the Syrian Arab Republic, the reduction in the transit tax is not foreseen to have a positive material impact on trade whilst the conflict persists.

Food basket

The cost of the food SMEB per person reached LBP 3.2 million (USD 35) in July 2024. The cost of the basket in national currency was relatively stable in the immediate two years following the start of the economic crisis in 2019, only rising by LBP 100 000 between October 2019 and February 2021, when it reached LBP 150 000, reflecting the effects of the broad commodity coverage of the currency subsidy programme. The basket then added LBP 2.8 million over the following 32 months, before stabilizing at LBP 3.1 million in October 2023. In United States dollar terms, the cost of the food basket dropped from USD 33 in October 2019 to USD 13 in July 2020, a result of access to a subsidized exchange rate of USD/LBP 1 507.50, before steadily starting to climb again, surpassing its 2019 level by August 2023. The rise in the cost of cereals and tubers in United States dollars accounted for 44 percent of the food basket price growth between July 2020 and July 2024, followed by dairy (14 percent), vegetables and fruits (13 percent) and pulses (12 percent).

Following the intensification of the conflict from the end of September 2024 onwards, preliminary weekly data have indicated that the cost of the food SMEB per person has reached USD 37/person by the first week of October 2024. This was also affected by the recent removal of the wheat subsidy, which has increased the cost of the different bread bundles.[110]

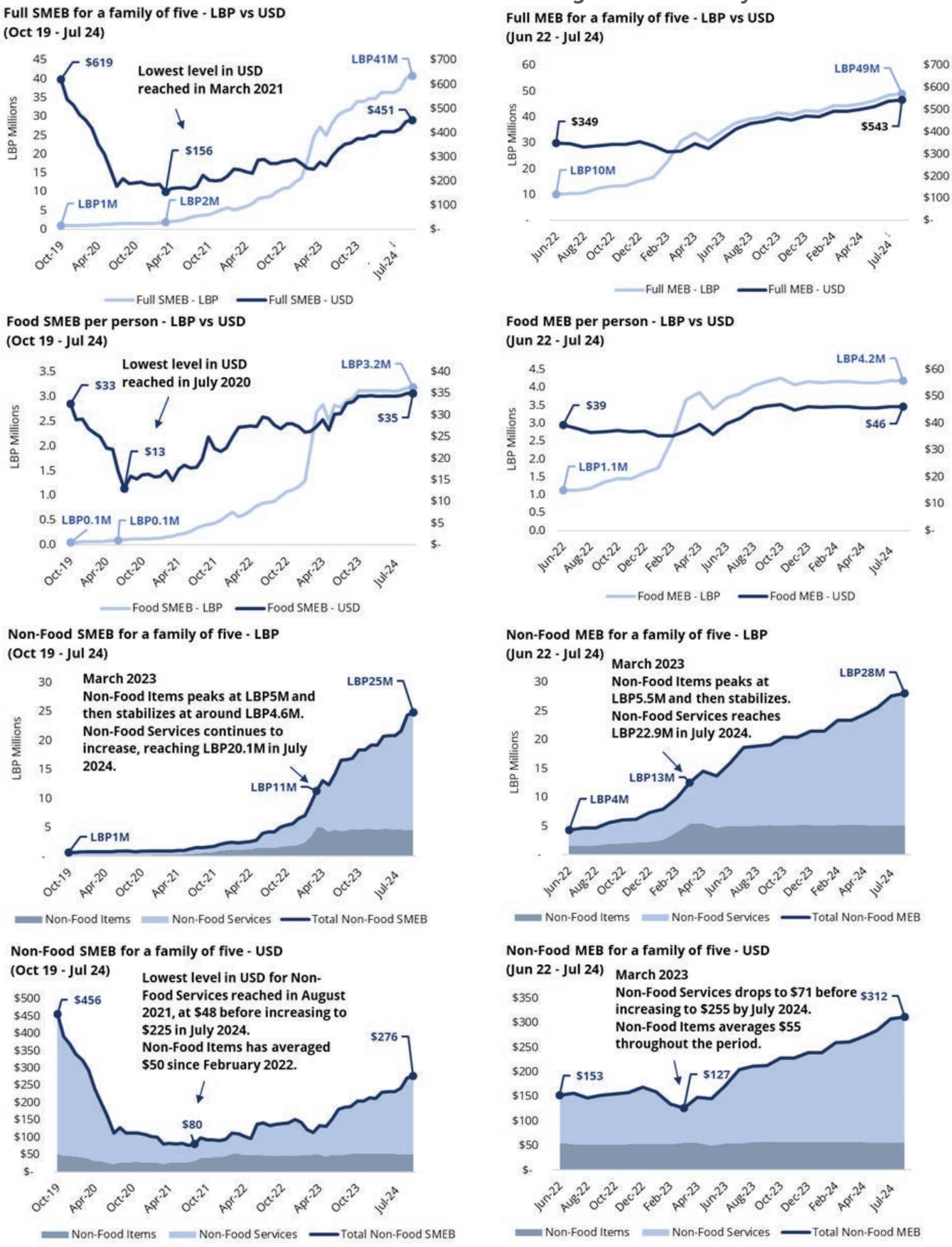
The Food MEB per person cost LBP 4.2 million (USD 46.2) in July 2024, up from LBP 1.1 million (USD 39.2) in June 2022. The cost of the basket in national currency doubled between January 2023 (LBP 1.8 million) and March 2023 (LBP 3.7 million) due to exchange rate effects before stabilizing in August 2023 at LBP 4.1 million. The cost of the Food MEB in United States dollars initially decreased from USD 39 in June 2022 to USD 35 in February 2023 but then went on to gradually increase to USD 46 in December 2023. It has remained at this level since then. Inflation in the cost of cereals and tubers, vegetables and fruits, and condiments and beverages were the key drivers behind the increase in the price of the basket over the studied period.

Non-food basket

In July 2024, the cost of the non-food SMEB reached LBP 24.8 million (USD 276), with the cost of NFI reaching LBP 4.7 million (USD 52) and the NFS reaching LBP 20.1 million (USD 225). The rise in the cost of the non-food SMEB in national currency starting in October 2019 was driven by inflation of both sub-baskets until the NFI peaked in March 2023 at LBP 5 million and stabilised in subsequent months at an average of LBP 4.6 million, as the informal market exchange rate stabilized, and close to pre-crisis levels in United States dollar terms. The cost of NFS, on the other hand, continued its inflationary trend, rising by 148 percent in Lebanese pounds between May 2023 and July 2024, compared to 10 percent for the NFI. The cost of the Non-Food SMEB in United States dollars dropped by 83 percent between October 2019 (USD 456) and July 2021 (USD 76), with the NFS reaching its lowest point in August 2021 (USD 48). The non-food basket then went on to increase by 262 percent over the following three years and continued to rise by an average of 11 percent per quarter between July 2023 and July 2024.

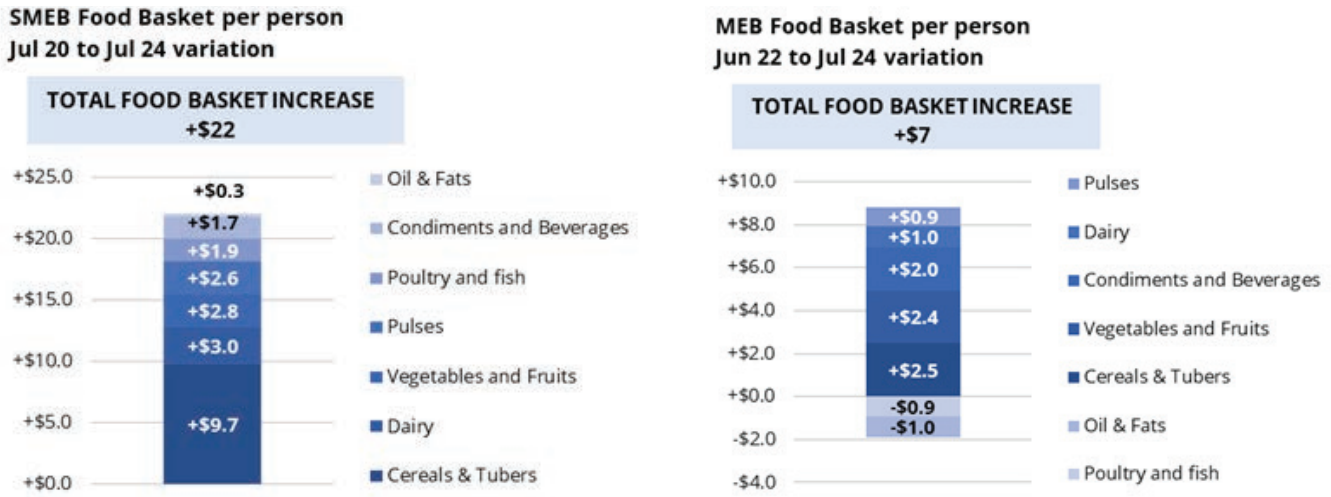
As of July 2024, the non-food MEB basket cost LBP 28 million (USD 312), mainly composed of the NFS sub-basket, which cost LBP 22.9 million (USD 255), followed by the NFI sub-basket which reached LBP 5.1 million (USD 57). The cost of the NFI MEB in national currency followed the same pattern as in the case of the NFI SMEB, with the sub-basket increasing by 244 percent between July 2022 and March 2023 when it peaked at LBP5.5 million before averaging LBP 5.1 million between May 2023 and July 2024. The NFS MEB, similarly to the NFS SMEB, showed a continuous inflationary trend in national currency between June 2022 and July 2024, increasing by 725 percent throughout the period. Contrary to trends in the national currency, the cost of the non-food MEB in United States dollars reached its lowest point in March 2023 (USD 127), almost solely due to the NFS MEB decreasing to USD 71. The non-food basket then recovered, increasing by 146 percent between March 2023 and July 2024, here again almost exclusively driven by inflation of the NFS MEB (+257 percent), with the NFI MEB not varying substantially (+2 percent) over the same period.

Figure 26: Lebanon – Rising costs of essential goods and services are constraining households' access and worsening food insecurity



Source: WFP. 2024. *Market analysis*. Rome. [Cited July 2024]. https://www.wfp.org/market-analysis/.

Figure 27: Lebanon – Higher prices of cereal and tubers are driving up costs of the essential food basket



Source: WFP. 2024. *Market analysis*. Rome. [Cited July 2024]. https://www.wfp.org/market-analysis/.

Market functionality and supply chain resilience

Prior to the escalation of the conflict in September 2024, the supply chain resilience remained strong between August 2023 and August 2024. Essential goods continued to flow into markets, with more than 90 percent of the 300 WFP-contracted shops[ae] maintaining adequate stock levels. The WFP MFI[af] scored an average of 8.1, out of 10, in August 2024, up from 7.9 in April 2024, reflecting a stable yet strained market. Notably, there has been a decline in the assortment of essential goods, particularly health and household items, which may impact households' ability to meet basic needs.[ag]

However, following the recent intensification of the conflict, from the end of September 2024, market functionality has been affected, especially in the areas highly affected by the conflict expansion. By the second week of October 2024, 50 percent of the shops in South, 62 percent of shops in the southern suburb of Beirut, 83 percent in Nabatieh, and 21 percent of shops in Baalbeck-Hermel were not operating.[ah] The increasing demand due to people stocking up on food, as well as the increased demand from IDPs relocating to host regions, has resulted in currently reduced stock coverage for some shops across the country. Around half of the shops surveyed by WFP reported that they were informed about delays of delivery from their food suppliers, some of which are currently facing challenges to fully replenish stocks due to the sudden increase in demand in some areas. However, key supply routes outside of conflict areas remain operational and are expected to adapt to the demand.[111]

[ae] WFP provides food vouchers and cash assistance, through electronic cards, to Syrian refugees in Lebanon. Refugees can buy food in more than 300 WFP-contracted shops across the country. Shops are selected based on their ability to provide quality service, diverse and healthy food products and accessible prices for Syrian and Lebanese customers.

[af] WFP's MFI is a quantitative measure of the functioning of markets based on a trader survey. It is designed to provide insights into the feasibility of market-based interventions. The MFI assigns the marketplace a score across different dimensions between zero (low functionality) and ten (high functionality) that can be interpreted consistently across time and locations.

[ag] The lower assortment scores can be attributed to the index's inclusion of specific items, such as shelter construction materials, health and communication products, that are not typically sold in retail food shops but are available in other types of shops not surveyed in this assessment.

[ah] Based on a weekly rapid market assessment that WFP has started conducting with a non-representative sample of shops across the country, presenting indicative results of trends as a quick pulse of what the situation is.

Supply chain resilience, amidst conflict

According to WFP's monthly trader surveys, stock levels and supply chain flows of essential products (both food and non-food) remained robust between August 2023 and August 2024 despite the ongoing conflict along the southern border. All surveyed shops reported receiving their orders in full within a week as of August 2024, and approximately 93 percent of shops indicated they had at least two weeks of stock coverage.

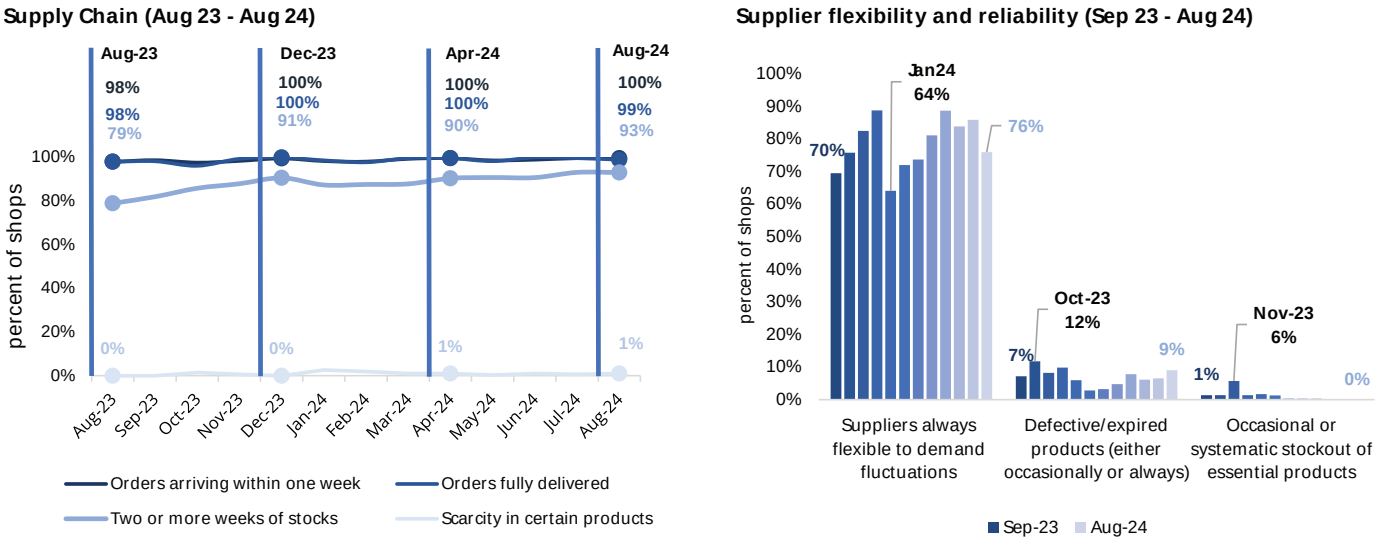
Supplier flexibility dropped in January 2024 in response to the escalating conflict in the south and progressively recovered over the following months before slightly dropping again in August as tensions worsened. Given the intensification of the conflict, supplier flexibility is expected to worsen further in September. An estimated 76 percent of the shops reported that suppliers were consistently adaptable to sudden changes in demand by August 2024. A consistent minority of shops faced issues related to the delivery of expired or defective products. Notably, no shop has reported stockouts of essential goods since May 2024.

Market Functionality Index trends

The Market Functionality Index (MFI)[112] is a quantitative measure of the functioning of markets based on a trader survey. It was designed to provide insights on the overall market situation, identify incoming factors that may impinge on market operations and provide information on the feasibility of market-based interventions, such as cash transfers. The Index assigns each marketplace a score across different dimensions between zero (low functionality) and ten (high functionality) that can be interpreted consistently across time and locations.

The national MFI score reached 8.1 in August 2024, slightly above its average since April 2024. The assortment dimension, which indicates which classes of essential goods can be purchased in a marketplace, showed a noticeable decrease nationally from 7.3 in April 2024 to 6.8 in August 2024. This is notably due to a decrease in the assortment of health items in Bekaa Governorate and household items in South Governorate.[ai] There was also a perceptible variability in the price score dimension, which evaluates price trends and predictability, between May 2024 (9.4), July 2024 (8.8) and August (9.5), owing to greater uncertainty in the market that

Figure 28: Lebanon – Supply chains of essential products, including foods, have been resilient



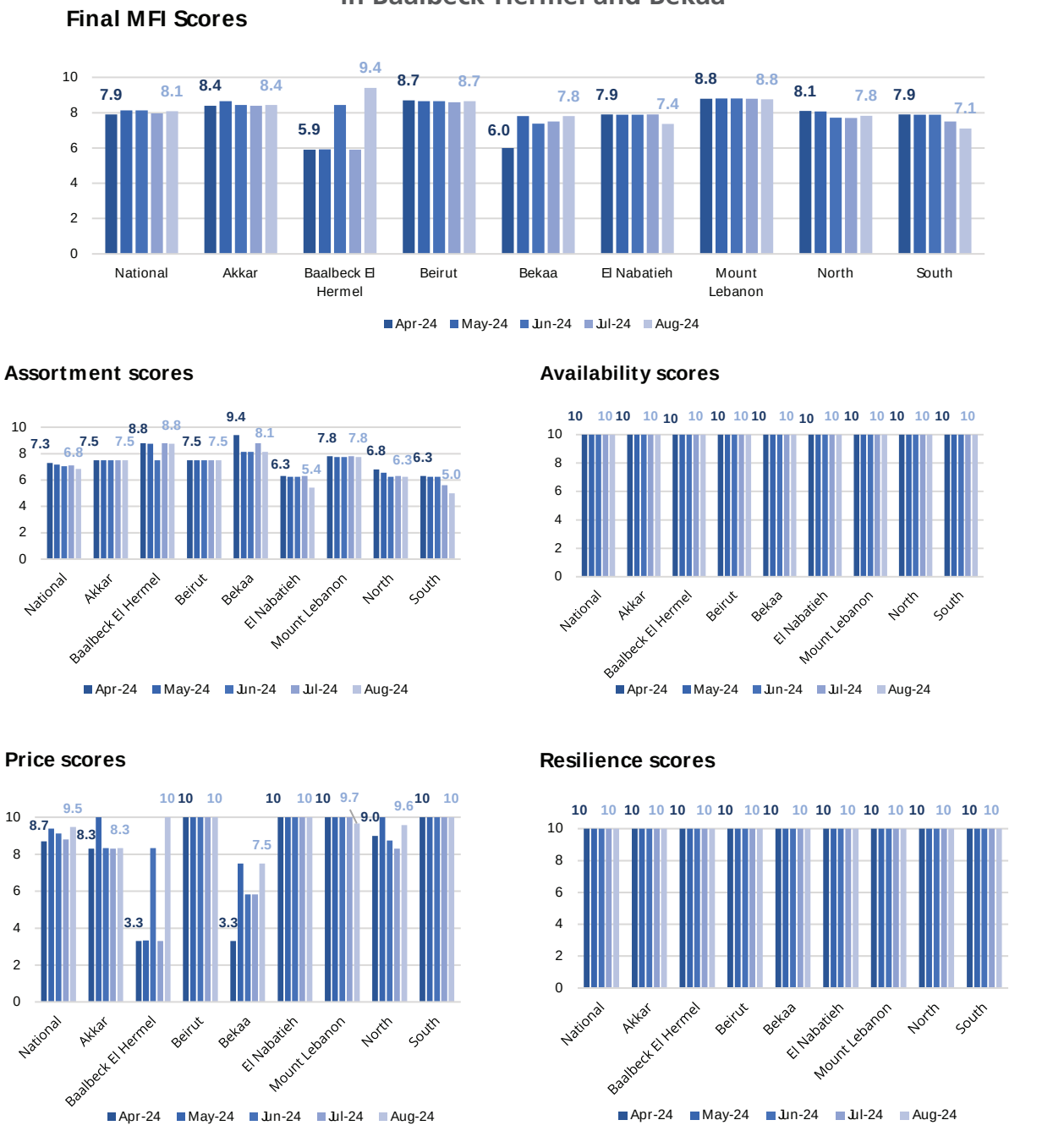
Source: WFP. 2024. *Market analysis*. Rome. [Cited July 2024]. https://www.wfp.org/market-analysis/.

[ai] The lower assortment scores can be attributed to the Index's inclusion of specific items, such as shelter construction materials, health and communication products, that are not typically sold in retail food shops but are available in other types of shops not surveyed in this assessment.

reduces shops' ability to accurately forecast price changes in the near future in Baalbeck-Hermel, Bekaa and North governorates.

The remaining two dimensions scored the maximum between April and August 2024, indicating a highly resilient market with widespread availability of goods. No reports of scarcity or risk of stockouts were noted in any governorate, as the availability dimension achieved a perfect score of ten nationwide. Similarly, the resilience dimension, which assesses delivery lead times and the robustness of supply chains through stock coverage, also maintained a full score across the country. While private sector business activity (PMI) and company turnover (BTA-Fransabank) have deteriorated over the past year, the supply of essential goods at retail-level (MFI) remains solid.

Figure 29: Lebanon – Markets functioned well in most governorates, except in Baalbeck-Hermel and Bekaa



Source: WFP. 2024. *Market analysis*. Rome. [Cited July 2024]. https://www.wfp.org/market-analysis/.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FOOD SUPPLY AND DEMAND BALANCE SHEET

The national food supply and demand balance for the 2024/25 marketing year (July/June) is summarized in Table 18. It contains wheat, barley, potatoes (in cereal equivalent), maize, sorghum, chickpeas, lentils and other pulses. The balance is based on the Mission's production estimates, including a forecast for the second potato season to be harvested in November and December 2024. The balance is based on the following assumptions:


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- **Population** as of mid-2024 is projected at about 5.80 million people.
- **Food production** of cereals and potatoes (in cereal equivalent) is estimated at 272 000 tonnes and pulses at 4 900 tonnes.
- **Food use** is estimated at 858 800 tonnes of cereals and potatoes (in cereal equivalent), using a per capita average annual consumption of 148 kg of cereals and potatoes, which includes 125 kg of wheat, 1 kg of maize (consumed green on the cob), 22 kg of potatoes (in cereal equivalent) and 8 kg of pulses.
- **Seed requirements** are estimated at 32 600 tonnes, assuming a similar area planted to the last four-year average (2020–2023) and using an average seed rate of 250 kg/hectare for wheat, 300 kg/hectare for barley, 30 kg/hectare for maize, 600 kg/hectare for potatoes (in cereal equivalent), 140 kg/hectare for chickpeas, 150 kg/hectare for lentils and 90 kg/hectare for other pulses.
- **Feed use** is estimated at 564 000 tonnes, which includes all barley as well as 17 percent of wheat production (mostly as bran when milled into flour).
- **Stocks** are estimated at 70 000 tonnes of cereal equivalents (opening stocks), corresponding to slightly over one month of consumption. Stocks are expected to remain at the same level at the end of the 2024/25 marketing year and, therefore, no stock drawdown is anticipated.
- **Post-harvest losses**, including handling and storages losses, and other uses are estimated using a rate of 11 percent for cereals, 10 percent for potatoes, 13 percent for chickpeas and lentils, and 10 percent for other pulses.
- **Import requirements** for the 2024/25 marketing year (July/June) are estimated at 664 000 tonnes of wheat, 57 000 tonnes of barley, 488 000 tonnes of feed maize and 72 000 tonnes of potatoes (in cereal equivalent). This represents a 7 percent increase in wheat imports compared to the last four-year average. The import quantities for wheat, maize and pulses represent 88, 99 and 90 percent, respectively, of total anticipated utilization, while potato imports represent 9 percent of total utilization. The domestic supply deficit is expected to be fully covered by commercial imports.

Table 18: Lebanon – Food supply and demand balance sheet (tonnes), 2024/2025 marketing year (July/June)

	Wheat	Barley	Maize	Potatoes	Total	Chickpeas	Lentils	Other pulses	Total pulses
Stock drawdown	0	0	0	0	0	0	0	0	0
Production	93 700	20 000	5 700	152 700	272 000	3 100	1 500	300	4 900
Total availability	**93 700**	**20 000**	**5 700**	**152 700**	**272 000**	**3 100**	**1 500**	**300**	**4 900**
Food use	724 200	0	5 600	129 000	858 800	15 800	13 100	16 300	45 200
Seeds	13 100	3 700	30	15 800	32 600	300	300	60	660
Animal feed	1 600	70 600	484 200	7 600	564 000	200	100	10	310
Losses	10 300	2 200	600	15 300	28 400	400	200	30	630
Total utilization	**749 200**	**76 500**	**490 400**	**167 700**	**1 483 800**	**16 700**	**13 700**	**16 400**	**46 800**
Exports	**8 500**	**500**	**3 270**	**57 000**	**69 270**	**800**	**800**	**2 500**	**4 100**
Imports	**664 000**	**57 000**	**488 000**	**72 000**	**1 281 000**	**14 400**	**13 000**	**18 600**	**46 000**

[1/] Average 2015–2019.
[2/] Average 2020–2023.
Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL and collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic (forecast), 2024.

FOOD SECURITY

Food security situation and trends

The unparalleled economic and financial crisis in Lebanon has severely impacted the capacity of its citizens and other population groups hosted in the country to fulfil their basic needs. Since 2019, the combination of diminishing income and employment opportunities, coupled with triple-digit inflation and currency depreciation, has plunged households into deeper levels of poverty. The situation was further aggravated by the surge in global food prices triggered by the war in Ukraine. Given Lebanon's heavy dependence on wheat imports, this exerted additional inflationary pressure. The long-term deterioration of essential services and the erosion of social safety nets have further strained the population's ability to access food and basic necessities. The crisis has not only reduced households' purchasing power but also severely disrupted public services, including electricity, healthcare and water systems, which are critical for food safety and availability. The worsening security situation in Lebanon, particularly the cross-border clashes since October 2023 and growing political instability, has compounded vulnerabilities. The reduction in humanitarian assistance for both Lebanese citizens and refugee populations has further exacerbated the situation, leaving many without adequate support to meet their basic food needs. Together, these factors have resulted in persistent food insecurity across all population groups, with projections indicating further deterioration unless significant interventions are made.

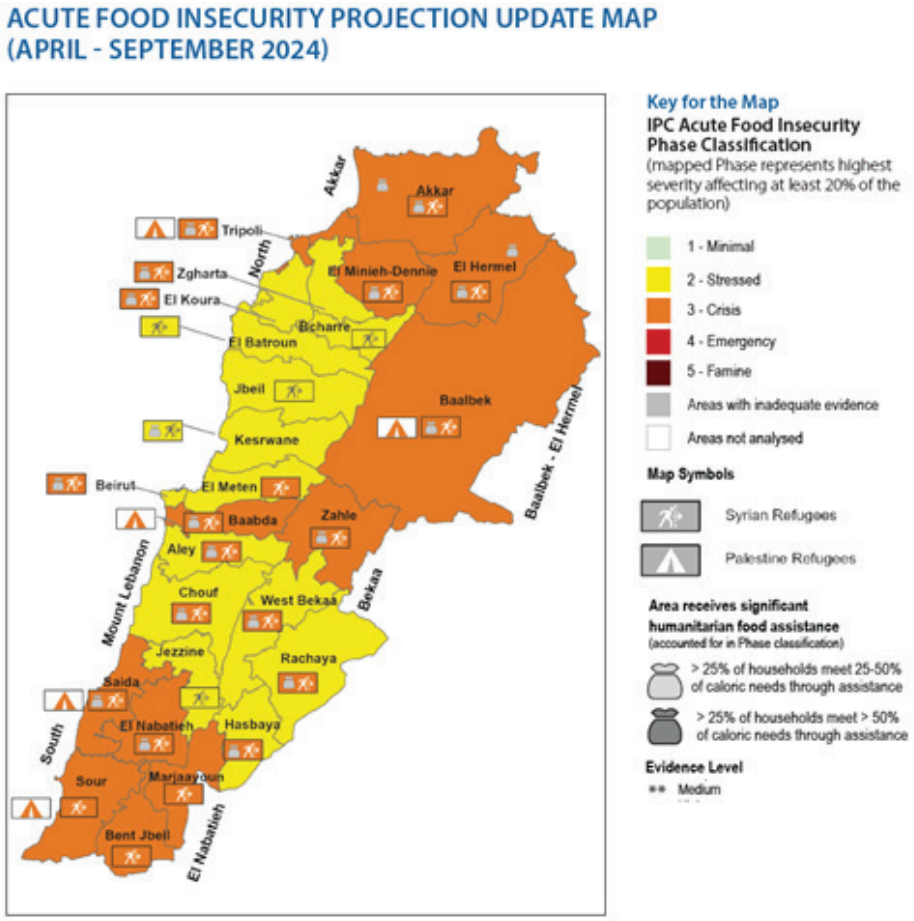
Integrated phase classification acute food insecurity analysis trends

Between September 2022 and September 2024, food insecurity trends across Lebanese, Syrian and Palestinian refugee populations in Lebanon have been shaped by a combination of economic crisis, inflation and reductions in humanitarian assistance.

The first Integrated Phase Classification (IPC) Acute Food Insecurity (AFI) analysis in late 2022 showed peak levels of food insecurity, driven by severe inflation, currency depreciation and the lifting of subsidies on essential goods. Throughout 2023, a temporary stabilization of food prices and the exchange rate, supported by continued networks of remittances, as well as improved tourism during the summer season, led to improved food security across all groups, though vulnerability remained high. However, a projection update for mid-2024, triggered by the eruption of the conflict along the southern border of the country, shows the start of the reversal of these gains, coupled with the decline in available funding for humanitarian programmes, persisting economic stagnation and increasing regional instability, resulting in increased food insecurity, especially among refugees.

From September to December 2022, food insecurity among Lebanese residents peaked, with 33 percent of the population classified in IPC Phase 3 (Crisis) or above (Emergency). This was largely driven by the economic collapse, soaring inflation and the removal of subsidies on essential goods, all of which severely impacted purchasing power. As the country's economy spiraled due to the rapid currency depreciation and

Map 7: Lebanon – High levels of acute food insecurity in southern, northern and eastern governorates



Disclaimer: *The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.*

Source: IPC. 2024. *Lebanon: Acute Food Insecurity Projection Update for April–September 2024*. [Accessed on 30 May 2024]. https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1157035/?iso3=LBN.

Lebanon IPC AFI Analyses

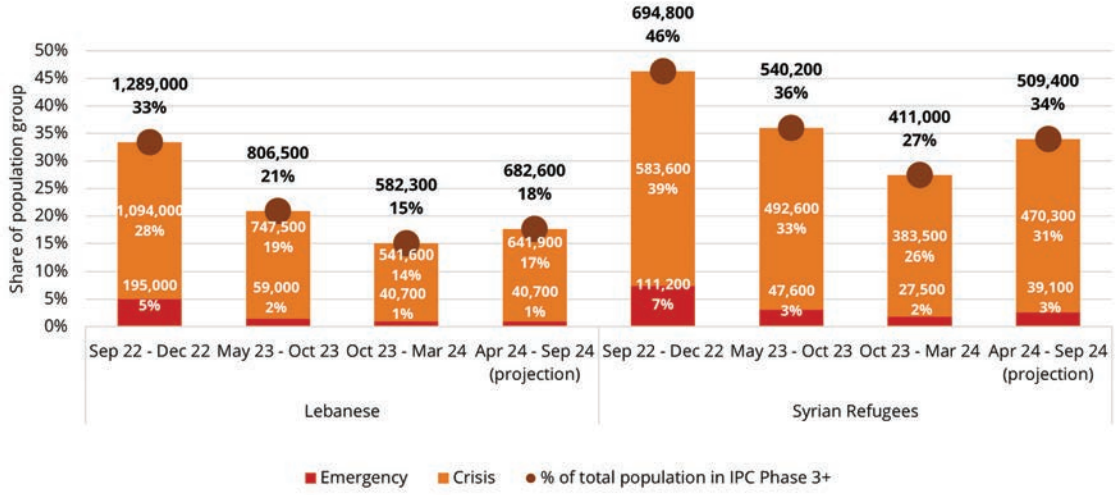
The first IPC AFI analysis was conducted in September 2022, during a time of economic recession, political stalemate and the effects of the COVID-19 pandemic, and the war in Ukraine. It indicated that about 1.98 million people, or 37 percent of the analyzed population, were in IPC Phase 3 (Crisis) including 6 percent in IPC 4 (Emergency).

The second IPC AFI analysis incorporated PRL and PRS for the first time. It found that 23 percent of the population were in IPC Phase 3 (Crisis) and 2 percent of the population in IPC Phase 4 (Emergency).

The third IPC AFI analysis, between October 2023 and March 2024, estimated that about 1.05 million people, or 19 percent of the analyzed population, were facing acute food insecurity and were classified in IPC Phase 3 (Crisis) or above. The situation was expected to deteriorate further as tensions at the southern border started to escalate displacing population living in the affected districts. Populations classified in IPC Phase 3 (Crisis) or above require urgent humanitarian action to reduce food gaps, protect and restore livelihoods, and prevent acute malnutrition.

Figure 30: Lebanon – Lebanese residents and Syrian refugees are facing high levels of acute food insecurity, 2024

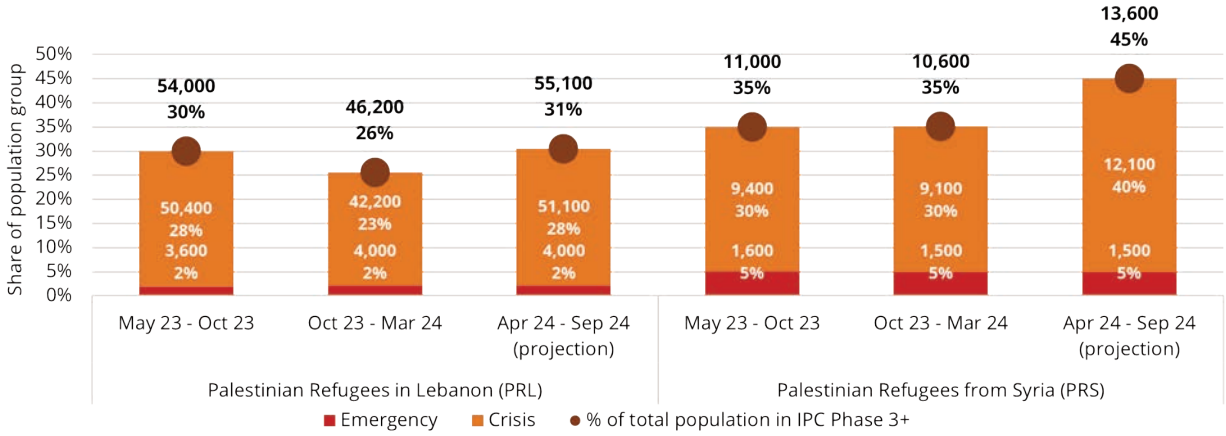
IPC food insecurity trend figures, September 2022–September 2024 (number and percentage of people)



Source: Lebanon IPC Acute Food Insecurity Analyses, 2022–2024 https://www.ipcinfo.org/ipc-country-analysis/en/.

Figure 31: Lebanon – High prevalence of Palestinian refugees in Lebanon and from the Syrian Arab Republic facing high acute food insecurity

IPC food insecurity trend figures, September 2022–September 2024 (number and percentage of people)



Source: Lebanon IPC Acute Food Insecurity Analyses, 2022–2024 https://www.ipcinfo.org/ipc-country-analysis/en/.

international price increases, households struggled to meet basic needs. From May to October 2023, food security improved, with only 21 percent in IPC Phase 3 (Crisis) or above, partially thanks to temporary wage increases, remittances and humanitarian assistance, and the situation continued improving, with 15 percent being classified in Phase 3 (Crisis) or above for the period between October 2023 and March 2024. However, the ongoing conflict on the south border since October 2023, continued inflation, especially of non-food essential services, and underfunded assistance programmes, led to an increase in food insecurity again by April to September 2024 (projection), with 18 percent of the Lebanese population projected to be in IPC Phase 3 (Crisis) or above, as economic stagnation and regional instability worsened.

Syrian refugees in Lebanon consistently faced high levels of food insecurity. From September to December 2022, 46 percent were in IPC Phase 3 (Crisis) or above, as inflation and loss of income sources severely affected their capacity to meet basic needs. This group's reliance on informal labour and humanitarian assistance made them particularly vulnerable to economic shocks. Moreover, Syrian refugees face strict legal restrictions limiting their access to formal employment, which leaves many to accept informal, often exploitative, works at low wages. From

May to October 2023, the situation improved slightly, with 36 percent of refugees in IPC Phase 3 (Crisis) or above, before reaching 27 percent for the period between October 2023 and March 2024, likely due to increased humanitarian cash assistance and more stable exchange rates. Nevertheless, approximately 7 percent of Syrian children were still engaged in child labour from May to October 2023, a significant protection risk that detracts from their access to education and perpetuates poverty cycles within refugee communities. IPC projections from April to September 2024 show an increase to 34 percent as cuts to assistance programmes, rising prices and displacement due to regional tensions created challenges to properly access food needs.

Palestine refugees in Lebanon (PRL) have been facing persistent acute food insecurity also due to legal and economic barriers. From May to October 2023, 30 percent were classified in IPC Phase 3 (Crisis) or above, reflecting their precarious economic conditions and dependency on humanitarian aid. The slightly improving conditions helped lower the number of those classified in IPC Phase 3 (Crisis) or above to 26 percent for the period between October 2023 and March 2024. This percentage was projected to increase to 31 percent. From April to September 2024, as funding constraints reduce assistance from organizations like United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), exacerbating their food insecurity, amidst a limited access to stable employment opportunities and ongoing inflation.

Palestine refugees from Syria (PRS) remain the most vulnerable population group. From May to October 2023, 35 percent were in IPC Phase 3 (Crisis) or above, as this population, facing heavy restrictions and marginalization, relied almost entirely on assistance. From April to September 2024, their food insecurity was also projected to worsen significantly, with 45 percent expected to be in IPC Phase 3 (Crisis) or above, as cuts to humanitarian aid and escalating economic hardships further erode their ability to access food.

Integrated phase classification acute food insecurity analysis trends projection update, April–September 2024

According to the latest Lebanon IPC projection update conducted in March 2024, around 1.26 million people (23 percent of the analysed population) were expected to face high levels of acute food insecurity (IPC Phase 3 [Crisis] or above) between April and September 2024. This figure includes 85 000 people (2 percent of the analysed population) in IPC Phase 4 (Emergency) and 1.18 million people (21 percent of the analysed population) in IPC Phase 3 (Crisis).

The analysed population includes Lebanese, Syrian refugees, PRL and PRS. Among the 1.26 million people expected to be in IPC Phase 3 (Crisis) or above, 683 000 were Lebanese (18 percent of the resident population), 510 000 were Syrian refugees (34 percent of the Syrians refugees in Lebanon), 55 000 were PRL (31 percent of the PRL population in Lebanon) and 13 600 were PRS (45 percent of the PRS population in Lebanon). The assumptions that led to the new updated classification also accounted for new reductions of assistance to Lebanese as well as further reductions in assistance to refugees.

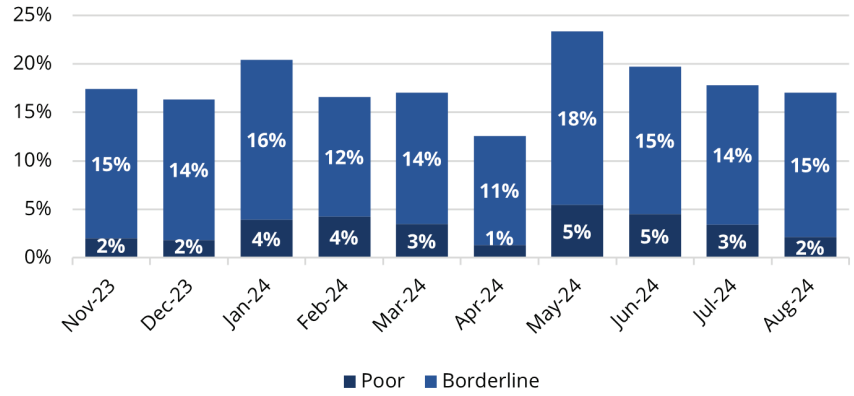
According to the IPC Projection Update of March 2024, 12 districts were classified as IPC Phase 3 (Crisis) for Lebanese residents. This includes Akkar, Baabda, Baalbeck, Bent Jbeil, Hermel, Minieh-Dennie, Nabatieh, Tripoli, Saida, Sour, Zahle and Marjaayoun, with the highest occurrence of acute food insecurity during the projected period was estimated in Akkar District (104 000), followed by Baabda (82 000), Tripoli (60 000) and Baalbeck (58 000).

However, 21 out of the 26 districts were classified as IPC Phase 3 (Crisis) for Syrian refugees, and the highest prevalence of acute food insecurity for Syrian refugees was projected in six districts (Akkar, El Minieh-Dennie, Tripoli, Baalbeck, Rachaya and Zahle) where the percentage of Syrian refugees classified in IPC Phase 3 (Crisis) or above was estimated between 40 and 45 percent. This was followed by Hermel, Baabda and Saida districts where 35 percent of Syrian refugees were expected to face acute food insecurity during the projected period. In absolute terms, with 98 000 people in IPC Phase 3 (Crisis) or above, Zahle was the district with the highest number of Syrian refugees who were estimated to be in high levels of acute food insecurity, followed by Baalbeck (75 000) and Akkar (63 000).

Regarding Palestinian refugees, of the PRL population residing in camps in Saida and Tripoli, 35 percent were classified in IPC Phase 3 (Crisis) or above, with

Figure 32: Lebanon – Lebanese residents – Fluctuating levels of diet frequency and diversity

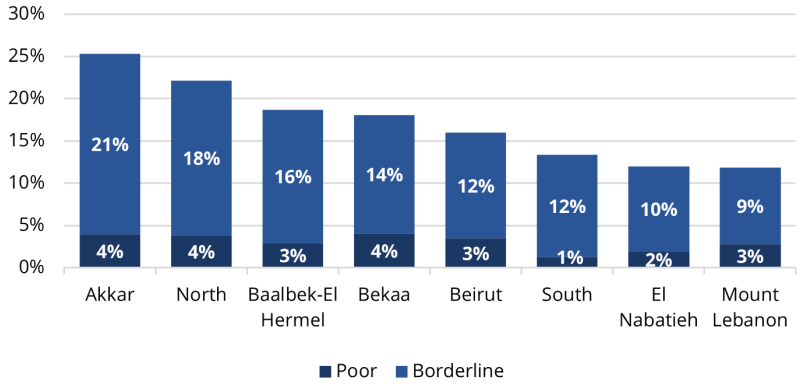
Poor and borderline food consumption scores, November 2023–August 2024 (percent)



Source: Author's own elaboration based on data from real time food security monitoring (RTM), 2024.

Figure 33: Lebanon – Lebanese residents – High levels of inadequate food consumption scores

Percentage of poor and borderline food consumption scores by governorate, November 2023–August 2024



Source: Author's own elaboration based on data from real time food security monitoring (RTM), 2024.

10 percent and 5 percent classified in IPC Phase 4 (Emergency) in Saida and Tripoli camps, respectively.

Food consumption and quality of diet

Lebanese residents

Based on near real-time food security monitoring (RTM data),[aj] overall inadequate food consumption has fluctuated over the past ten months. Poor food consumption has varied between 2 percent and 5 percent, while borderline consumption has ranged from 11 percent to 18 percent. The highest combined percentage of inadequate food consumption was observed in May 2024, following the end of Ramadan in April 2024, affecting nearly one-quarter of the Lebanese population. A more positive trend was noted in July and August, with poor food consumption decreasing to 2 percent of the population, while borderline food consumption remained fairly stable.

Aggregating the data collected from November 2023 to August 2024 allows for a comparative analysis among the surveyed governorates. The governorates with the

[aj] After the escalation of the conflict in the south of Lebanon in October, WFP adapted its remote data collection that has been running for the past four years to be more agile and responsive to the rapid change in the situation. In November, a near-RTM system was adopted, allowing for daily monitoring of the food security situation in the entire country. The daily remote surveys enable WFP and its partners to gather information from areas that are not accessible through face-to-face surveys, to track seasonality and how conflicts are impacting household food security.

highest proportion of households experiencing poor and borderline food consumption are Akkar and North Lebanon in the northern part of the country, followed by Baalbeck-El Hermel and Bekaa in the eastern region. These regions also represent the two main agricultural areas: Bekaa Valley, which accounts for 47 percent of the total cultivated area and the two northern governorates of North Lebanon and Akkar, which combined account for 26 percent.[113] Additionally, North Lebanon and Akkar governorates have the highest share of the population living below the poverty line, with 52 percent in North and 62 percent in Akkar.[114] Akkar, followed by North Lebanon, has the largest share of workers in the agriculture sector, which also happens to have the highest concentration of workers belonging to poor households. Agriculture workers are among the poorest in the population, followed by those in construction.

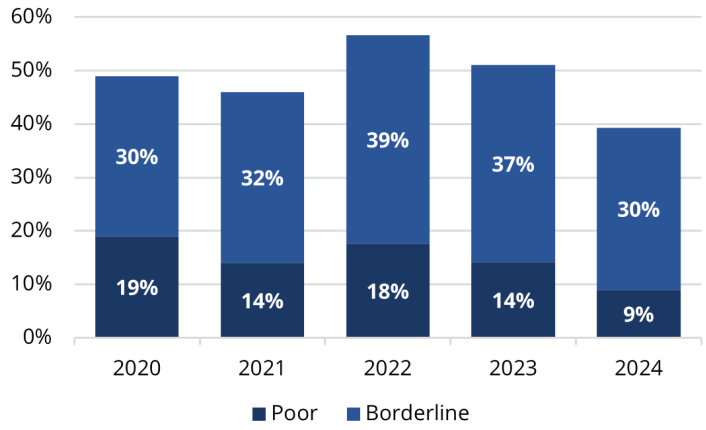
According to the focus group discussions (FGD) conducted during the Mission[ak] with Lebanese participants across the country, the economic constraints have significantly impacted food consumption, leading to a reduction in dietary diversity and quality. Many participants reported altering their eating habits, opting for cheaper and less nutritious options due to financial pressures. A participant from Baalbeck remarked, "We often eat less, and when we do eat, it is usually just bread and rice. I wish we could have vegetables and meat, but it is too expensive." This shift towards monotonous diets concerns has implications on the longer term health and nutritional status, particularly for children and vulnerable populations. Additionally, participants mentioned seasonal fluctuations in food availability, particularly during the winter, when shortages of fruits and vegetables are more pronounced. This was more evident in rural areas, where access to fresh produce can heavily depend on the harvest cycles.

Syrian refugees

Looking at the Syrian refugee population in Lebanon, the most comprehensive and reliable assessment, is the Vulnerability Assessment of Syrian Refugees

Figure 34: Lebanon – Syrian refugees – High levels of inadequate food consumption persist, despite an improvement since 2022

Inadequate food consumption by year (percent)



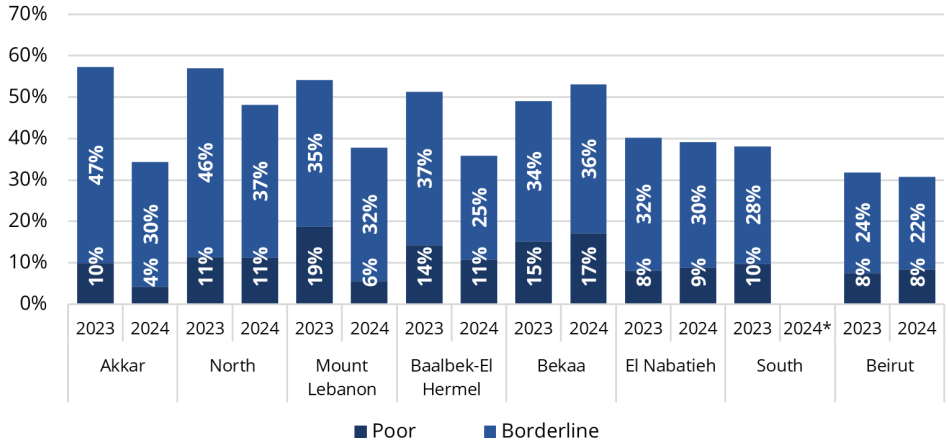
Source: Author's own elaboration based on data from VASyR 2020–2024. WFP, 2024.

[ak] As part of the CFSAM, qualitative data collection was carried out in the field through a series of FGDs and KIIs) between 22– 25 July 2024. The FGDs included a diverse range of community groups, comprising both Lebanese and Syrian refugee beneficiaries of the WFP, as well as non-beneficiaries, such as households that had recently been discontinued from assistance or had never received support. These discussions aimed to capture the lived experiences and coping strategies of households facing food insecurity. In addition, KIIs were conducted with local authorities and Food Security Sector (FSS) partners to gather insights regarding local responses to the food security crisis, focusing on challenges, resource gaps and opportunities for enhancing community resilience. The objective of this data collection was to triangulate the information gathered and provide a comprehensive understanding of the situation.

[al] The VASyR is a yearly assessment being conducted since 2013 that analyses a representative sample of Syrian refugee households in Lebanon to provide a multisectoral update on the situation of this population group.

Figure 35: Lebanon – Syrian refugees – Improvement in diet frequency and diversity observed in all governorates, with the notable exception of Bekaa

Inadequate food consumption by governorate in 2023 and 2024 (percent)



Note: Data collected in the South in 2024 is currently being reviewed.

Source: Author's own elaboration based on data from VASyR 2023–2024. WFP, 2024.

in Lebanon (VASyR).[al] VASyR provides an overview and trend of the food security situation of refugee households in Lebanon. The VASyR findings confirm that Syrian refugees consistently show higher percentages of inadequate food consumption, indicating greater food insecurity compared to Lebanese households.

Syrian refugees in Lebanon have exhibited notable progress in their food consumption scores between 2022 and 2024. A comparative analysis of food consumption scores for 2024 against the figures from 2022 and 2023 reveals a 9 percent reduction in the prevalence of poor food consumption, a 9 percent decrease in borderline food consumption, and a notable 18 percent increase in the prevalence of acceptable food consumption. Despite this positive shift in food consumption patterns, more than one-third of the Syrian refugees in Lebanon were still consuming an inadequate diet in June 2024.

As shown in Figure 34, improvements in food consumption were observed across the governorates between 2023 and 2024, with the exception of Bekaa where inadequate food consumption increased. The governorates with the most notable yearly improvements were Akkar (23-percentage point decrease in inadequate food consumption between 2023 and 2024), Mount Lebanon (16-percentage point decrease) and Baalbek-El Hermel (15-percentage point decrease). The Bekaa Governorate, on the other hand, witnessed a 4-percentage point increase from 49 percent in 2023 to 53 percent in 2024. The prevalence of inadequate food consumption remains unevenly distribution across the governorates in 2024, ranging from 53 percent in Bekaa to 31 percent in Beirut. Similarly to the Lebanese population, prevalence of inadequate food consumption among Syrian refugees in North Lebanon is among the highest nationwide, while a high percentage of poor food consumption is still reported in Baalbek-El Hermel (11 percent) despite the yearly improvement in food consumption observed in the governorate.

According to the World Bank poverty analysis, almost the entire Syrian population in Akkar is below the poverty line, followed by North Lebanon at 89 percent, Bekaa at 88 percent and Mount Lebanon at 81 percent. This suggests a systemic difference in the magnitude and degree of poverty between Lebanese and Syrian populations.

Observations reported by Syrian refugees' participants during the FGDs, highlighted that, while beneficiaries reported cooking meals with the food purchased through assistance, they noted the lower consumed quality due to reduced financial access. Non-beneficiaries faced even greater challenges, with many unable to cook regularly due to lack of food for financial reasons. Civil society actors emphasized the impact of economic hardship on communities' ability to afford basic needs, resulting in significant dietary

changes. These changes include an increased reliance on cheaper, less nutritious options, with families often resorting to staples like lentils and bulgur, further reducing food diversity and quality. Participants in the FGDs also highlighted that the quality of food items available in the first place was a concern, noting the prevalence of low quality produce, with some mentioning the presence of chemicals in the food.

Access to food and coping strategies

Lebanese residents

Between November 2023 and August 2024, Lebanese households demonstrated a relatively stable trend in both their ability to physically access markets and their reliance on these markets as their primary source of food. The challenges associated with accessing markets remained modest, with the majority of households consistently identifying markets as their main food source. During this period, the proportion of Lebanese households reporting difficulties in accessing markets fluctuated slightly, ranging from 9 percent to 12 percent.

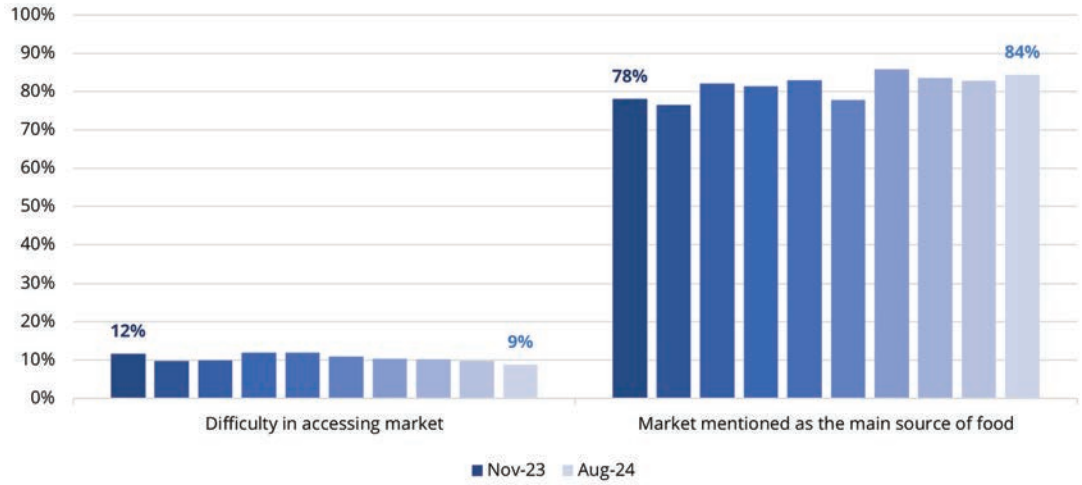
Markets continued to serve as a critical source of food for Lebanese households, with high percentages reported throughout the survey period. The lowest recorded reliance on markets occurred in December 2023 at 77 percent, while the highest was noted in May 2024 at 86 percent.

Regional variations in the difficulty of accessing markets were significant. Beirut and Mount Lebanon reported the least difficulty, with only 6 percent and 7 percent, respectively, of households encountering challenges during the reported period. Conversely, Akkar and Baalbeck-Hermel experienced the highest levels of difficulty, with 15 percent and 14 percent of households facing obstacles. The variation in the availability of food between urban and rural areas was observed by the Mission, revealing contrasts in access and affordability. In urban centres like Beirut, FGD participants noted a wider variety of food items available in the markets, but many expressed frustrations over soaring prices that rendered essential goods inaccessible. In rural regions such as Baalbeck and Akkar, participants reported a smaller range of available food, as well as a higher dependency on local shops, which often charged inflated prices due to transport challenges. The Mission also observed that in remote areas like Hermel, grocery shops are scarce. For example, participants in the FGDs reported that only one bakery was operating in the entire city, which could not serve the entire population. Consequently, residents had to obtain bread from nearby towns, increasing the final price of bread due to transportation costs.

In terms of market reliance, Beirut, Mount Lebanon and North exhibited the highest figures, with 84 percent of households identifying markets as their primary food source. Nabatieh, on the other hand,

Figure 36: Lebanon – Lebanese residents – Increased reliance on markets and slight decrease in accessing them between November 2023 and August 2024

Market access and food source by month (percent)



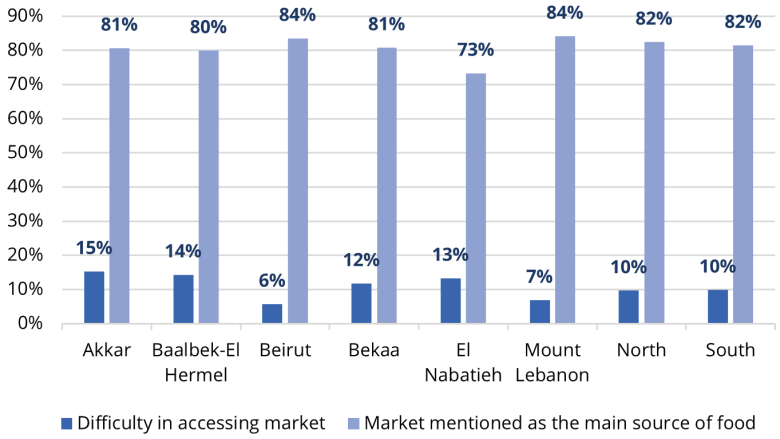
Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

recorded the lowest market reliance at 73 percent, due to the ongoing conflict, among other reasons. In addition to that, Nabatieh also registered the highest reliance on households' own food production (5 percent of households, compared to 2 percent nationwide) and humanitarian assistance (8 percent of households, compared to 5 percent nationwide). This indicates a greater level of self-sufficiency in food production, especially in agricultural areas and a heavier dependence on aid programmes, likely due to the heightened vulnerabilities due to the conflict. This was also noted through the Mission findings, with participants describing various methods of obtaining food, reflecting their diverse strategies in response to food insecurity. Many beneficiaries highlighted their reliance on humanitarian assistance, which often included food vouchers or direct aid. In addition to humanitarian aid, some participants discussed informal networks of support within their communities. This reliance on social connections allowed families to share resources, especially in times of crisis.

Overall, there is an overwhelming reliance on markets as the primary source of food in Lebanon, both now and before the beginning of the crisis. However, soaring prices of commodities have

Figure 37: Lebanon – Lebanese residents – Highest reliance on markets and lowest difficulty in access observed in Beirut and Mount Lebanon

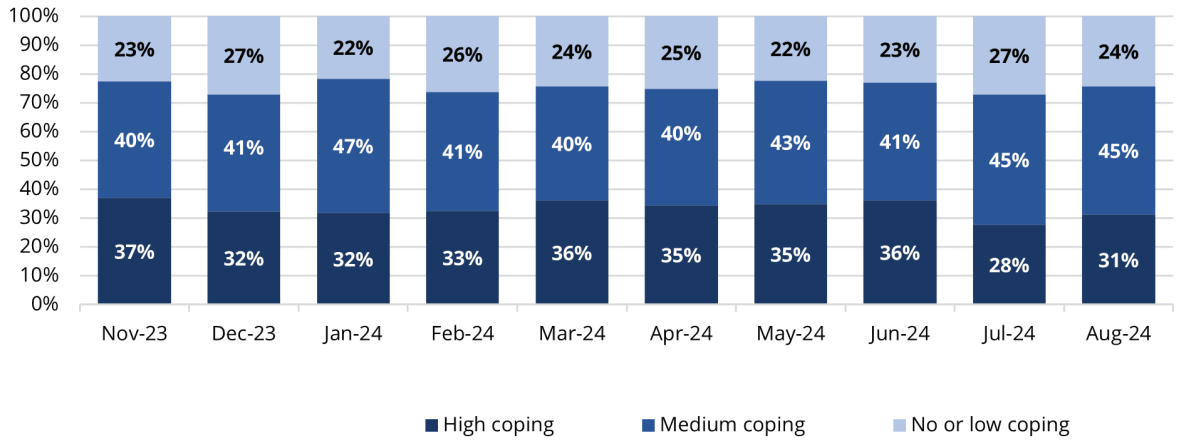
Average market access and food source by governorate (percent)



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

Figure 38: Lebanon – Lebanese residents – High levels of short-term coping due to lack of access to food among residents throughout the reported period

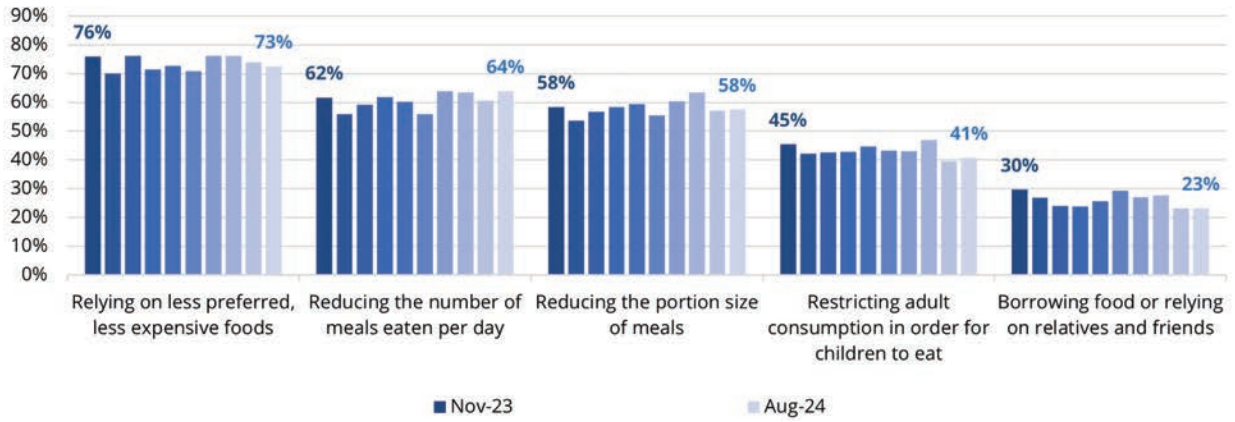
Medium to high food-based coping strategies by month (percent)



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

Figure 39: Lebanon – Lebanese residents – Relying on less preferred or less expensive foods and reducing number and size of meals are the most widespread food-based strategies

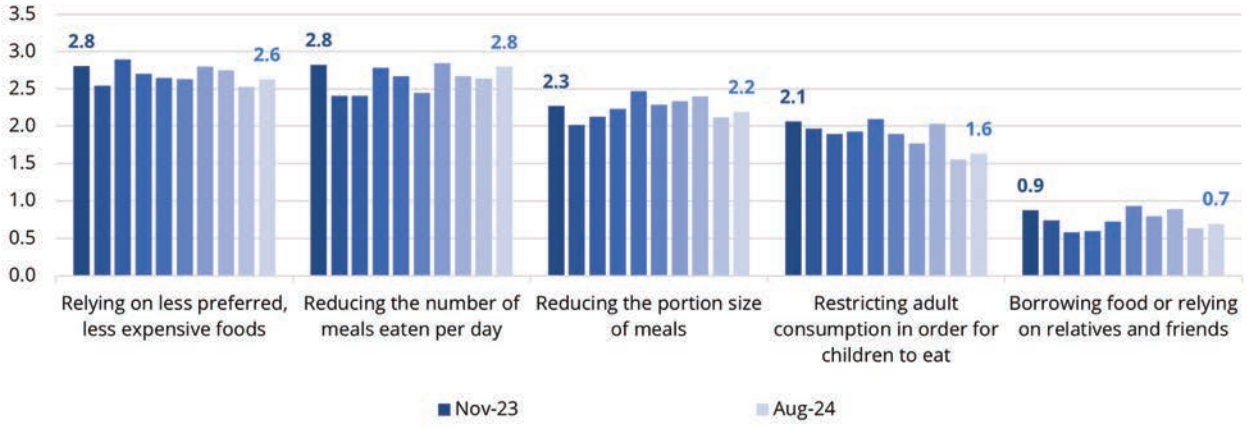
Prevalence (percent of households) applying different food-based coping strategies by month



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

Figure 40: Lebanon – Lebanese residents – Households opt for less preferred foods and reduce the number and sizes of meals two to three days per week

Frequency (days per week) of applied food based coping strategies by month



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

severely limited households' purchasing power and their ability to access food available in the markets.

According to the Lebanon Household Survey (LHS) [am] there has been a significant increase in monetary poverty in 2023. The survey, which covered Lebanese, Syrian and other nationals in five governorates (Akkar, Beirut, Bekaa, North Lebanon and most of Mount Lebanon), showed that monetary poverty rose from 12 percent in 2012 to 44 percent in 2022 across the surveyed areas. This increase has contributed to growing food insecurity, reduced food purchases and forced changes in diets. LHS data also indicated that 32 percent of Lebanese had expenditures below MEB and 20 percent could not afford the SMEB in 2023.

The Reduced Coping Strategy Index (rCSI) monitors the food-related coping strategies employed by households, and they are categorized into low, medium and high coping levels. These strategies reflect the extent to which households are adjusting their food consumption in response to food insecurity.

[am] LVAP is a joint household survey conducted by the WFP, the World Bank and the United Nations High Commissioner for Refugees (UNHCR) between December 2022 and May 2023.

Throughout the RTM reporting period, the percentage of Lebanese households employing medium coping strategies remained notable, showing a slight increase from 40 percent in November 2023 to 45 percent in August 2024. Conversely, the proportion of households using high coping strategies fluctuated but generally displayed a declining trend, decreasing from 37 percent in November 2023 to 31 percent by August 2024.

The most prevalent food-related coping strategy involved relying on less preferred and/or less expensive foods, with 73 to 76 percent of households consistently employing this strategy at a frequency of 2.5 to 2.9 days/week. Additionally, a significant number of households reported reducing the number of meals per day and/or the portion sizes of their meals, with the prevalence of either strategy ranging from 54 to 64 percent and a frequency between 2 and 2.8 days/week.

Furthermore, between 40 and 47 percent of households indicated that they restricted adult food intake to ensure children could eat, with this practice occurring at a frequency of 1.6 to 2.1 days/week. The least utilized strategy involved borrowing food or relying on social networks for food access, which was reported by 23 to 30 percent of households, occurring at a frequency of less than one day/week.

The prevalence of the different food-related coping strategies was highly observed by the Mission throughout the different regions. Those varied and often reflected the complex and challenging circumstances that families faced. Many participants shared experiences of adapting to their evolving realities, revealing resilience, amid adversity. One prevalent coping strategy among both beneficiaries and non-beneficiaries was the reliance on social networks. Participants often highlighted how their communities played a crucial role in their ability to navigate food insecurity. Informal networks of support were described as lifelines; families would share resources, food or even financial assistance during difficult times. Another significant coping mechanism discussed was the practice of altering dietary habits. Many participants reported a marked shift in their food consumption patterns due to economic constraints. A common strategy was to reduce the quantity and variety of food consumed. For instance, several beneficiaries mentioned that they often skip meals or opt for cheaper, less nutritious options to stretch their limited resources. Additionally, participants frequently discussed the financial coping strategies they employed. Many families resorted to borrowing money from friends or relatives to make ends meet, especially during emergencies or months when expenses exceeded income. One mother recounted, "I borrow money to buy food for my children. It's a cycle I can't escape; I pay one debt and then I must borrow again."

Syrian refugees

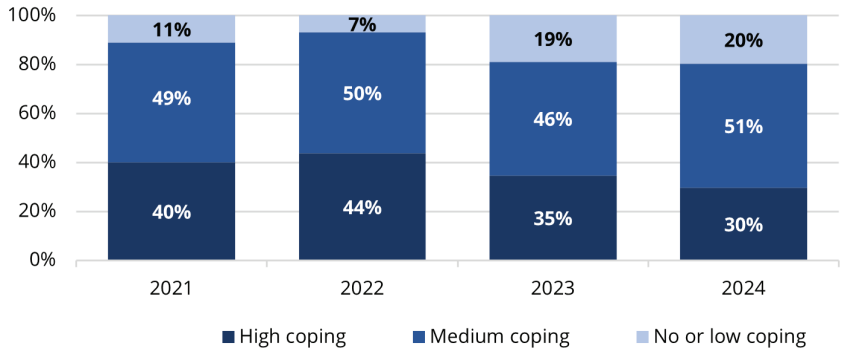
Although quantitative data for Syrian refugees on availability of food and sources of food is not collected through the VASyR assessment, RTM data indicated that the vast majority of Syrian refugees also rely on markets as primary source of food with gifts from family, relatives or friends also playing an important role in terms of food. About 15 percent of Syrian refugees reported difficulties in accessing markets between November 2023 and August 2024, with highest prevalences recorded in Akkar and Nabatieh governorates. Main challenges faced when accessing markets were distance and security concerns.

FDGs and key informant interviews (KIIs) also revealed that both beneficiaries and non-beneficiaries noted that, while some food items are available in local markets, rising prices significantly limit their access to food. Non-beneficiaries reported facing even more challenging circumstances, often struggling to obtain basic food items, on top of geographic limitations. One participant from a remote area mentioned, "We live in a valley with only a small shop, but it's very expensive. There are no taxis around, so we walk to reach the road to get a taxi." In contrast, humanitarian assistance remains a crucial source of food for Syrian refugees. Beneficiaries indicated that support from e-cards helps supplement their income, although many still find it difficult to meet their basic needs. One participant stated, "The e-cards help us get food, but we know it is not enough for the whole month. We have learned to stretch it as far as possible."

The rCSI for Syrian refugee households from 2021 to 2024 indicates a consistent reliance on both medium and high coping strategies, although there were signs of improvement by 2024. The proportion of households utilizing medium coping strategies remained stable, with a slight increase to 51 percent between 2022 and 2024. In contrast, the percentage

Figure 41: Lebanon – Syrian refugees - Widespread reliance on food-based coping, with almost one-third of households still implementing severe coping strategies in 2024

Food-based coping strategies rCSI average per year

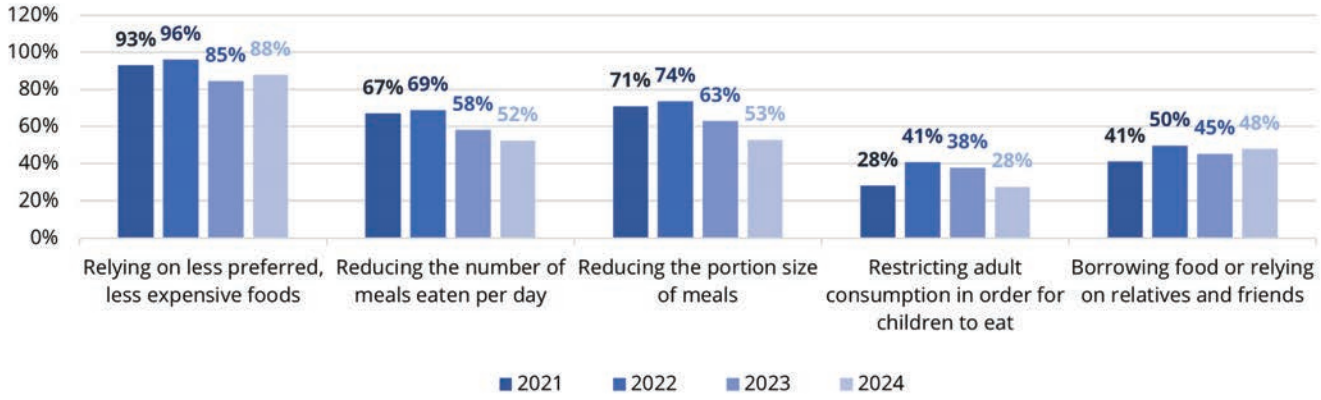


Note: IPC-rCSI classification not included in VASyR 2020

Source: Author's own elaboration based on data from VASyR 2021–2024. WFP, 2024.

Figure 42: Lebanon – Syrian refugees – Despite improvements in prevalence of food-based coping strategies between 2022 and 2024, widespread reliance on coping mechanisms remains

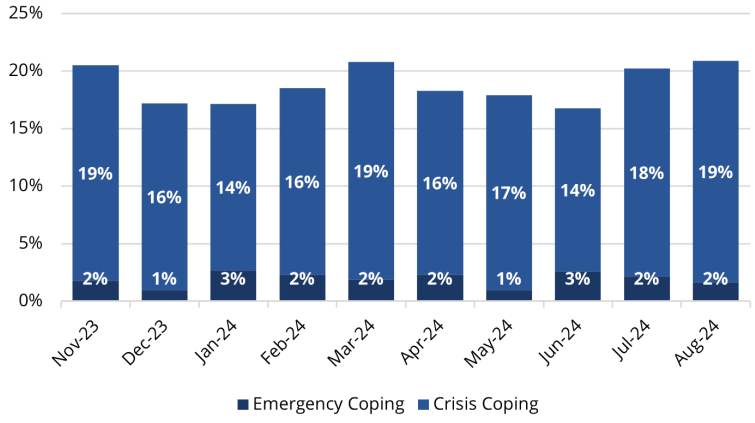
Prevalence (percent of households) applying food-based coping strategies per year



Source: Author's own elaboration based on data from VASyR 2023–2024. WFP, 2024.

Figure 43: Lebanon – Syrian refugees – Similar improvement in the frequency of food-based strategies observed between 2022 and 2024, with households still relying on less preferred foods four days per week

Frequency (days per week) applying food-based coping strategies per year



Note: IPC-rCSI classification not included in VASyR 2020

Source: Author's own elaboration based on data from VASyR 2023–2024. WFP, 2024.

of households employing high coping strategies improved significantly, dropping from 44 percent in 2022 to 30 percent in 2024, although these levels are still considered elevated.

The most prevalent strategy throughout this period was relying on less preferred and/or less expensive foods. This strategy peaked in 2022, with a prevalence of 96 percent and a frequency of 5.5 days/week, before declining to 85 percent and 4 days/week, respectively, in 2023. The strategy then saw a slight uptick in 2024, settling at 88 percent of households and 4.3 days/week. The second most common strategy involved reducing portion sizes of meals, with prevalence decreasing from 74 percent in 2022 to 53 percent in 2024, and frequency declining from 3.2 days/week to 2 days/week during the same time frame.

Other coping strategies showed similar trends, with 2022 marking a peak in their usage and the subsequent two years showing a reduction in reliance on food-related coping strategies among Syrian refugee households.

Findings from the FGDs indicate a variety of different food-related coping strategies being applied by both beneficiaries and non-beneficiaries of WFP programmes. While beneficiaries frequently resorted to reducing the quality and quantity of the consumed food, non-beneficiaries employed more drastic measures. Many resorted to begging or relying on community support networks to secure food. One participant reflected, "We often ask neighbours for help. It's not easy, but it's the only way we can eat." Others mentioned using credit lines at local markets to obtain food and necessities, leading to a cycle of debt that further complicates their financial stability.

Livelihoods

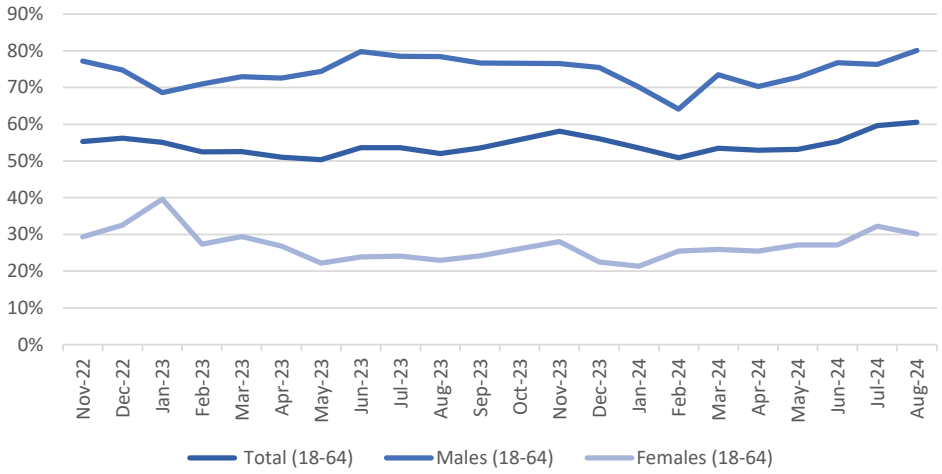
Lebanon's labour market has been deeply impacted by the ongoing economic crisis, which has reduced labour force participation and increased informal employment, particularly among poorer households. According to the World Bank, key challenges included low female labour force participation and high unemployment rates among poorer families, contributing to an overall decrease in labour force engagement. Unemployment rose from 11 percent in 2011/2012 to nearly 13 percent in 2018/2019, be-fore declining to 11 percent by 2022/2023 due to increased inactivity that shrank the labour force. Over this period, informal employment surged, with the share of Lebanese working in the private, informal sector rising from 23 percent in 2018/2019 to 34 percent in 2022/2023, and employment informality spiking from 40 to 60 percent.

The World Bank also noted that the Lebanon's crisis has led to a "brain drain" of skilled professionals, especially in healthcare and education, weakening essential services and hindering economic recovery. At the same time, remittances from the Lebanese diaspora have become a crucial financial lifeline, reaching around 36 percent of GDP in 2022 (a sharp increase from 15 percent in 2019), making Lebanon one of the most remittance-dependent countries globally. These funds provide vital support for households, though distribution is unequal and primarily benefits higher-income households. Estimates indicate that 15–30 percent of Lebanese households relied on remittances in 2022, up from around 10 percent in 2018 and 2019. Households with educated heads and those receiving remittances were more resilient to poverty, underscoring the importance of human capital and diaspora support. While remittances serve as a critical income source, they are also vulnerable to external economic fluctuations, highlighting a potential risk for Lebanon's economy.

Recent data from the WFP's RTM (November 2022 to August 2024) reveals significant patterns and dis-parities in Lebanon's labour market, underscoring the economic challenges faced by both Lebanese and Syrian refugees, as well as notable regional and gender-based disparities. Employment rates among individuals aged 18–64 exhibit seasonal trends, fluctuating between 50 and 61 percent and peaking in August 2024. This mid-year increase, particularly in July and August, is largely driven by seasonal demand in sectors like tourism and agriculture, highlighting Lebanon's reliance on these industries. A pronounced gender disparity prevailed, with an average male employment rate of 74 percent compared to 27 percent for females, a 47-percentage point gap that underscores structural and cultural barriers restricting women's access to stable employment opportunities.

Figure 44: Lebanon – Labour market defined by fluctuating employment and gender disparities

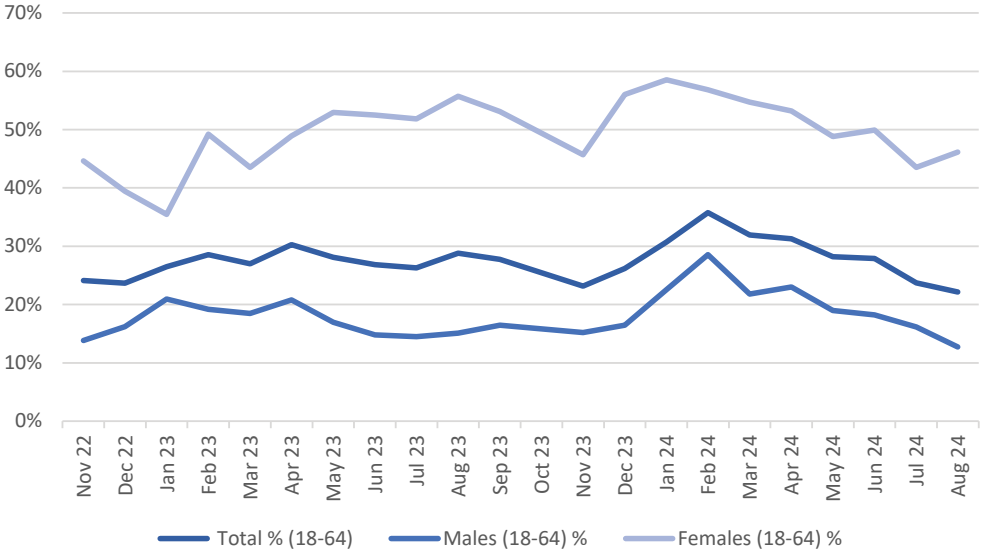
Monthly employment rate,18 to 64 years old (percent)



Source: Author's own elaboration based on data from RTM November 2022–August 2024. WFP, 2024.

Figure 45: Lebanon – Unemployment peaking in February 2024 before gradually improving through August 2024

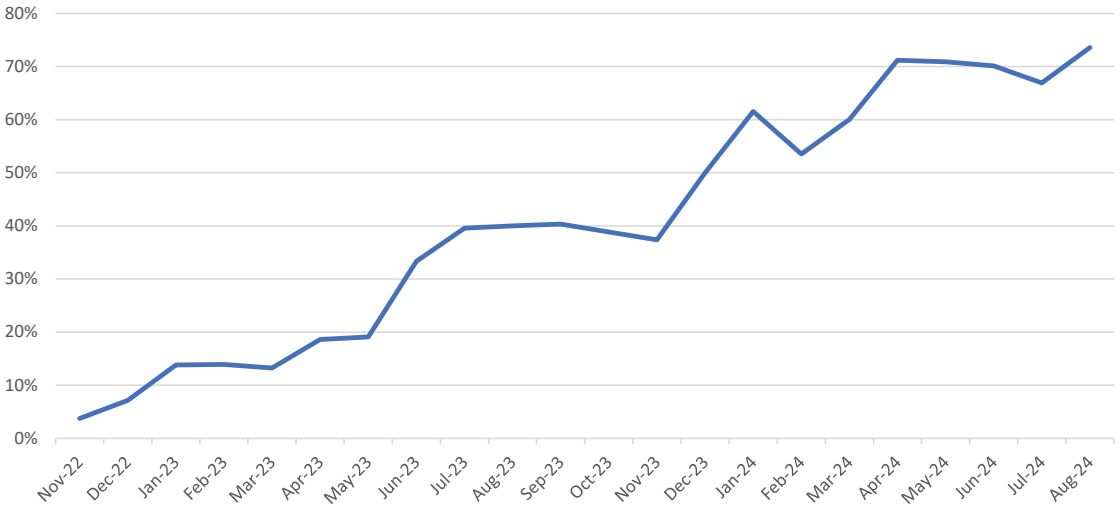
Monthly employment rate,18 to 64 years old (percent)



Source: Author's own elaboration based on data from RTM November 2022–August 2024. WFP, 2024.

Figure 46: Lebanon – Almost three-quarters of all wage employees were receiving their compensation in USD in August 2024, up from 4 percent in November 2022

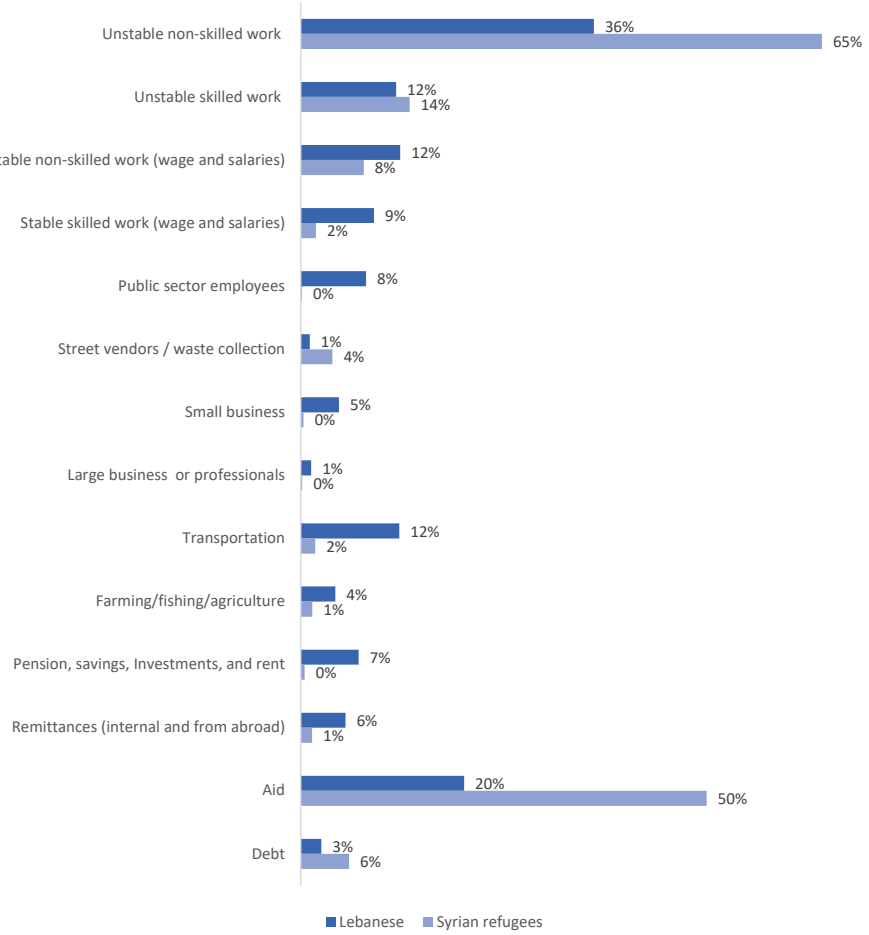
Share of employees receiving their compensation in USD (percent)



Source: Author's own elaboration based on data from RTM November 2022–August 2024. WFP, 2024.

Figure 47: Lebanon – Widespread reliance on unstable employment and aid among Syrian refugees, with more diversified income streams for Lebanese households

Income sources Lebanese residents and Syrian refugees



Source: Author's own elaboration based on data from RTM November 2022–August 2024. WFP, 2024.

Unemployment, measured by WFP's RTM using ILO's relaxed definition, also shows seasonal fluctuations, with an average rate of 27 percent over the period. The unemployment rate peaked at 36 percent in February 2024, reflecting economic slowdowns in winter, and dropped to a low of 22 per-cent in August 2024 during peak tourism and agricultural seasons. A significant gender gap in unemployment was evident, with men's average unemployment at 18 percent compared to 50 percent for women, a 31-percentage point difference. This highlighted not only the limited job opportunities available to women but also the systemic barriers they face in entering and staying in the workforce.

Both Lebanese youth and Syrian refugees were experiencing high NEET (Not in Education, Employment, or Training) rates, indicating widespread economic disengagement. Lebanese youth have a NEET rate of 20 percent with 23 percent of young women and 17 percent of young men neither working nor studying. Syrian refugees face even higher NEET rates, with 45 percent of youth among refugees, including 58 percent of women, in this category. These figures reveal the severe economic obstacles Syrian refugee women encounter, with limited pathways to education or stable employment. Economic instability, restricted job opportunities, and cultural expectations are key factors driving these high NEET rates for both groups, particularly for women.

Sectoral employment distribution further illustrates disparities between Lebanese workers and Syrian refugees. Lebanese workers are relatively well-represented across formal sectors such as public administration (12 percent) and education (11 percent), which offer greater job stability and benefits but are largely inaccessible to refugees. In contrast, Syrian refugees are concentrated in informal, labour-intensive sectors, with 27 percent employed in other service activities which include low skilled jobs in the hospitality and cleaning sectors, 22 percent in agriculture, and 16 percent in construction. This reliance on informal work reflects legal restrictions and economic vulnerability among refugees, who are excluded from more secure job opportunities in the formal sector.

The analysis of income sources from November 2023 to August 2024 using RTM data highlights further economic contrasts. Lebanese households have more diversified income streams, with notable contributions from temporary skilled (12 percent) and permanent unskilled work (12 percent), public sector jobs (8 percent), and small businesses (5 percent). In contrast, Syrian refugees rely heavily on temporary unskilled work (65 percent) and aid (50 percent), underlining their economic precarity and limited job stability. Regionally, income disparities are also pronounced. Rural areas like Bekaa and Akkar show a high dependence on temporary unskilled work, with 59 percent and 53 percent of households, respectively, relying on this income source. These areas also have a greater reliance on aid, with 47 per-cent of households in Baalbek-El Hermel and 37 percent in Akkar dependent on external assistance. In contrast, urban areas like Beirut and Mount Lebanon benefit from more diversified income sources, with 21 percent of households in Beirut earning from permanent unskilled jobs and 15 percent in Mount Lebanon relying on permanent skilled roles, reflecting greater economic stability and access to formal employment.

Moreover, from November 2022 to August 2024, Lebanon saw a marked increase in wage dollarization, with the proportion of wage employees receiving salaries in USD rising to 70–75 percent by August 2024. This shift reflects employers' efforts to counteract currency depreciation and maintain purchasing power, as the local currency's instability has eroded the value of wages. The trend toward dollarization underscores Lebanon's adaptation to economic challenges, with USD payments becoming a critical tool for preserving wage stability in an unpredictable financial climate. Overall, these data reveal a complex picture of Lebanon's labour market, marked by seasonal employment fluctuations, pronounced gender and refugee disparities, and significant economic challenges in rural regions. Lebanese workers benefit from greater access to formal employment and diversified income sources, while Syrian refugees, especially women, face substantial barriers, often limited to low-wage, informal sectors. The high NEET rates, particularly among refugees and women, further underscore the need of policies that address job creation, skills training, gender inclusivity, and economic stability to support Lebanon's vulnerable populations.

Exposure to shocks and main constraints

FGD among Lebanese participants reported job losses since Lebanon's economic crisis and a heavy reliance on informal and seasonal employment work that offered little security or benefits. Households faced significant challenges in maintaining stable incomes, often reporting a sharp decline over the past years due to the economic crisis. Employment opportunities were a key topic, with many expressing frustrations over the lack of viable options. While some beneficiaries received assistance through job creation and skills training programmes, participants noted that these initiatives often did not meet their immediate needs. The discussions also highlighted gender dynamics in employment, with many women facing additional barriers to securing work. A female participant shared, "It's hard for us women to find jobs. We often have to stay at home, taking care of the children while our husbands look for work." This underscores the role of traditional gender roles in shaping employment opportunities and highlights the need for targeted support to empower women in the labour market. Furthermore, rising household expenses have significantly impacted families' ability to save and cope with shocks.

Among Syrian refugees, household income for both beneficiaries and non-beneficiaries is primarily derived from low-wage, informal employment. Beneficiaries reported that cash-based food and non-food assistance helped supplement their income, but many still struggled to meet basic needs. Non-beneficiaries, in contrast, reported higher levels of income instability, often leading to food insecurity and reliance on borrowed money or community support. The fragility of their livelihoods was evident, as many participants mentioned that their earnings were often not enough to cover essential expenses.

Participants in the discussion also emphasized the precarious nature of their employment, often engaging in unskilled labour, with many having experienced job loss due to the economic crisis in Lebanon. The unpredictability of labour opportunities forced beneficiaries to adapt quickly, leading some to take on multiple short-term jobs just to make ends meet. Non-beneficiaries on their part reported a greater level of desperation, with many unable to find stable work. They often resorted to unsafe practices, such as sending children to work or accepting jobs that exposed them to dangerous conditions. In addition, expenses for both groups have surged over the past few years, making savings nearly impossible. Beneficiaries often struggle to cover rent, medical expenses and food, prioritizing immediate needs. One participant stated, "I pay rent first; if my landlord threw my stuff outside, it would be a catastrophe." Non-beneficiaries reported an even bleaker outlook, often unable to afford basic needs and accumulating debts to survive. Many families expressed that they were trapped in a cycle of borrowing just to pay for essentials.

Key informants in North and Akkar indicate that the agricultural sector is facing significant challenges due to production issues caused by climate change, high production costs and export restrictions, that have contributed to reducing crop productivity, particularly for apples and potatoes. Civil society representatives note a decline in job opportunities across various sectors, especially construction and agriculture, which has left many individuals struggling to find stable employment. Additionally, rising living costs have made it difficult for even families with multiple income earners to afford essentials such as rent, food and healthcare.

Key informants from Bekaa Governorate have identified significant challenges in the agricultural sector, where economic shocks, including inflation and competition from foreign produce, have adversely affected local farmers despite high agricultural output. Labour shortages in the agricultural sector, along with Lebanese workers' reluctance to accept low wages, have increased dependence on Syrian labour. In Baalbeck and Hermel governorates, the influx of Syrian workers has become essential to local agriculture, with restrictions on their movement, due to lack of legal documentation, posing potential risks to agricultural productivity and food availability.

Farmers in Bekaa face issues such as limited access to quality inputs like seeds and fertilizers, a lack of technical knowledge and insufficient market linkages, which hinder their livelihoods. The absence of government support for local agriculture further exacerbates these challenges, making farmers more vulnerable to market fluctuations and economic shocks.

Livelihood coping

Lebanese residents

The Livelihood Coping Strategy Index (LCSI) measures the adoption of negative coping strategies used by households in response to livelihood challenges. The strategies are divided into stress coping (short-term measures that may have minimal impact on future livelihood sustainability), crisis coping (actions that directly affect future productivity and livelihood sustainability) and emergency coping (severe measures that can significantly undermine future livelihood potential). Certain strategies were classified under different levels of severity based on the context and specific vulnerabilities of each population group.

RTM data indicates a sustained reliance on crisis-level coping strategies over the observed period, with emergency coping strategies remaining low but persistent. Between 14 percent and 19 percent of households employed crisis coping strategies, peaking at 19 percent in November 2023, March and August 2024, likely due to economic stressors such as inflation and income instability. Temporary improvements in household livelihoods were noted in January and June 2024, when the percentage using crisis strategies dropped to 14 percent.

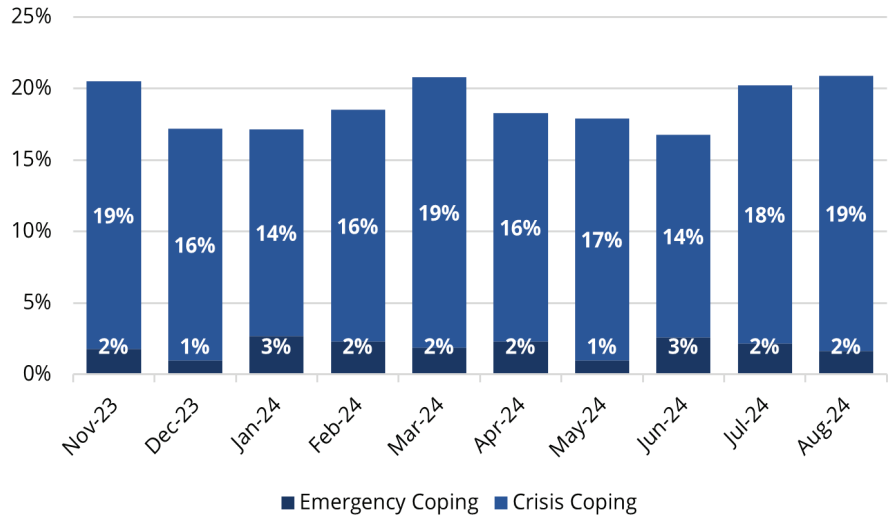
Emergency coping strategies were less frequently utilized, ranging from 1 percent to 3 percent of households, with peaks of 3 percent in January and June 2024. These fluctuations may indicate periods of significant economic distress, where some households had exhausted other options for coping.

Stress coping strategies remained consistently high throughout the period, with the most common being the reduction of non-essential health expenditures (69–77 percent) and purchasing food on credit (66–76 percent). Among crisis coping strategies, reducing essential health expenditures ranged from 30 percent to 39 percent, peaking in July 2024. The most prevalent emergency strategy was begging for money or food, which peaked at 4 percent in January 2024.

In addition to the financial coping strategies that households have had to apply, such as buying food on credit or borrowing money to cover food needs, qualitative data from the CFSAM indicated that some Lebanese beneficiaries have chosen to forgo healthcare and essential medications to allocate more resources toward food. One participant noted, "I stopped going to the doctor because I need that money for food. I am worried about my health, but I must feed my children first." This highlights the difficult choices families face, prioritizing immediate survival over long-term health. Additionally, some participants reported exploring small-scale income-generating activities, such as

Figure 48: Lebanon – Lebanese residents – Fluctuations and recent uptick in severe livelihood-based coping

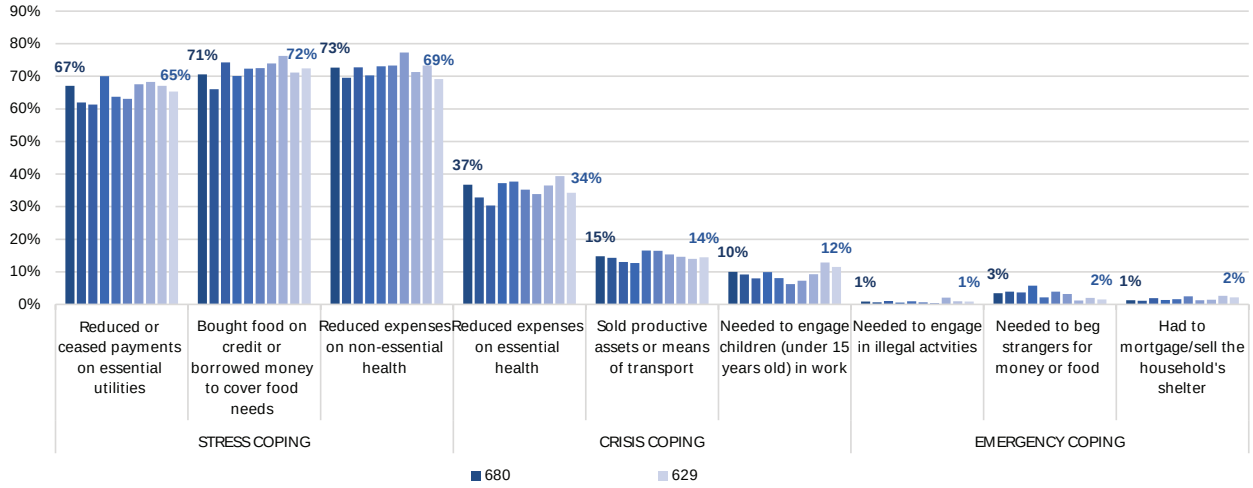
Households applying critical livelihood coping strategies per month (percent)



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

Figure 49: Lebanon – Lebanese residents – Reducing essential expenses and relying on credit are the most widespread strategies

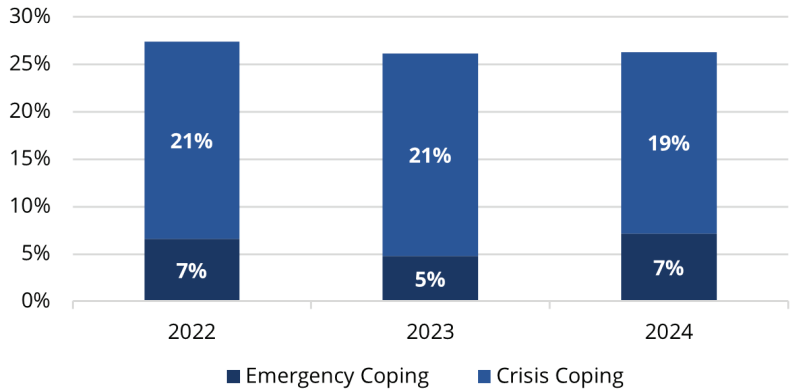
Most applied livelihood coping strategies per month (percent)



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

Figure 50: Lebanon – Syrian refugees – One-quarter of household are implementing critical livelihood coping since 2022

Households applying critical livelihood coping strategies per year (percent)



Source: Author's own elaboration based on data from VASyR 2022–2024. WFP, 2024.

selling homemade goods or providing local services, as a coping mechanism. A common strategy among both beneficiaries and non-beneficiaries was reliance on social networks, which they identified as crucial for managing food insecurity. As a beneficiary from Tyre stated, "We look out for each other; if someone has extra food, they share it with those in need." Additionally, participants frequently discussed financial coping strategies, with many resorting to borrowing money from friends and relatives to make ends meet and afford to buy food.

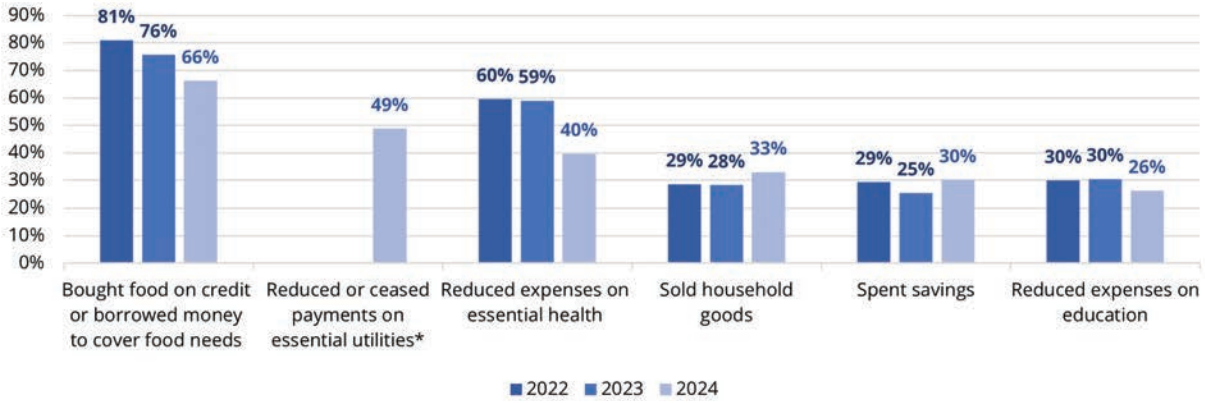
Syrian refugees

VASyR trends indicate sustained reliance on coping strategies in 2024, hinting at lingering vulnerabilities in household resilience. Crisis coping strategies decreased slightly to 19 percent in 2024, down from 21 percent in the previous year, reflecting enhanced economic stability and continued humanitarian support. Emergency coping strategies, after dropping to 5 percent in 2023, rose slightly to 7 percent in 2024, suggesting that some vulnerable households still face significant challenges.

Buying food on credit or borrowing money remains the most prevalent coping strategy but has decreased to 66 percent of households, down from 81 percent in 2024 and 76 percent in 2023, signaling reduced financial strain. Reducing expenses on health and education also saw a notable improvement, with

Figure 51: Lebanon – Syrian refugees - Decrease in the prevalence of the most widespread strategies between 2022 and 2024

Most applied livelihood coping strategies per year (percent)



Note: Introduced in 2024.

Source: Author's own elaboration based on data from VASyR 2022–2024. WFP, 2024.

49 percent of households cutting back on health expenditures in 2024, compared to 59–60 percent the previous two years, while 26 percent spent less on education, down from 30 percent the two years earlier. A slight increase was observed in selling household goods (28–33 percent) and spending savings (25–30 percent) between 2023 and 2024, reflecting ongoing hardship in some households. Some 49 percent of households reduced or stopped payments on essential utilities in 2024.

In the FGDs, many Syrian participants reported difficulties in affording basic needs, leading to increased debt as a means of survival. Some felt trapped in a cycle of borrowing to cover essentials. Similar to the case of food related coping strategies, which varied widely between beneficiaries and non-beneficiaries, reflecting their differing levels of support and resource availability. WFP beneficiaries indicated that they had to sell personal belongings to meet urgent expenses and sought informal work to supplement their income. This often resulted in exploitation, as they accepted low wages and faced unsafe working conditions due to pressing financial needs. Non-beneficiaries adopted more drastic coping strategies, frequently putting themselves in risky situations. Many turned to begging or relied on community support networks for food. Others utilized credit lines at local markets to obtain necessary items, which further complicated their financial stability.

Humanitarian and social assistance in Lebanon

Food assistance remains crucial in Lebanon, as all population groups continue to face severe economic, social, and security challenges. According to the Food Security and Agriculture Sector (FSAS), approximately 2.4 million people, including Lebanese citizens, Syrian refugees, Palestine refugees, and migrants, required food security assistance in 2024. While this marked a decrease from 3.1 million people in 2023 (equivalent to 54 percent of Lebanon's population) to 2.4 million in 2024 (43 percent of the population), the need for food assistance remained high.

FSAS financial requirements amounted to USD 1.2 billion in 2023 and to USD 780 million in 2024. Despite lower requirements, funding gaps remained significant, with only 13 percent of the budget requirements met in 2023 and 17 percent of the 2024 budget requirements met by mid-year. These financial constraints forced the FSAS to reduce the scope of assistance, resulting in lower cash transfers per household, less frequent distributions for Lebanese residents, and reduced coverage for Syrian refugees. The funding shortfalls also underscore the ongoing challenges in meeting food security needs for Lebanon's vulnerable populations amidst worsening economic and security conditions.

[an] Gaza war: Preliminary findings on the socioeconomic and environmental impact on Lebanon, December 2023.

Lebanese residents

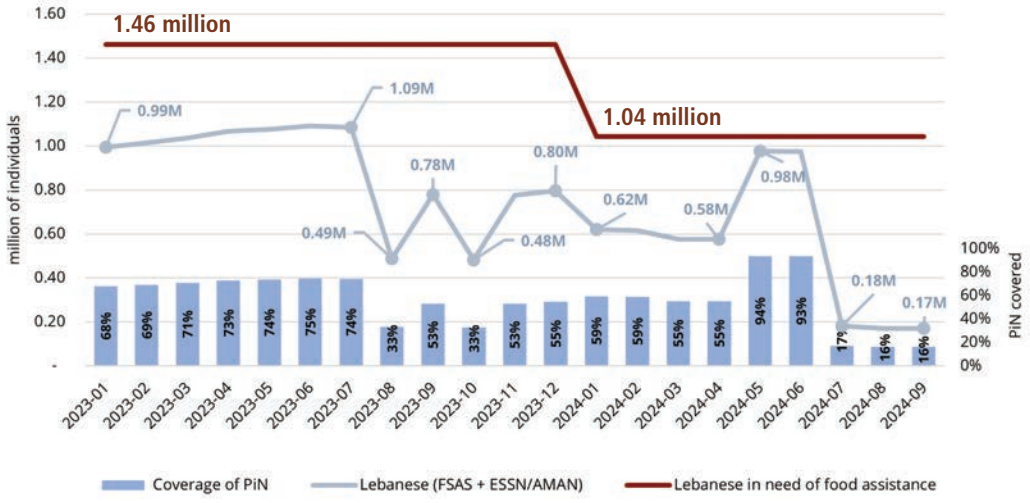
Over the past two years, Lebanese residents primarily received assistance through three major social assistance programs aimed at addressing food insecurity and poverty: the National Poverty Targeting Programme (NPTP), implemented by Lebanon's Ministry of Social Affairs (MoSA) and the Presidency of the Council of Ministers (PCM) with support from WFP, ESSN/AMAN, a national social protection programme funded by a World Bank loan and also managed by MoSA and PCM in collaboration with WFP; and WFP's Emergency Response (ER) program. Together, these programs, supplemented by humanitarian food assistance from FSAS partners, provided essential support to economically vulnerable Lebanese households in 2023 and 2024. While both NPTP and ESSN/AMAN primarily offered cash-based transfers to help recipients meet basic needs, WFP's ER programme provided regular in-kind food assistance, ensuring that Lebanese households have access to essential food supplies during a time of heightened economic instability and food insecurity.

NPTP experienced severe financial challenges in 2024, securing only USD 33.3 million, just 23 percent of its USD 147 million target for the year. With no additional contributions after June 2024, NPTP support for economically vulnerable Lebanese households ceased in July 2024. Meanwhile, the ESSN/AMAN programme, which had supported around 390 000 economically vulnerable Lebanese in July 2023, saw a marked reduction in coverage. From August 2023 to February 2024, it was assisting an average of only 60 000 individuals, as many families had reached the 18-month maximum benefit duration. In May 2023, the World Bank approved an additional USD 300 million to expand the program, aiming to support up to 160 000 families over a 12-month period. However, delays in finalizing the loan agreement postponed its implementation, resulting in a suspension of ESSN/AMAN transfers from February to April 2024. Two additional ESSN/AMAN payments took place in May and June 2024, but no further payments occurred between July and September. The ESSN/AMAN programme was expected to resume in October as a unified social safety net, integrating former NPTP beneficiaries and reaching approximately 800 000 vulnerable Lebanese. Similarly, WFP's ER programme reduced its coverage starting in January 2024, decreasing from 310 000 beneficiaries in December 2023 to 168 000 in June 2024.

Data from FSAS partners and WFP on assistance coverage showed that food and cash assistance reached over one million Lebanese in the first half of 2023. Coverage peaked in June 2023 with over 1.15 million individuals reached. However, from

Figure 52: Lebanon – Lebanese residents – Funding shortfalls and delays in the extension of ESSN/AMAN have led to a drop in assistance coverage in late 2024

Coverage of Lebanese in need of assistance, January 2023–September 2024



Source: Author's own elaboration based on data from FSAS January 2023– September 2024. WFP, 2024.

August onwards, the number of recipients dropped sharply, declining to about 491 000 in August and experiencing fluctuations for the remainder of the year, ultimately reaching over 817 000 recipients in December. In 2024, the downward trend continued as the number of recipients steadily declined each month. Starting with nearly 630 000 recipients of food assistance in January, coverage consistently decreased to 171 000 in July, August and September 2024 reaching only 16 percent of the vulnerable Lebanese in need of assistance. Coverage of assistance was expected to increase to nearly full coverage starting in October 2024 as ESSN/AMAN payments to over 800 000 vulnerable Lebanese were expected to resume.

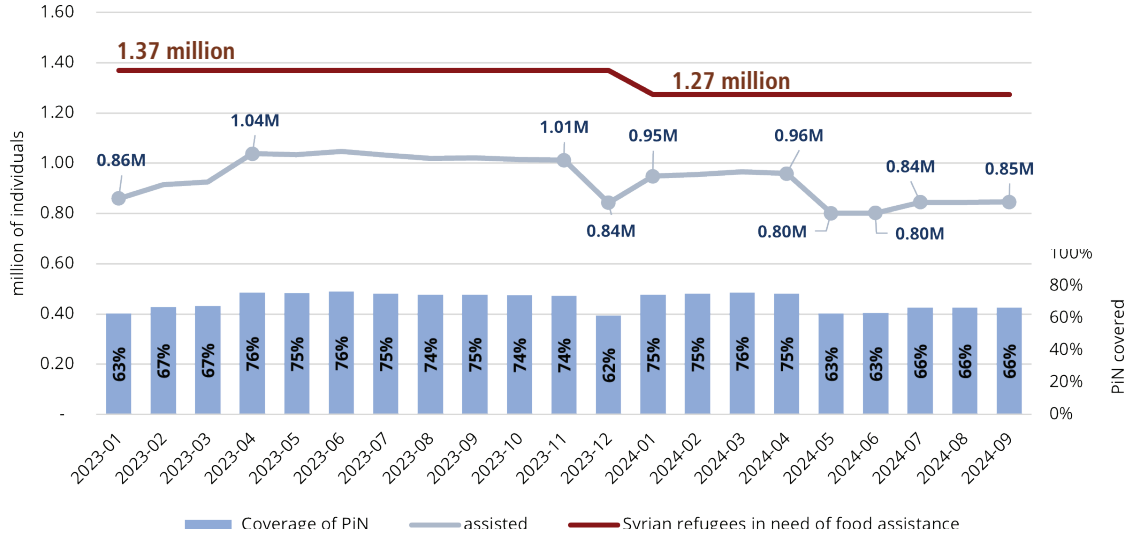
Syrian refugees

Syrian refugees receive cash-based transfers to meet their food and other essential needs mainly through different modalities, including either restricted food vouchers or unrestricted cash for food and non-food needs.

The data on Syrian refugees receiving cash-based food assistance in Lebanon from January 2023 to September 2024 also reveal a reduction in the coverage of assistance, reflecting funding challenges faced by FSAS partners in Lebanon. In late 2023, UNHCR and WFP indicated that the proportion of Syrian refugees receiving monthly assistance would be reduced from 90 percent to 60 percent, starting in December 2023. WFP further announced in May 2024 that assistance for an additional 35 000 households receiving food e-vouchers would be discontinued, impacting about 15 percent of the total refugee population. Consequently, the number of Syrian refugees receiving food cash-based assistance decreased from around 1.01 million in November 2023 to about 850 000 in September 2024, highlighting the substantial impact of limited funding for humanitarian support and underscoring the urgent need for additional resources to maintain adequate aid levels. In 2024, coverage rates improved slightly to around 75–76 percent in the first quarter but began to decrease notably from May onwards. From May to September, coverage ranged between 63 percent and 66 percent, underscoring the persistent funding challenges and the growing difficulty in sustaining high assistance levels. The coverage of assistance to Syrian refugees was expected to increase starting in October 2024 as, in response to increasing needs and the limited access for most Syrian families to other emergency assistance programmes, around 122 000 additional Syrian refugee families were expected to be cash assistance for basic needs, in addition to the 164 300 families already assisted prior to October.

Figure 53: Lebanon – Syrian Refugees - Constrained funding resulted in the discontinuation of assistance for a large portion of households in the second half of 2024

Coverage of Syrian refugees in need of assistance, January 2023–September 2024



Source: Author's own elaboration based on data from FSAS January 2023– September 2024. WFP, 2024.

Adequacy of cash assistance

In 2024, the FSAS in Lebanon has set a need-based recommended transfer values for cash assistance. For food assistance, the recommended transfer is USD 25/person/month, capped at a maximum of six household members. For non-food assistance, the recommended transfer is USD 100/household/month. Need-based transfer value is informed by the gap analysis, a method used to determine the appropriate amount of cash assistance needed by vulnerable households to afford the MEB. Currently, both Lebanese and Syrian refugees face substantial uncovered gaps, with current assistance levels falling short of covering the MEB.

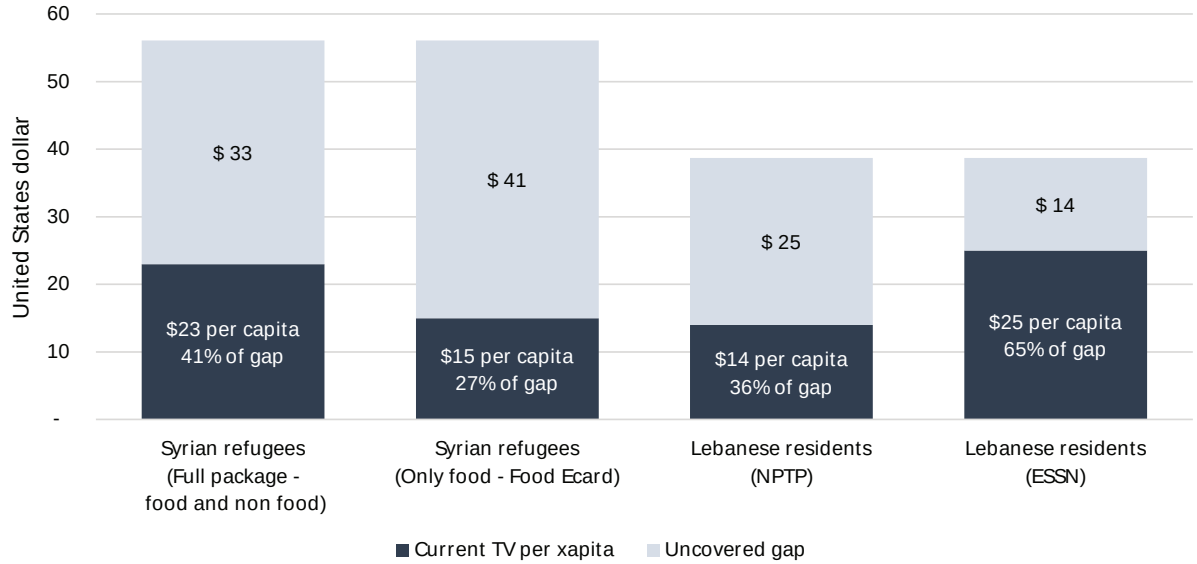
Lebanese benefiting from the ESSN/AMAN and NPTP programmes receive USD 20/person/month for food (capped at six members per household) and an additional USD 25/household for non-food needs. However, due to funding constraints, starting in January 2024, and until June 2024, Lebanese households benefiting from the NPTP have been receiving a reduced transfer value of USD 10/month for food capped at a maximum of five household members per family and USD 20/household for non-food. For households benefiting from the NPTP received on average USD 14/capita in 2024, covering 36 percent of their needs, with an unmet gap of USD 24.7. Lebanese under the ESSN/AMAN programme had a higher coverage in 2024, with an average transfer of USD 25/capita meeting 65 percent of their needs, leaving a gap of USD 13.7.

Syrian refugees in Lebanon also receive cash-based transfers for food and non-food needs, delivered through restricted food vouchers or unrestricted cash. However, not all Syrian refugee households receive the full package, leading to variability in support coverage. In May 2023, Syrian refugee families have been able to redeem their assistance in USD or LBP receiving USD 20/person for food (up to a maximum of 5 individuals) and USD 25/household for other basic needs. However, since December 2023 and due to funding constraints, cash assistance for Syrian refugees has been set at USD 15/person for food and USD 40/household for non-food needs. Starting November 2024, the transfer value for Syrian refugees was expected to increase to USD 20/person/month (capped at five household members) for the food component, and USD 45/household for the non-food component. The transfer value increase was originally planned for January 2025, but anticipated considering the escalation of the conflict.

The current transfer value for Syrian refugees benefiting from the full assistance package (food and

Figure 54: Lebanon – Lebanese residents and Syrian refugees – Facing substantial uncovered gaps, with current assistance levels falling short of covering the MEB

Current transfer value coverage of gap with MEB (United States dollar)



Source: Author's own elaboration based on data from LVAP 2022–2023 and VASyR 2024. WFP, 2024.

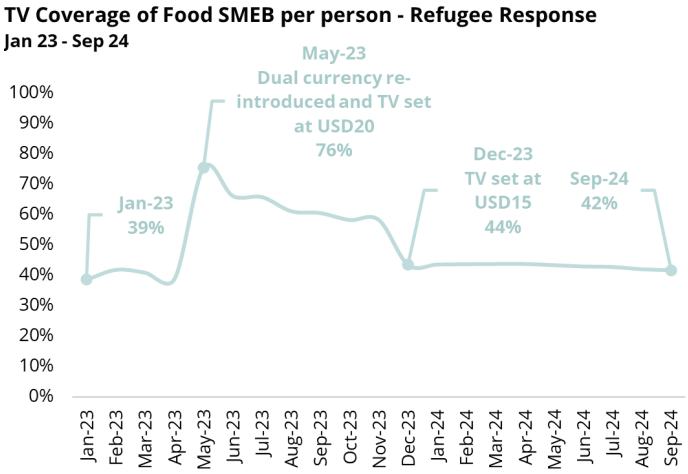
non-food) averaged USD 23/capita in September 2024 covering 41 percent of the identified gap while those receiving food-only assistance (Food E-card) received on average USD 15/capita, covering just 27 percent of the identified gap, leaving substantial gaps of USD 33.1 and USD 41.1, respectively.

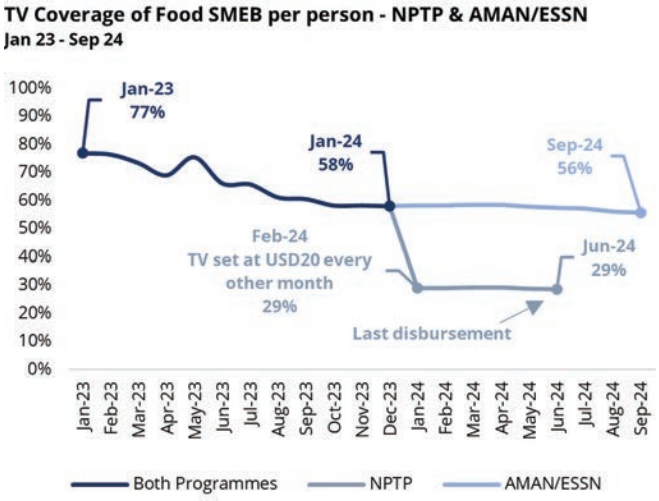
The purchasing power of assistance is also measured against SMEB, to assess the adequacy of cash transfers in meeting essential costs. In Lebanon, funding shortages have compounded the impact of inflation on the purchasing power of cash assistance for vulnerable populations, further limiting the ability of Lebanese residents and Syrian refugees to meet essential needs. As inflation drove up the cost of SMEB, funding constraints forced cash assistance programs to reduce both the amount and frequency of transfers, deepening the gap between aid levels and basic living costs.

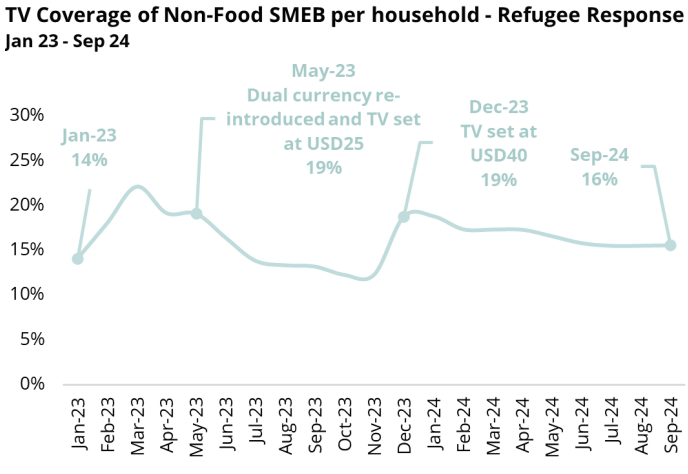
For Lebanese households benefiting from the NPTP, food assistance covered 77 percent of the SMEB in early 2023, but by mid-2024, SMEB coverage had dropped to 29 percent, driven by both inflation and funding limitations. Syrian refugees experienced a similar decline in support, with food assistance covering 76 percent of the SMEB in early 2023 after an increase in the transfer value amount, up from 39 percent in April 2023, but only around 42 percent by mid-2024. The transfer value coverage of the non-food SMEB for ESSN/AMAN and NPTP dropped from 17 percent for both programmes in January 2023 to 10 and 8 percent, respectively, in June 2024, with slight fluctuations observed throughout the period of analysis.

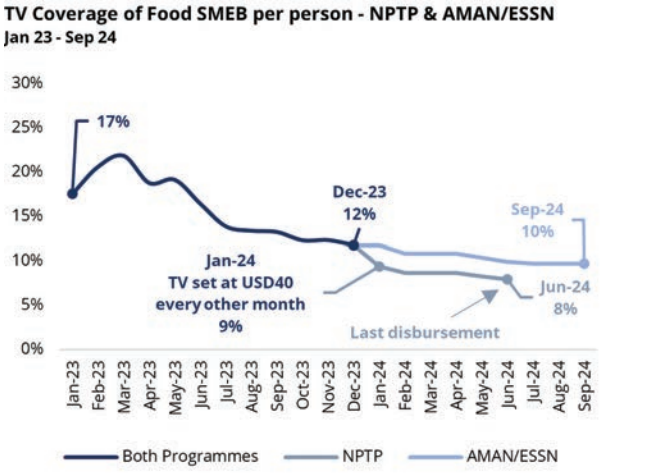
Figure 55: Lebanon – Funding shortages have compounded the impact of inflation on the purchasing power of cash assistance

Transfer value coverage of Food and Non-Food SMEBs









Source: Author's own elaboration based on data from WFP SMEB and Market Analysis January 2023– September 2024. WFP, 2024.

Assistance outcomes

Assistance outcomes are tracked by Basic Needs Outcome Monitoring (BNOM) surveys. Outcome monitoring of ESSN/AMAN and NPTP programmes is led by MoSA and supported by WFP. Since December 2020 WFP also conduct BNOMs to track assistance outcomes among Syrian refugees on a quarterly basis.

Lebanese residents

The most recent outcome monitoring data for the ESSN/AMAN were collected in November 2023, while for the NPTP the latest data available are from May 2024.

Despite loss of purchasing power of cash-based assistance, among ESSN beneficiaries, food security improved in 2023. In November 2023, 81 percent of active ESSN households were food secure, with a drop in moderate food insecurity from 29 percent in March to 18 percent by year-end. Three-quarters of households achieved acceptable food consumption (up from 61 percent in March) and the use of severe consumption-based coping strategies also declined to 29 percent by November. NPTP beneficiaries also showed positive trends in food security, with a reduction in food insecurity from 16 percent in December 2023 to 12 percent in May 2024.

Acceptable food consumption scores increased to 83 percent in May 2024. In addition to cash assistance these results were likely driven by the exchange rate stability, dollarization of the economy and incomes, and a more stable economy in late 2023 and early 2024. However, women headed households, disability-headed households and youth-headed households remained more food insecure compared to other groups and continue to face higher vulnerability. Despite food security gains in 2023 and 2024, irregular ESSN/AMAN payments and the suspension of the NPTP have likely increased the vulnerability of affected populations, intensifying food insecurity and have likely pushed households to adopt more severe coping mechanisms against assistance shortfalls in late 2024.

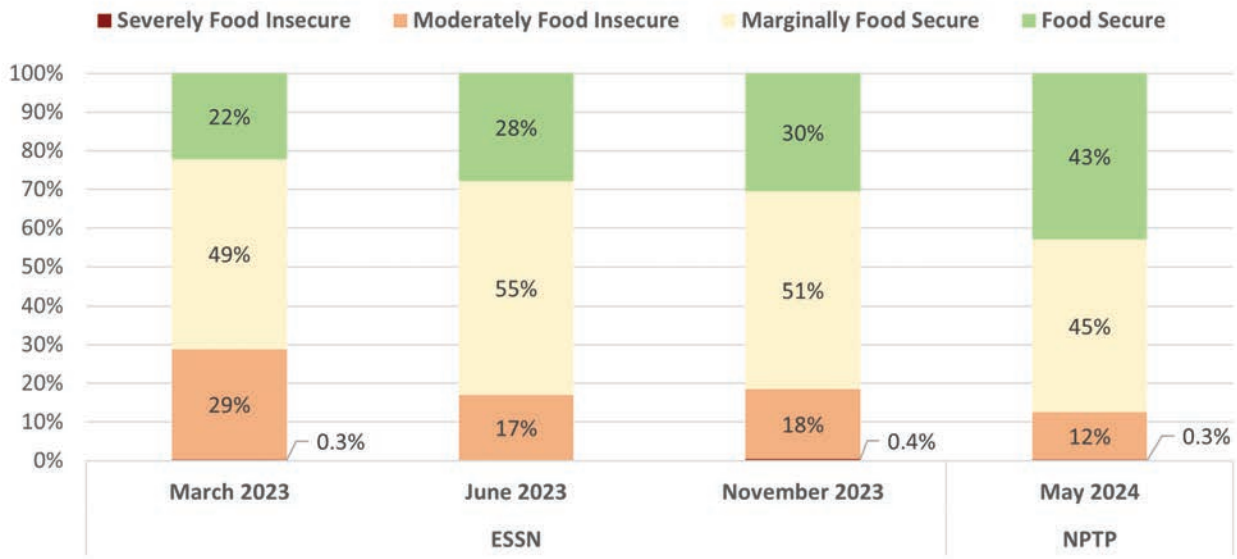
Syrian refugees

WFP's BNOM data showed that food security among Syrian refugees receiving assistance improved notably in 2023, aided by dual currency disbursements for cash assistance and a more stable economy.

Among assisted households, food security rose from 8 percent in March to 38 percent in December, with food insecurity decreasing to 20 percent. Significant improvements were observed between March and July 2023, where food security among assisted households rose by 27-percentage points, reaching 73 percent, driven largely by an increase

Figure 56: Lebanon – Lebanese beneficiaries – Improving outlook across assistance modalities

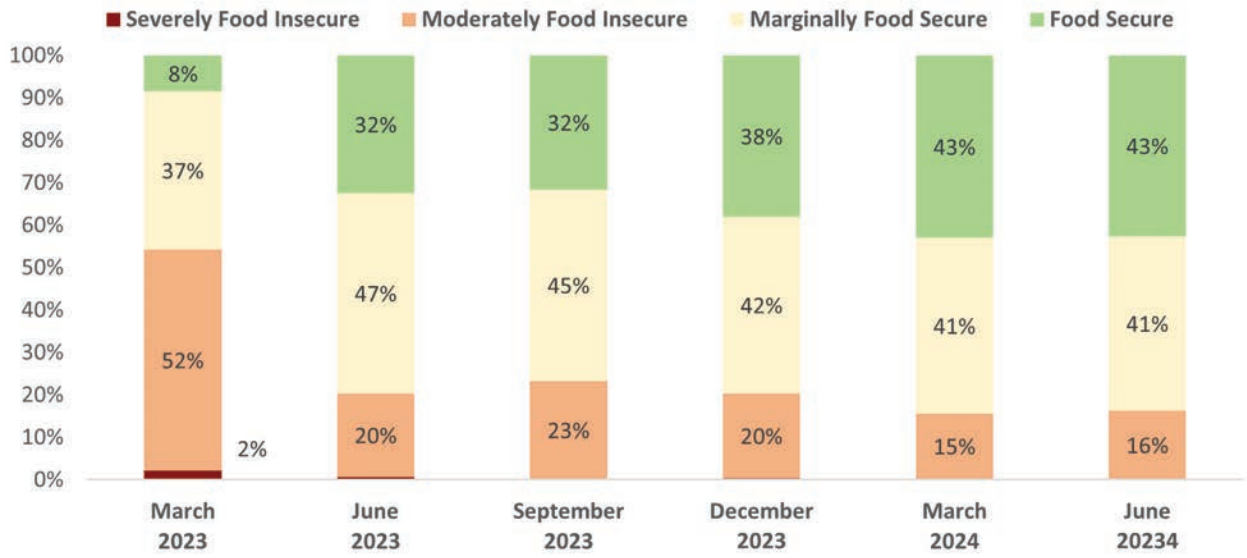
Lebanese residents, CARI Food Security Classification (percent)



Source: Author's own elaboration based on data from Basic Need Outcome Monitoring (BNOM) March 2023–May 2024. WFP, 2024.

Figure 57: Lebanon – Syrian refugees – Increased transfer values and economic recovery led to improving food security

Syrian refugees, CARI Food Security Classification



Source: Author's own elaboration based on data from Basic Need Outcome Monitoring (BNOM) March 2023–May 2024. WFP, 2024.

in marginally food-secure households. Food security outcomes of Syrian refugees continued to improve in 2024, as the prevalence of food insecure households receiving assistance further dropped to 16 percent and the share of fully food secure families increased to 43 percent.

However, disparities persisted. Male-headed households showed greater improvement in food security than female-headed households, with a gap of 10-percentage points by December. Elderly-headed and disability-headed households also faced higher food insecurity, with only 26 percent of households led by individuals with disabilities achieving full food security, and severe food insecurity more prevalent in these groups. Younger and middle-aged households saw better improvements compared to elderly-headed households, likely due to greater employment opportunities. However, while food security among male-headed households remained steady, with 87 percent food secure in March 2024 and 86 percent in August 2024, food insecurity among female-headed households increased slightly from 75 percent in March to 79 percent in August 2024, creating a 7-percentage point gap between male and female-headed households in August 2024.

Despite improvements in their food security situation in the year and a half to August 2024, assisted Syrian refugee households continue to face high level of vulnerability and limited resilience. In August 2024, the share of assisted households living above MEB threshold was only 36 percent. However, when excluding the value of assistance, 88 percent of assisted households would have expenditures below he MEB threshold. Some 33 percent of assisted households had inadequate food intake and continue to heavily rely on negative coping livelihood strategies in August 2024.

Assistance cuts in 2024

As of January 2024, a reduction in the level of humanitarian and social assistance in Lebanon impacted Lebanese, Syrian refugees, and Palestine refugees.

Lebanese residents

According to WFP RTM, the percentage of Lebanese with an inadequate food consumption score rose from 16 percent in December 2023, before the cuts began (with 2 percent classified as having a poor score), to 20 percent in January 2024, the first month of cuts (with 4 percent having a poor score). Although this percentage decreased in the following

months, it increased again to 23 percent in May 2024 (with 5 percent having a poor score) before falling to 17 percent by August 2024, still higher than at the start of the year. Simultaneously, the percentage of households using medium or high food-based coping strategies rose from 73 percent in December 2023 to 79 percent in January 2024, remaining elevated in the following months and reaching 76 percent by August 2024. Additionally, the percentage of households employing crisis or emergency livelihood coping strategies increased from 17 percent in December 2023 to 21 percent by August 2024.

The October 2023 IPC acute food insecurity analysis indicated that 15 percent of the Lebanese population was classified in IPC Phase 3 (Crisis) or above, equivalent to approximately 582 000 individuals, with 1 percent in IPC Phase 4 (Emergency), representing about 41 000 individuals. This percentage was consistent with the initial projection for April to September 2024. However, the March 2024 IPC update reported a 3-percentage point increase in the proportion classified as IPC Phase 3 (Crisis) or above, raising the total to 18 percent, roughly 683 000 people.

Findings from the Mission indicated that Lebanese participants had mixed feelings about the role of assistance programmes in addressing food insecurity. Beneficiaries generally recognized the value of support options like food vouchers, cash assistance, and nutritional programs, describing them as essential for their well-being. In contrast, many non-beneficiaries expressed uncertainty about how to access aid or what resources were available to them. The discontinuation of assistance programs was a recurring theme in the discussions. Beneficiaries expressed concern about the potential effects on their food security and overall quality of life. Non-beneficiaries also raised concern about the cessation of support, although they did not receive direct assistance, they felt the broader economic impacts, such as rising prices and heightened vulnerabilities within their communities. Former beneficiaries also reported frustration over their inability to afford food at previous levels.

Syrian refugees

Assistance cuts to Syrian refugees materialized amid ongoing economic hardship in Lebanon, stemming from the financial crisis that began in 2019.

According to WFP's RTM, the percentage of Syrian refugees with an inadequate food consumption score rose from 30 percent in November 2023, before the cuts, to 43 percent by February 2024. This includes an increase in those classified with a poor score, from 4 percent to 12 percent, indicating a tripling of this group. Simultaneously, the percentage of households employing limited or no food-based coping strategies, such as purchasing less expensive food or restricting adult consumption, declined from 18 percent in November 2023 to 14 percent by February 2024. Conversely, those using high coping strategies increased from 43 to 48 percent during the same period. Specific strategies showed that limiting portion sizes was reported by 74 percent of the refugee population, up from 64 percent, while nearly 60 percent restricted adult consumption in favor of children by February 2024.

In the first quarter of 2024, among non-assisted but eligible households that lost assistance due to reduced funding, 9 percent reported a poor food consumption score. Additionally, the percentage of households employing severe food-based coping strategies increased to 27 percent for assisted families and 30 percent for non-assisted but eligible families, up from 22 percent at the start of the dual currency implementation and at the end of 2023. Furthermore, the proportion of households with the economic capacity to meet their essential needs (ECMEN) above the SMEB declined from 40 percent after the dual currency disbursement reinstatement in the second quarter of 2023 to 32 percent by early 2024.

Among recipients of Food E-card vouchers, who experienced a 25 percent decrease in assistance for a family of five, the percentage of households with an acceptable food consumption score fell from 74 percent at the end of 2023 (and 73 percent in the second quarter of 2023) to 72 percent by early 2024. Conversely, the proportion of households with a high rCSI increased to 29 percent, up from 18 percent at the end of 2023 and 20 percent following the dual currency implementation in the second quarter of 2023. Additionally, the percentage of households with their ECMEN above the SMEB decreased from 59 percent at the end of 2023 to just 39 percent by the first quarter of 2024.

The October 2023 IPC analysis projected an increase in the percentage of Syrian refugees classified in IPC Phase 3 (Crisis) and above, rising from 27 percent of the population in October 2023 (approximately 411 000 individuals, including 2 percent in IPC Phase 4 (Emergency), or 28 000 individuals) to nearly 33 percent in the period from April to September 2024 (around 500 000 individuals, with 2 percent in IPC Phase 4 (Emergency), or 28 000 individuals). Those in IPC Phase 3 (Crisis) or higher require immediate humanitarian intervention to address food shortages, enhance dietary diversity, support livelihoods, and prevent acute malnutrition. The updated March 2024 IPC further raised the projection for refugees in IPC Phase 3 (Crisis) or above to 34 percent, equivalent to around 510 000 individuals. Notably, the percentage of Syrian refugees classified in IPC Phase 4 (Emergency) increased by one percent, totaling three percent, or approximately 39 000 individuals. The increase from 27 percent to 34 percent underscores the significant detrimental effects anticipated from these cuts, which extend beyond food insecurity to include negative impacts on health, nutrition, and the ability to meet other essential needs.

Concerns about protection and stability remain high, exacerbated by ongoing reductions in humanitarian assistance. Diminished aid risks undermining stability and may escalate tensions between host communities and refugees. Growing desperation as people struggle to meet essential needs could lead to conflicts over resources. The UNDP Tension Monitoring System (TMS) indicates that economic factors have historically been key sources of tension in the country, further intensified by job losses, persistent poverty, and declining service delivery. The combination of economic decline, high political instability, cuts in assistance, and concerns about securing essential needs, including food, significantly contributes to these tensions. Conditions are likely to persist as threats to Lebanon's stability, with the potential for inter- and intra-communal tensions to continue or intensify as communities compete for resources. The latest TMS survey from November 2023 shows that 84 percent of respondents (both Lebanese and Syrians) believe that the refugee presence in Lebanon strains the country's resources, with 54 percent citing competition for low-skilled jobs as a primary source of tension.

As the situation for refugees becomes increasingly desperate, there is a potential for increased migration flows. Reports from Cyprus have highlighted a rise in the number of Syrian refugees arriving by boat from Lebanon, with at least 600 arrivals reported over four days at the end of March and beginning of April 2024. Official data indicates that approximately 2 000 individuals arrived in Cyprus by sea in the first three months of 2024, compared to just 78 in the same period of 2023.

A previous study[126] on cash assistance in Lebanon found that both food and unconditional cash support had immediate positive effects on the well-being of Syrian refugee children, food security, and livelihood coping strategies. However, once the assistance ceased, there was no evidence of lasting benefits, even six months later. While households were able to increase their cash savings and acquire durable goods during the assistance period, they often depleted these resources shortly after aid ended. These findings align with trends observed in other contexts of high economic volatility. The depletion of coping mechanisms is likely to have lasting impacts on the health and education of an entire generation of Syrian refugees, affecting their future employment prospects and ability to build livelihoods. This situation could ultimately lead to increased financial burdens on host communities and supporting countries. As individuals continue to exhaust their coping strategies, the negative effects of ongoing cuts in assistance may further escalate in the medium to long term.

Findings from the qualitative data collected through the Mission reveal that many Syrian discontinued beneficiaries felt unjustly excluded or faced challenges in navigating the reapplication process after their support was discontinued. Participants reported feelings of abandonment and difficulty meeting basic needs without the assistance they once received. This sentiment was echoed by others who noted a growing divide between those receiving aid and those who were not. One participant remarked, "When we lost the assistance, we had to cut back on food, and my children had to start working to help us get by. It is a daily fight to survive." Additionally, some participants raised concerns that while the assistance provided short-term relief, it did not address underlying issues such as unemployment and limited job opportunities.

Escalation of the conflict

Since 8 October 2023, the escalation of the conflict in the southern border resulted in a significant humanitarian impact and has led to the displacement of more than 809 000 individuals according to the IOM Displacement Tracking Matrix (DTM) figures as of October 20, 2024. This was the result of the recent intensification of the conflict that, at the end of September 2024, has spread to new areas across the country, including central areas, Beqaa and the southern suburbs to Beirut. On 1 October 2024, Israel began a new ground operation inside Lebanese territory accompanied by air strikes targeting areas reportedly associated with Hezbollah.

As of 17 October 2024, the Lebanese Ministry of Public Health (MoPH) reports a total of 13 697 casualties due to the ongoing hostilities, including 2 412 conflicted-affected deaths.[115] National authorities estimated that over 1.3 million people are now directly affected and/or displaced by the conflict. IOM Displacement Tracking Matrix reports a total of 809 043 being displaced since 8 October and until 20 October 2024, with new displacements continuing to be reported. Displaced populations have sought safety in 1 100 locations, comprising villages and neighbourhoods, across 899 cadastres throughout Lebanon.[116]

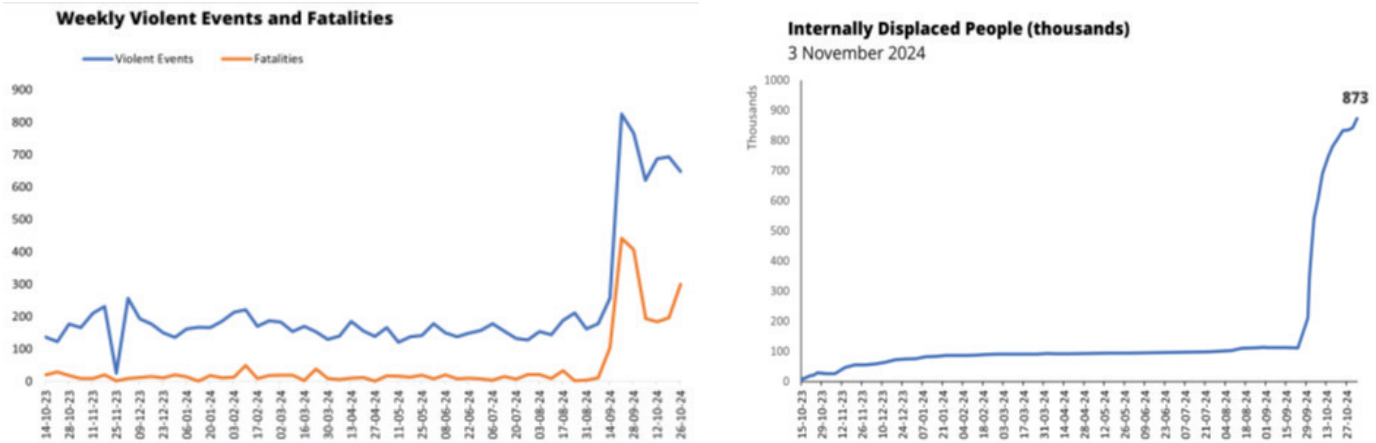
By 21 October 2024, 1 094 centres have been opened to receive displaced persons in public schools, educational complexes, vocational institutes and universities designated by the Ministry of Education and Higher Education, and institutes affiliated with the MoA, and in private schools, clubs and private halls in various Lebanese regions, of whom 901 centres have reached their maximum capacity.[117] A total of nearly 192 000 IDPs have been are being hosted in the shelters. The recent Flash Appeal that was launched on 1 October 2024, seeks USD 425.7 million to assist 1 million people affected by the crisis over the next three months.[118] Of those, USD 131 million were required for the food security sector response.

In addition, between 23 September and 21 October 2024, the Lebanese General Security recorded the crossing from Lebanese territory into the Syrian Arab Republic of around 486 700 people, including 341 849 Syrian citizens and 144 830 Lebanese citizens.[119] Acute food insecurity remains high in the Syrian Arab Republic, affecting more than half of the population, (13 million people) and mainly driven by the deterioration of the economy and by the escalation of conflict in several areas of the country. Almost 16 800 Lebanese citizens have also arrived in Iraq between 27 September and 19 October 2024, as reported by United Nations High Commissioner for Refugees (UNHCR).

Most of IDPs come from: Sour, Nabatieh, Bent Jbeil, Marjaayoun, Baabda, Baalbek and Saida.

Figure 58: Lebanon – Worsening violence leading to a surge in forced displacement from mid-September 2024

Weekly conflict violence and total IDPs



Source: Author's own elaboration based on data from ACLED and IOM-DTM October 2023–October 2024. WFP, 2024.

Prior to the intensification of the conflict in September 2024, approximately 78 percent IDPs were residing in host settings, while 19 percent had chosen rental housing. An additional 2 percent had relocated to their secondary residences and around 1 percent were accommodated in 15 collective shelters. Among those in host settings, 26 902 individuals were cohabitating with families that are not internally displaced, while 60 860 were living separately. According to the IOM, 21 percent of the 87 762 individuals residing in host settings were experiencing overcrowded conditions. As of 21 October, the share of IDPs residing in host settings has dropped to 48 percent, while those resorting to rental housing increased to 25 percent and collective shelter accommodation surged to 24 percent of IDPs. Moreover, two-thirds of the hosted IDPs lived in overcrowded conditions.

According to the latest statistics from the Council for South Lebanon, prior to the intensification in September 2024, 4 000 residential buildings have been destroyed, while 20 000 others have been severely damaged between October 2023 and August 2024.[120] As of 28 September 2024, 25 water facilities were reported damaged impacting nearly 300 000 people and 37 health facilities are closed across the country. Most of the buildings that serve as collective shelters are schools/educational establishments, affecting access to education for students.[121] The start of the new school year has been postponed until November, exacerbating the impact on children. While there has been no assessment of damages following the recent intensification of the conflict, attacks have increased notably in urban settings such as Tyre, Baalbek, and Nabatieh, where evacuation orders have been issued on a daily basis.

Children's access to education has also been directly impacted with at least 77 percent of the country's public schools being non-operational. The start of the school year has been pushed back to 4 November, affecting more than 400 000 children.
The impact of the conflict on the food security situation in Lebanon so far is likely to be severe and will have long lasting effects. The current food security situation appears as extremely fluid. Acute food insecurity was already high, with the latest IPC projection update, covering the period from April until September 2024, estimating that around 23 percent of the population, including Lebanese, Syrian refugees, and Palestinian refugees, were classified in IPC Phase 3 (Crisis) or above. This was mainly due to the protracted economic crisis that has started since late 2019, the cuts to humanitarian aid that materialized at the end of 2023, and the ongoing, but localized hostilities since 8 October 2023. The governorates of El Nabatieh and South already experienced a sharp decline in food security between March and September 2023, with a 7-percentage point increase in the number of households with poor or borderline food consumption and an increase in the use of crisis-level coping strategies. Additionally, decreased market functionality, supply chain disruptions and limited stocks are expected to drive up prices and further reduce access to food. A preliminary WFP Rapid Market Assessment has already indicated that most markets in the South, El Nabatieh, and Southern Beirut are non-operational, with nationwide price hikes of essential goods.

The economic impact of the conflict has also been severe. This comes at the backdrop of an economic, governance and financial crisis in Lebanon that has seen the country's GDP deteriorate from USD 54.9 billion in 2018 to an estimated USD 18 billion in 2023. Escalating clashes are affecting livelihoods in southern Lebanon, especially in the agriculture sector, which constitutes around 80 percent of southern Lebanon's GDP.[an] Even though official figures regarding the financial loss have not been made available yet, there are estimated referring to direct financial loss reached USD 1.2 billion as of February 2024, including the estimated cost of affected agricultural land.[122] Many farmers in southern Lebanon, specifically in Marjayoun and Hasbaya, have begun an early wheat harvest to avoid losing their crops to wildfires from airstrikes and phosphoric bombs near their land, according to local reports. Both districts normally provide the domestic market with around 30 percent of its annual wheat requirements.[123]

The Mission visited the southern Lebanon in July 2024, prior to the escalation of the hostilities, and reports that the ongoing conflict in South has heightened vulnerabilities. Many municipalities in South are experiencing significant food security and livelihood challenges, including food shortages

and economic hardships linked to the conflict and blockades. Key informants noted limited labour availability due to displaced households, and income from crop sales has been adversely affected by the conflict, particularly impacting poorer low- and middle-income farmers and rural households. Small-scale farmers are struggling to compete with cheaper imported products and face inadequate government support for local agriculture. This has led to decreased incomes and increased vulnerability and food insecurity, especially for those dependent on crops like tobacco for example.

The IPC Acute Food Insecurity Analysis Projection Update for Lebanon,[124] conducted in March 2024, assumed that the current conflict along Lebanon's southern border, ongoing since 8 October 2023, would not spiral into a full-scale conflict. It was assumed that armed clashes would continue with similar intensity and remain mostly localized in South and Nabatieh governorates. It has also been assumed that the conflict's primary impact area would remain within the 7 km border radius. However, less frequent attacks targeting areas of Mount Lebanon, Baalbeck-Hermel and Bekaa governorates were also expected. Displacement was also expected to continue to increase, potentially reaching 140 000 IDPs by September 2024 from 91 000 IDPs in April 2024.

However, there is an urgent need to conduct an IPC analysis to capture and reflect the current food security situation accurately. After after the *pager's attacks* and the escalation of hostilities and airstrikes across Lebanon, since 17 September, the IPC assumptions related to conflict and escalation in the south needs to be revisited and the IPC numbers should be updated to reflect the higher-than-expected displacement, vulnerability and food insecurity.

Following this intensification in hostilities, WFP has been conducting a series of rapid market assessments on a weekly basis to better understand the evolving situation and needs, and to guide appropriate response strategies. The latest assessments, covering the period between late September and mid-October 2024, paints a concerning picture of Lebanon's market conditions.[125] The conflict has severely impacted market operations, particularly in highly affected areas such as El Nabatieh and Southern suburbs of Beirut (SSB), where shop functionality has plummeted. Only 18 percent of shops in El Nabatieh and 31 percent in SSB were operational by 17 October. In contrast, areas like Baalbek-El Hermel and the Bekaa have shown some improvement in market operations compared to the start of the hostilities, though they remain fragile. As such, while market functionality remained very high outside of the direct conflict zone, such as in North, Akkar, Beirut and Mount Lebanon, it remained very fluid in areas highly affected by this recent escalation in hostilities. In parallel, however, supply chain disruptions are widespread across the country, particularly in South and Bekaa, where the percentage of shops reporting supply issues has surged to 58 percent by mid-October 2024, a stark contrast to improvements in regions like Akkar and Beirut, which have seen disruptions ease during the same period. In parallel, Food prices continue to climb across the country, further straining households already grappling with the effects of conflict and economic instability. The cost of the food SMEB on a weekly basis rose by 4.5 percent from the last week of September to the third week of October, reaching USD 37.4/person/month.

WFP RTM is currently the only data that has been collected regularly since the beginning of the conflict, covering the period from November 2023 until the end of August 2024, and has full coverage of both South and Nabatieh governorates. Based on the latest findings from RTM, 21 percent of the people in both South and Nabatieh governorates, for a total of around 240 000 individuals, had insufficient food consumption by the end of August 2024. The period of February through June saw an increase in both borderline (10–22 percent) and poor (3–7 percent) food consumption, likely driven by the cumulative effects of reduced aid, ongoing inflation and the effects of the ongoing conflict. A slight improvement in poor food consumption of 2–3 percent was observed in July–August, potentially reflecting seasonal factors such as improved agricultural production during the summer months. However, borderline consumption remained high, at 16–18 percent, suggesting ongoing economic vulnerability and food access challenges. In parallel, 83 percent of the individuals in both governorates were applying medium to high food-related coping strategies by August 2024, the highest levels recorded

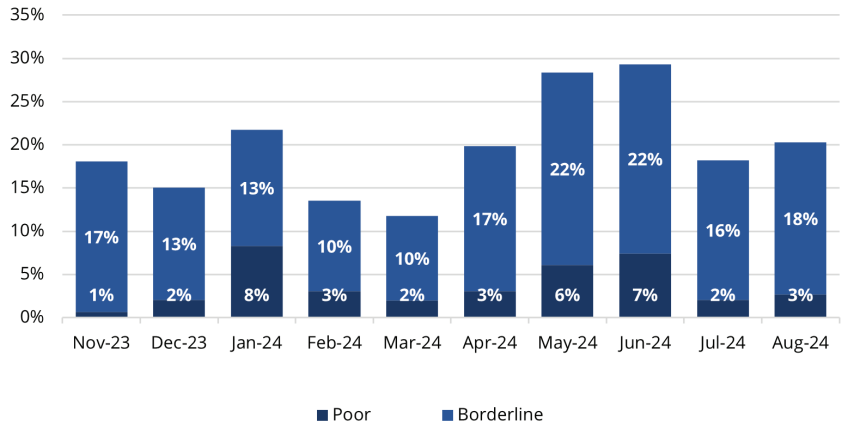
over the reported period. Around 14 percent of respondents in both governorates indicated challenges in accessing markets in August 2024, down from 16 percent in June 2024 but up from 7–8 percent in April–May 2024.

During the Mission FGDs and KIIs were conducted with Lebanese and Syrian refugees in southern Lebanon, including internally displaced Lebanese, as well as local authorities in the region, findings suggest that some needs of internally displaced Lebanese back then, prior to the intensification of the conflict at the end of September 2024 onwards, were being addressed through various informal channels outside of the formal humanitarian response. These channels include community and societal support, which may involve assistance with rent in certain cases and the provision of monthly cash support averaging USD 200 for families.

Despite these efforts, participants reported ongoing challenges in meeting their basic needs. Coping strategies mentioned include, reducing food consumption and seeking more affordable medications. Additionally, participants expressed concerns about the difficult living conditions they are facing, particularly the rising costs associated with meeting essential needs.

Figure 59: Lebanon – Lebanese residents and Syrian refugees – Uptick in inadequate diet frequency and diversity, May–June with levels recovering, July–August

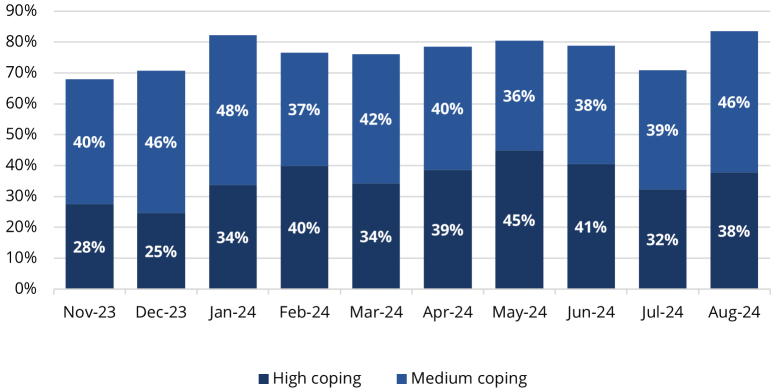
Households with inadequate food consumption in South and Nabatieh governorates per month (percent)



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

Figure 60: Lebanon – Lebanese residents and Syrian refugees – Fluctuating levels of critical food-based coping strategies with a noticeable rise in August 2024

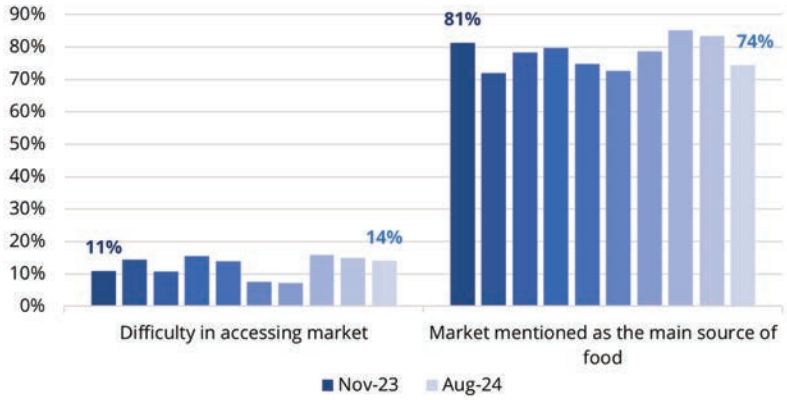
Households applying medium to high food-based coping strategies in South and Nabatieh governorates per month (percent)



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

Figure 61: Lebanon – Lebanese residents and Syrian refugees – South and El Nabatieh are the governorates with the lowest reliance on markets nationwide

Households reporting challenges in accessing markets and markets as their main source of food in South and Nabatieh governorates per month (percent)



Source: Author's own elaboration based on data from real time food security monitoring (RTM), November 2023–August 2024. WFP, 2024.

Geo-spatial Conflict Impact Analysis

The ongoing hostilities in Lebanon, which intensified since mid-September 2024, have significantly strained the country's capacity to respond to humanitarian needs, leading to mass displacement and overwhelming pressure on essential services. The conflict has resulted in mass internal displacement, with hundreds of thousands of families forced to flee their homes, seeking safety in less affected areas. This sudden and large-scale movement of people has shifted the geographic distribution of humanitarian needs, making certain areas, both hosting displaced populations and areas of origin, more critical for immediate humanitarian interventions. Displacement has increased the strain on resources such as food, housing, healthcare, particularly in urban areas that were already grappling with the effects of Lebanon's protracted economic crisis since late 2019. In addition, the intensity of the conflict varies significantly across the country, with certain regions experiencing direct hostilities while others are considered safer locations and are serving as primary destinations for the displaced populations.

In order to optimize the delivery of humanitarian assistance, WFP in collaboration with the FSAS and Basic Assistance sectors developed a conflict impact model that leverages almost real-time data on displacement trends and impact of the conflict.

The methodology of the conflict impact model focuses on areas likely to harbour high concentrations of vulnerable populations or were mostly impacted by the conflict based on broad indicators. It classifies cadasters (Admin level 3) in three priority categories: i) Marginal impact; ii) High impact – Hosting; and iii) High impact – Conflict affected. The classification is based on the overlap of conflict variables and presence of displaced populations. The priority areas are currently being updated on a bi-weekly basis. As the tool itself is dynamic and informed by weekly data, this can help identify and regularly update the areas most impacted by the conflict and where humanitarian needs are the most acute.

The first layer considers the impact of conflict as measured by the Conflict Impact Index, and identifies areas directly experiencing conflict.

The second layer of prioritization considers the presence and concentration of IDPs.

Cadasters are then classified in three categories based on the overlap of Map 8 – Conflict Impact Index and Map 9 – Presence of IDPs, as presented in Map 10:

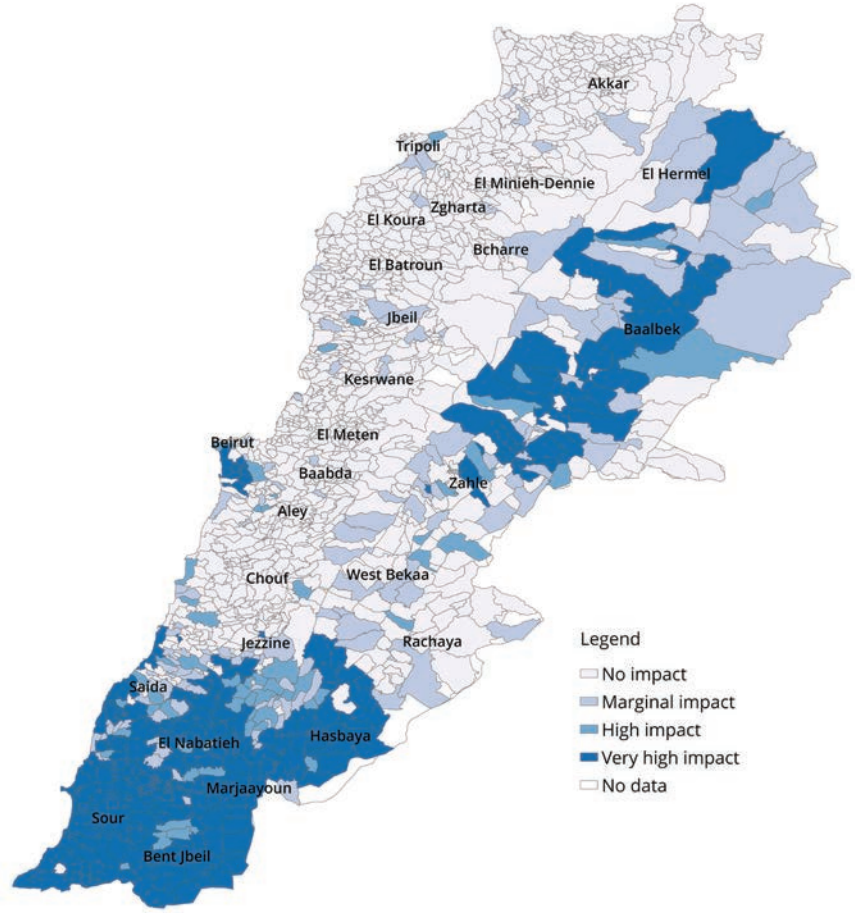
- Marginal impact: No or marginal impact of conflict and not hosting IDPs or hosting a small number of IDPs (<500 and <20 percent of population).
- High impact – Hosting: No or marginal impact of conflict and hosting a high number of IDPs (>=500 or >=20 percent of population).
- High impact – Conflict affected: High or very high impact of conflict as measured by the Conflict Impact Index. May also host IDPs.

Table 19: Lebanon – Conflict Impact Index Indicators and categories

Dimension	Indicator	Values
Conflict Impact Index (CII) indicators	Number of strikes	0=No strikes 1=Less than 5 strikes 2=Between 5 and 19 strikes 3=between 20 and 49 strikes 4=50 strikes or more
	Number of fatalities	0=No fatalities 1=Less than 5 fatalities 2=Between 5 and 9 fatalities 3=between 1 o and 19 fatalities 4=20 or more fatalities
	Civilians targeted	0=No civilian targeted 1=Civilian targeted
	Access	0=access to markets and financial services 1=restricted access to markets and financial services or hard to reach area
	Displacement from impacted areas[1/]	0=Majority of the population remaining in the area 4=Majority of the population displaced from the area
	Evacuation order	0=No evacuation order issued by IDF 4=Evacuation order issued by IDF
Conflict Impact Index (CII) categories	**No Impact**	CII=0
	Marginal Impact	CII=1 and 2 (No fatalities or civilian targeted)
	High Impact	CII>=3 & CI 1<6 (or CI 1<3 with fatalities or civilian targeted_
	Very High Impact	CII>=6

Source: Author's own elaboration based on data from ACLED, Lebanese Red Cross and WFP. 25 October 2024.

Map 8: Lebanon – Conflict Index Map



Disclaimer: *The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.*

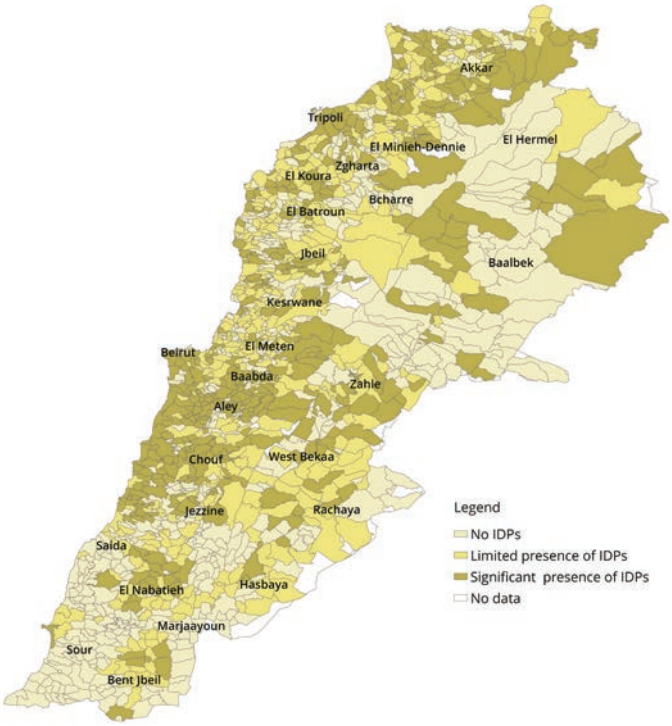
Source: WFP Lebanon. 2022. *Lebanon GIS Portal*. https://gis.lbn.wfp.org/portal/apps/sites/#/lebanon-gis-portal.

Table 20: Lebanon – Displacement Indicators and values

Dimension	Indicator	Values
Displacement	**No IDPs**	No presence of IDPs
	Limited presence of IDPs	Communities hosting less than 500 IDPs and IDPs represent less than 20 percent of the population
	Significant presence of IDPs	Communities hosting more than 500 IDPs or IDPs represent more than 20 percent of the population

Source: Author's own elaboration based on data from ACLED, Lebanese Red Cross and WFP. 25 October 2024.

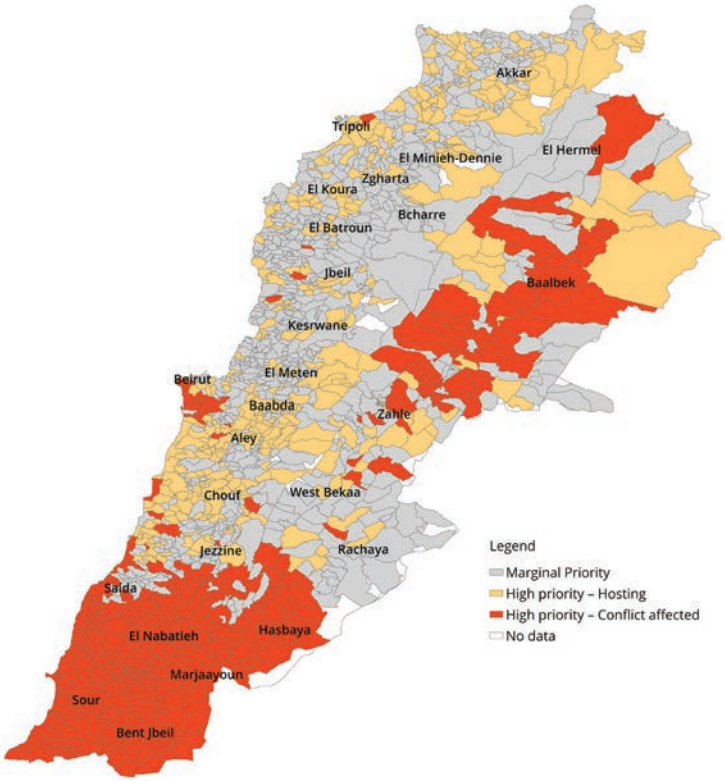
Map 9: Lebanon – Presence and concentration of IDPs across Lebanon as of 11 October 2024



Disclaimer: *The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.*

Source: Author's own alaboration based on data from IOM, LRC, DRM. 11 October 2024. WFP, 2024.

Map 10: Lebanon – Priority Index as of 11 October 2024



Disclaimer: *The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.*

Source: WFP Lebanon. 2022. *Lebanon GIS Portal*. https://gis.lbn.wfp.org/portal/apps/sites/#/lebanon-gis-portal.

Humanitarian access

The ongoing conflict in southern Lebanon is resulting in limited humanitarian access to affected communities. As the need for assistance grows, the escalation of violence has hindered the delivery of humanitarian aid and restricted the operations of organizations trying to support those impacted, especially in hard-to-reach border towns. These challenges are exacerbated by road closures and supplier reluctance in transporting goods to certain areas, resulting in a supplier-to-supplier transfer increasing prices and duration. As a result, the districts of Marjaayoun, Bent Jbeil, Tyre and Hasbaya, continue to witness an acute shortage in service provision, namely health care, electricity, education, as well as the availability of fuel. The socioeconomic vulnerability of communities in hard-to-reach areas, where many rely on agriculture, is worsening by the ongoing conflict increasing the number of people in need of assistance. The escalation of the conflict has further hindered this access, with people that have remained in border areas reporting a severe shortage of essential needs.

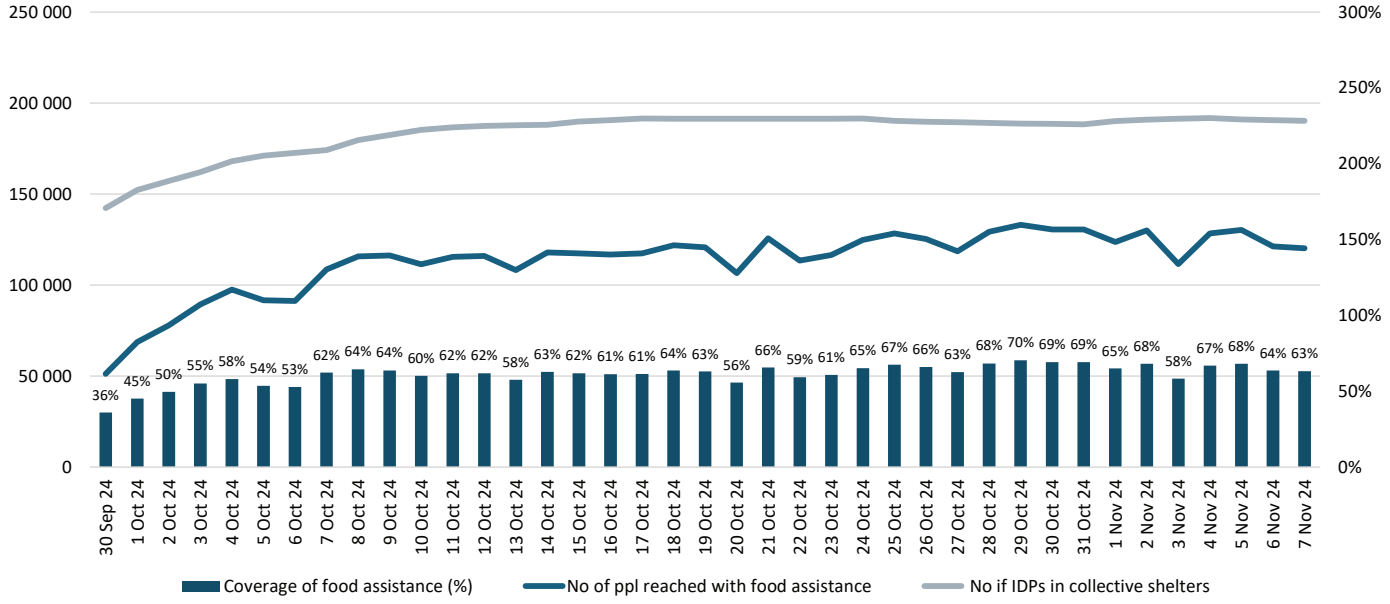
Additionally, humanitarian partners face communication difficulties, as the affected population is hesitant to respond to telephone calls or share information about their needs, citing concerns over telephone network hacking incidents.

Access to the conflict-affected areas is expected to remain challenging and to worsen as the conflict escalates. Under the leadership of the DSCL/RC/HC, the humanitarian community has been helping in addressing access constraints faced by partners and people in need of humanitarian assistance through the established Civil Military Coordination (CMCoord) Cell and Access Working Group. Efforts to secure unimpeded access are expanding, but ensuring guarantees for safe humanitarian access to those still in the affected areas and collective shelters remain critical.

As of the time of finalizing of this report, following the intensification of the conflict, an estimated 10 000 households remain trapped in hard-to-reach areas in the south of the country. By 22 October 2024, WFP had coordinated 4 different inter-agency convoys to different areas in the South and El Nabatieh govenrorates, as well as a convoy to northern Baalbek area, in order to deliver critical food assistance to those unable to evacuate.

Figure 62: : In collective shelters food assistance from FSAS partners reached over two third of the IDPs

Number of IDPs hosted in collective shelters and number of IDPs reached with food assistance, 30 September–7 November 2024



Source: Author's own elaboration based on data from IOM-DTM AND FSAS, 30 September–7 November 2024. WFP, 2024.

Humanitarian food security response

The FSAS sector estimated in USD 131 million the budget requirements to address the immediate humanitarian food security needs of 1 million displaced people, host communities, and populations affected by the ongoing conflict between October and December 2024. This in addition to the USD 780 million required to address the impact of the pre-existing crises in Lebanon in 2024.

FSAS priority activities aim at addressing food access and availability constrains due to displacement and disruption of livelihoods and markets. This includes distributing dry food parcels, ready-to-eat meals, and fresh produce (vegetables and fruits) to vulnerable populations. Cash assistance is offered for food needs, especially for those outside shelters, along with unconditional cash or vouchers for conflict-affected farmers.

Food assistance in collective shelters

Data from 30 September to 7 November 2024, on food assistance coverage for IDPs in Lebanon's collective shelters showed a significant effort from FSAS partners to address food needs through the distribution of hot and cold meals and ready to eat rations for the displaced population in shelters, achieving a stable and high level of coverage. Initially, coverage was at 36 percent, with only 51 258 individuals receiving assistance out of over 142 000 IDPs in shelters. Over the following weeks, this number steadily increased, reaching over 133 000 individuals on 29 October, with coverage percentages fluctuating between 56 percent and 71 percent. By early November, food assistance stabilized at 88–91 percent coverage, reaching approximately 171 000 IDPs on average. However, food assistance gaps in collective shelters remain, with Baalbek, Beirut, and Mount Lebanon showing the largest coverage gaps in November.

Food assistance outside of collective shelters

Since the onset of Lebanon's conflict in October 2023, FSAS and its partners have been actively responding to immediate food needs through food and cash assistance while FSAS partners continued to assist over 1 million people across Lebanon in September 2024 through regular programmes.

Additionally, the ESSN/AMAN programme reached over 800 000 vulnerable Lebanese by October 2024 following disbursements in May and June. MoSA, in collaboration with WFP, has launched a three-month shock-responsive social safety net initiative from October to December 2024, providing targeted assistance to more than 52 000 households (over 200 000 individuals) bringing the number of Lebanese reached with one or more rounds of cash assistance to nearly 300 000. These households, who do not currently receive aid from other programmes, include NPTP beneficiaries not covered by ESSN/AMAN, households previously discontinued from WFP's food assistance, and newly displaced individuals due to the conflict. This assistance is geographically prioritized for conflict-affected areas with high IDP populations.

To address needs in heavily impacted areas with limited resources, inter-agency convoys have been deployed to critical locations like Tyre, Deir El Ahmar, and Rmaych, delivering food, medical supplies, shelter materials, and other essentials to displaced populations. These high-priority zones have seen significant displacement and disruptions, making coordinated, large-scale assistance vital for supporting basic needs.

RECOMMENDATIONS

Short-term recommendations

The CFSAM was conducted at the end of July 2024, prior to the recent expansion in the intensity of the South border conflict taking place in Lebanon since 8 October 2024. At the time of finalization of this report, the ongoing conflict had further intensified and expanded beyond South, leading to the displacement of up to an estimated 1 million people inside the country, according to Lebanese authorities, with more than 258 000 persons between Lebanese and Syrian refugees having crossed the border to the Syrian Arab Republic as well, as of 10 October 2024.[127] As such, this section outlines critical interventions needed to address the impact of the conflict on emerging food security needs and structural constraints affecting the agriculture sector, on top of the regular programmatic/operational recommendations based on the findings of the Mission itself. Those include:

Situation monitoring: A continuous and close monitoring of the situation in Lebanon remains of the utmost importance. While Lebanese authorities are already mentioning nearly 1 million IDPs across the country, similar to the 2006 war, the scale of the conflict itself has not fully dwindled into what materialized back then, with full destruction of civilian and public infrastructure across the country. The ongoing risk of a broader expansion of the conflict, which would further exacerbate an already dire situation from a food security perspective. It is critical to monitor the impact of this escalation in hostilities on the food security and livelihoods of the different affected vulnerable population groups, to help inform both emergency and regular programmatic interventions.

Implementation of emergency food security interventions: Tied to the ongoing conflict and its recent expansion, it is critical that WFP, Food Security Cluster Partners, donors, local authorities and other relevant stakeholders rapidly implement emergency interventions to support vulnerable populations affected by the ongoing conflict, especially IDPs. The following measures are crucial considering the increasing needs, amid the volatile situation and the urgency to respond in a timely manner, while contributing to overall assurance (including data assurance), accountability and system strengthening:

- Expand the capacity to provide RTE parcels, hot meals, food rations, bread and cash assistance for recently displaced people along primary routes and areas of IDPs concentration.

- Expand cash assistance and as necessary in-kind food assistance for both IDPs as well as the communities and households hosting them, where their coping mechanisms are strained and food security is put at risk.

- Where possible, tap into existing national social protection systems for horizontal (and possibly vertical) expansion of shock responsive safety nets, to reach vulnerable Lebanese households with emergency cash assistance. In the case of Syrian refugees, efforts should be expanded towards the existing cash assistance programme

setup for horizontal and vertical expansion of emergency cash assistance to Syrian refugees.

- Where possible, and in coordination with the donor community, it will be important to shift any restricted cash assistance modalities to unrestricted ones, which can provide the needed flexibility for the different affected population groups to cover their needs on the go, regardless of their location, and can as well help reduce any potential stress that existing and operational retail networks might be facing in the current situation.

IPC analysis update: Tied to the situation monitoring, it will be important to conduct a new IPC analysis, in order to set baseline values of what the food security situation of the different population groups looks like at the start of the escalation of the conflict. The latest IPC projection update was conducted in March 2024, covering the period of April until September 2024, and assumed that the ongoing conflict would remain at the same intensity that was registered back then, with the number of IDPs reaching 140 000 by the end of September 2024. With the recent escalation since the last week of September 2024, these numbers will now need to be updated to better reflect the real situation in the country. In addition, regular updates will likely have to be undertaken in the upcoming months to further understand the food security and livelihood needs of the affected population, once data on the needs and situation are available, in order to help better inform humanitarian response mechanisms.

Enhance food security, markets and nutrition information and monitoring systems: Tied both to the ongoing conflict as well as the regular programmatic implementation of food security interventions, and given the general volatility of the food security and vulnerability situation in Lebanon, it will be essential to continue to generate timely, reliable and sustainable food security, markets and nutrition information, and analysis to enable both emergency and regular effective national, and regional policies and interventions. To ensure that, it will be important to continue enhancing the ability of national entities to collect, analyze and disseminate food security, markets and nutrition information.

Adequate Food Security and Agriculture sector coordination: With the intensification of the conflict calling for different types of food security and resilience interventions to address both the short- and long-term needs of people affected by the ongoing crisis exacerbated by the recent escalation in hostilities, it important to have the necessary coordination structures in place to ensure that interventions remain complementary and address the needs of different target groups with customized support. Cluster activation is recommended to enhance the effectiveness of the immediate emergency response, while laying the grounds for a coordinated transition into a recovery phase is of equal importance to ensure protection of livelihoods and longer term food security of the affected population groups once the context begins to show signs of stabilization.

Lifesaving and humanitarian food assistance: Urgent action continues to be required to save lives and reduce food consumption gaps of vulnerable population groups, especially those already categorized in IPC Phase 4 (Emergency) and IPC Phase 3 (Crisis) in the latest IPC projection update covering the period from April to September 2024. These numbers are expected to increase following the conflict escalation, whilst there are now an estimated 1 million IDPs being reported by the Government of the Lebanese Republic. This can only be achieved by improving access to food through appropriate modalities, as well as the provision of an appropriate transfer value to cover the needs. The previously implemented cuts to humanitarian food assistance to Lebanese and Syrian Refugees, along with the decrease in transfer values, had detrimental effects on the lives and well-being of affected populations, as noted by the Mission through community meetings. As the different vulnerable population groups are starting to exhaust their coping mechanisms, amid the cuts in humanitarian assistance, this has the possibility of having long lasting effects on health and education levels of an entire generation. Community participants already highlighted the psychological toll that they face daily due to their circumstances. This would in turn impact their long-term ability to find employment and livelihood sources for themselves and their families, eventually leading to a comparatively higher financial burden, including on host communities and refugees, as well as the supporting countries. As such, as people continue

to exhaust their remaining coping strategies, the full detrimental effects of these ongoing cuts, coupled with the expansion in the conflict and the displacement situation, are expected to further exacerbate in the short- to medium-term.

While some portions of the different population groups were assumed to be vulnerable in the latest IPC projection update, those were not classified in IPC Phase 3 (Crisis) or above given the level of assistance that was previously delivered. With the current rapidly changing context, expanding conflict and displacement situation, it is crucial to monitor the situation and implement activities that help mitigate the potential negative impact on their livelihoods and continue assisting those households to prevent them from moving to higher food insecurity phases.

In addition, it remains critical that the value of humanitarian cash-based food assistance is set based on needs and gaps. An alignment between the transfer value of cash-for-food and multi-purpose cash assistance with the market-based MEB and household economic capacity values is crucial, while regularly updating the assistance provided to all populations based on the monitoring of risk factors and contextual development, can help ensure that food insecurity levels are properly tackled.

Comprehensive approach to assistance: Beyond the food security needs, the Mission noted the struggles that vulnerable populations continue to experience in order to meet their different essential needs, including health and shelter. Participants in the FGDs highlighted the daily decision on what to spend on, given the limited financial resources at their disposition, with many having to implement hard coping mechanisms in order to meet a portion of their basic needs. Further increases in the costs of non-food essential services are expected to continue in the upcoming period, as this component of the basket remains at only 51 percent of its value at the start of the economic crisis as of July 2024, while the food component has already surpassed its pre-crisis levels. Several participants through the FGDs suggested that assistance programmes should prioritize housing subsidies or rent support, especially given the rapid increase in rent prices. Healthcare support was another key area, with the suggestion that assistance programmes should include medical aid or vouchers to help cover the cost of healthcare services. Participants also highlighted the importance of education access, recommending increased support for school fees and ensuring that all children have access to education, regardless of their legal status in the case of refugees. Syrian refugee participants also highlighted the need for further legal protection and support in navigating the complex process of renewing permits and avoiding deportation.

Enhancement of community communication, awareness and feedback mechanisms: Outreach and communication/education efforts should be strengthened through the existing community communication and feedback mechanisms in place, to help inform both beneficiaries and non-beneficiaries of available resources, as well as any changes to existing programmes. This becomes even more important given the current ongoing emergency response and volatile situation, in order to ensure that vulnerable populations are aware and know how to access the different resources that can help alleviate some of the challenges they are facing. Improving awareness and accessibility of existing assistance programmes was already emphasized in the different community meetings that the Mission conducted.

Monitor the agriculture situation in areas affected by hostilities: Continue monitoring the impact of the hostilities on the agriculture sector through CNRS and the national DRM system. Conduct an agricultural and food security assessment once the areas affected by the conflict become accessible.

Resume and further expand the coverage of school meals programmes: Given the escalating hostilities in Lebanon since September 2024, directly impacting student's access to public education, the Minister of Education and Higher Education established the Higher Committee for the Management of Education in Emergencies, Crises, and Disasters tasked with developing a comprehensive, phased and inclusive national education response plan to ensure learning continuity and plan the recovery phase. The plan includes a situational assessment through data collection of students and teachers, registration of students online, and meeting the basic needs of IDP students and teachers in the shelters.

The second phase will focus on ensuring learning continuity outside of the shelters - either in public schools currently not repurposed as collective shelters, or in neighboring private schools. It will be essential to ensure the provision of nutritious and healthy school meals and snacks to improve children's ability to learn and encourage school enrollment and attendance by girls and boys aged between 5–14 and to adapt and scale up the school meals programmes to the national emergency education set-up.

Long-term recommendations

Livelihood assistance: While the Lebanese economy had likely started to stabilize on a lower economic output compared to the drastic deterioration that was registered in the first few years of the crisis between 2020 and 2022, this fragile stabilization was hindered by the ongoing conflict since October 2023, leading to downward revisions in the expected economic growth for both 2023 and 2024. The recent expansion of the conflict will likely lead to an additional economic downturn. As such, the scaling up of different livelihood support programmes become of the utmost importance, once the situation in the country allows, in order to ensure that vulnerable populations have access to stable income sources that help them mitigate the loss of income that they have been facing over the past few years. Participants in the FGDs stressed the importance of long-term assistance rather than short-term aid, advocating for programmes that focus on rebuilding livelihoods and fostering self-sufficiency. Moreover, participants expressed a desire for training and educational programmes that could equip them with skills to diversify their income sources. Vocational training, workshops on financial literacy and small business development were highlighted as crucial components to foster economic resilience. These suggestions reflect a strong desire for sustainable solutions that empower individuals and communities to overcome the challenges they face, ensuring that food security and livelihood opportunities are not just temporary fixes but part of a long-term strategy for resilience.

Social safety net systems: The recent implementation of the ESSN/AMAN extension is of the utmost importance to ensure that the projected deterioration in the food security situation among Lebanese residents in the IPC projection update, as well as due to the recent escalation of the conflict, does not fully materialize. It is imperative that the disbursement of assistance to beneficiaries can continue on a constant basis in the upcoming period, so that vulnerable households continue to receive the assistance needed to ensure access to food and other essential needs. In parallel, the full unification of the different existing social safety nets remains important to ensure appropriate operational implementation and governance. The proper implementation and standardization of such programmes is required to ensure that regular assistance is provided to extremely poor and food insecure Lebanese families. As such, it will be of the utmost importance that adequate technical assistance continues to be provided to the Government of the Lebanese Republic to ensure appropriate social safety net designs in terms of coverage and benefit package to address the needs of poor and food insecure Lebanese. In addition, such systems can be used for any needed horizontal (and potentially vertical) scale-up in providing assistance, given the rapidly changing context.

Agricultural asset creation and recovery: As part of the regular agricultural support programming, it will be essential to expand the asset creation and recovery programmes in agriculture especially in rural agricultural areas as well as areas with high reliance on food from own production to protect already volatile livelihoods sources. This could include the scaling up of cash assistance to reach a greater number of

[ao] In 2020, The MoA prepared the *National Agriculture Strategy (NSA) 2021–2025*, with five key pillars: (i) restoring the livelihoods and productive capacities of farmers and producers; (ii) increasing agricultural production and productivity; (iii) enhancing efficiency and competitiveness of agri-food value chains; (iv) improving climate change adaptation and sustainable management of agri-food systems and natural resources; and (v) strengthening the enabling institutional environment. The NAS also identifies the need to improve and modernize digital services for farmers as one of the flagship programmes. The Mission proposes a series of cost-effective measures aligned to the NSA to address some of the most pressing emergency and structural challenges facing the agriculture sector, with a view to contributing to national food security objectives, strengthening agriculture resilience and promoting sustainable and equitable growth.

small-scale crop producers and livestock keepers to improve access to quality agricultural inputs (fertilizers, pesticides and seeds, feed, veterinary services), as well as the focus on capacity development initiatives. During the Mission, participant suggestions included establishing community gardens and food cooperatives that could empower families to grow their own food or purchase it collectively at lower prices. In addition, and once the situation allows, it is crucial that appropriate intervention programmes in South and Beqaa area of the country take place, to help rehabilitate the damages that have affected the agriculture sector.

Agriculture malpractices and food safety (NSA Pillar 2, Programmes 2.2, 2.3 and 2.4).[ao] An upturn in agriculture input supply from 2023 and the prevalence of pesticide smuggling has led to a rapid increase in agriculture malpractices with urgent food safety implications. In the absence of a functional food safety regulation, the excessive use of pesticides and fertilizers is a health concern for the resident population of all income categories. In addition, the hostilities in the southern part of Lebanon also pose serious food safety risks. The Mission observed that the severity of the situation regarding food safety requires the direct attention of the highest level of the government. The following actions are recommended:

- Elevate the Committee for Food Safety under the Prime Minister presidency to prioritize and coordinate all interventions related to food safety issues.
- Implement vigorous food safety checks at the entrance of wholesale markets with the authority to remove non-compliant lots from the marketing channels.
- Conduct a comprehensive study to assess the extent of pesticide pollution in the country.
- Conduct a large-scale compulsory training to farmers, inputs suppliers and wholesalers on pesticide/agrochemical management and integrated pest management (IPM) principles, conditional to operation license renewal.
- Explore the possibility to restrict the procurement and use of pesticides, only by registered professional certified applicators.
- Reduce the reliance on pesticides by scaling up IPM approach and innovative technologies such as on-farm weather stations which help farmers to predict and monitor pest and disease outbreaks (fruits, grapes, vegetables, potatoes), through Farmer Field Schools (FFS), targeting medium size farmers.
- Use market-based instruments of the pesticides policy judiciously and coherently to serve the objective of food safety risk reduction. In collaboration with the customs, design differential taxation rate on import, value added taxes, fees of registration and fees of registration' maintenance tools that can promote the use of safer pesticides and non-chemical alternatives.
- Explore the expansion of suitable farmers' credit system, such as the *kafalat*[127], to provide an alternative to the one based on in-kind agrochemical credit.[ap]
- Conduct information campaigns through media on food safety risks and promote brands/suppliers who perform traceability.
- Reinforce mandated institutions to implement the Food Safety Law (35/2015).
- Accelerate wastewater treatment strategies to acceptable irrigation standards.

[ap] Farmers' over-reliance on input suppliers for credit and technical advice creates a relationship of dependency that ultimately harms farming and food production, especially when suppliers push farmers to use more inputs than they need.

[ar] The draft seed law focused mainly on the following: a) the organization of seed trade within the country, which lacked a complete and comprehensive legislation; b) the establishment of the eligibility, terms and conditions for selling, importing, producing and multiplying seeds; c) the foundation of a national committee for seeds at the MoA in order to establish the technical requirements for the organization of the seed sector; and d) the establishment of sanctions for infractions.

Finalize the seeds legal framework and policy (NSA Pillar 1, Programme 2.1). In the absence of promulgated 'seed' legislation, the private sector can import, multiply and distribute any type of seeds/varieties. The situation is particularly critical with regard to wheat and barley seeds, following the suspension of LARI's seeds multiplication programme. In 2014, MoA drafted a *seed law*, but the text was reportedly withdrawn from Parliament for revision and update.[ar] The following actions are recommended:

- Re-establish a seed forum with the mandate to review and update the draft seed law and, in the short term, explore the promulgation of a Ministerial Decree to establish minimum terms and conditions for seed imports.

- In close partnership with the private sector, re-establish a seed multiplication programme aiming at producing foundation and certified seeds on contract with farmers and under which MoA and LARI are the oversight agencies.

- In close partnership with the private sector, reestablish a programme to produce certified grafted seedlings of several fruit trees such as stone and pome fruits, olive, grapevine, citrus, etc.

Promoting commodities in the food security value chain and promote food security value chain commodities (NSA Pillars 2 and 3, Programmes 2.1 and 3.2).The crisis has raised the issue of staple food sovereignty to the political agenda. The main food imported is soft wheat, which is forecast at 664 000 tonnes and expected to account for 88 percent of the total utilization for the 2024/25 marketing year (July–June). Yet, in monetary terms, wheat import is a small portion of total food imports. In 2022, Lebanon imported USD 228 million worth of soft wheat, which accounted for only 6 percent of the total food import value. To achieve self-efficiency in soft wheat production at the current average yield level (2.9 tonnes/hectare), an additional 230 000 hectares of land is required, which would bring the total wheat area to about 275 000 hectares. This expansion, assuming current yield levels, would provide about 800 000 tonnes of domestically-produced wheat, meeting domestic requirements. This is more than the total agriculture land currently cultivated in Lebanon. A substantial increase in soft wheat yield is unlikely in the medium term, considering that farmers choose to plant 70 percent of the soft wheat on rainfed land. The main reason winter wheat (mainly hard wheat) production to ensure irrigated crop rotation cycle with higher value potatoes and vegetable crops. Furthermore, in a context of limited water resources, the cropped area with low value irrigated winter wheat and high value spring/summer crops are intertwined. A minor increase in irrigated cereals in the rotation could, therefore, lead to a decrease of high value crops. Lebanon lacks the agricultural land to achieve a marginal increase in soft wheat self-sufficiency.

Yet, the country relies on imports for other staple food that offer value-added and agronomic advantages. In 2022, the country imported about 27 000 tonnes of hard wheat products such as pasta and bulgur, which totaled USD 38 million. Lebanon also exported 7 300 tonnes of hard wheat grains, almost all to Italy and Türkiye, some of which might be reimported in the form of pasta. Hard wheat provides multiple opportunities for the local agri-food processing industry to cater for the rich traditional Lebanese cuisine. The production of *freekeh* can add significant value, albeit on a small scale. There are currently at least 6 pasta and 12 commercial bulgur and *moughrabieh* producers. These local companies pay farmers USD 400–450/tonne of hard wheat,[128] while farmgate price for soft wheat ranges from USD 250–300/tonne.

The local market for chickpeas and lentils is estimated at about 17 000 and 14 000 tonnes, respectively, 80–90 percent of which is imported. These winter pulses could advantageously diversify crop rotation in the wheat-potato/vegetable cropping pattern considering their nitrogen fixation capacity and low water requirements, making these crops suitable on land with limited irrigation potential. Yet, the main limiting factors for these crops are the costs of manual harvesting as well as low productivity.

In 2022, Lebanon imported 22 000 tonnes of bovine meat (fresh/frozen) and 55 000 tonnes of live bovines. There is no beef breeding industry in the country that

[as] The Mission forecasts an average yield of 2.1 tonnes/hectare in 2024.

could also stimulate the production of animal feed, improving crop rotations and reducing the use of agrochemicals. Some of the transmit beef farms for imported animals could be transformed into breeding farms with marginal initial investments. The subsector could emulate the success of the poultry industry.

The following actions are recommended:

- Conduct high yielding hard wheat, chickpea and lentil variety evaluation and produce foundation and certified seed on contract with farmers.
- Test and scale up adapted mechanized harvesting solutions for chickpeas and lentils, through varieties testing (erect types), soil preparation and adaptation of existing machineries.
- Stimulate investments in staple food agri-processing industries (e.g., access to financial services at preferential rate).
- Use market-based and financial instruments judiciously and coherently to serve the objective of value chain promotion.

Promote irrigation efficiency innovation (NSA Pillars 2 and 4, Programmes 2.3 and 4.3). Water scarcity is the main limiting factor in crop area extension and intensification, while irrigation efficiency is low, around 50–60 percent. A fast adoption of irrigation water conservation technologies such as surface and subsoil drip irrigation, pulse irrigation, sensors and smart metres can achieve more efficient water usage. The Mission recommends the following interventions to increase demand for irrigation conservation saving technologies:

- Promote water saving technologies by covering upfront costs for new irrigation water conservation technologies.
- Increase tariffs for the use of low efficiency water technologies (such as gravity irrigation, sprinklers).

Pilot and establish a real-time market information system (NSA Pillar 3, Programme 3.1). Timely data and information on markets and prices to facilitate transparent transactions along with value chains are not available which represents an obstacle to farmers' engagement in the agrifood system.

The following actions are recommended:

- Improve market transparency, through piloting the implementation of a private sector driven Market Information System to release timely price information from the main wholesale markets (notably Beirut, Tripoli, Zahle and Baalbeck).

Harmonize and strengthen agriculture information systems (NSA Pillar 5, Programme 5.2). The Government of the Lebanese Republic uses two sources of agriculture statistics, MoA and CSA. In additional, with solid remote sensing capacity, CNRS regularly updates the country's landcover map which includes agriculture land classes. Yet, none of the statistical data are available to users or regularly communicated to international organizations. This report compiled basic agriculture statistics and completed MoA data gaps, from 2015 to 2023. The following actions are recommended:

- Establish a permanent and harmonized agriculture statistic system, funded by government treasury. The features of a permanent agriculture statistic system could include a) an area frame using CNRS 2023 landcover as stratification which is likely to be the most accurate method to timely estimate the area cultivated for main crops[at] and b) a yield and socioeconomic survey, building on an analysis of existing methodologies, capacities and costs.
- Conduct a series of agroeconomic studies such as the static costs of production/crop returns disaggregated by farming systems or farm size viability in different groups of value chains to inform upcoming MoA agriculture policies and strategies formulation, using CREAL long-time series data source.
- Accelerate the implementation of MoA farmers' registry and prioritize public support to farmers who registered.

[at] The absence of a recent population census upon which an agriculture census can be designed is a significant methodological constraint.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ANNEXES

Annex 1 – List of institutions visited

- Bank Audi (private bank)
- Big Mills of the South (miller)
- Central Bank (*Banque du Liban*)
- Chamber of Commerce, Industry and Agriculture
- CREAL (*Centre de Recherches et D'etudes Agricoles Libanais*)
- Debbane Agri (agricultural input trader)
- Del Libano (pasta producer)
- Fadel Trading (wholesale agrifood trader)
- Gray Mackenzie Retail Lebanon (leading food retailer)
- Head of Bekaa Farmers Association
- Head of the Syndicate of the Livestock Sector
- Head of the Syndicate of Bakeries
- Head of the Syndicate of Importers and Exporters of Vegetables and Fruits
- Head of the Wheat Farmers Syndicate
- International Labour Organization
- International Monetary Fund
- International Organization for Migration
- Ministry of Agriculture
- Ministry of Economy and Trade
- Ministry of Environment
- Ministry of Social Affairs
- United Nations Office for the Coordination of Humanitarian Affairs
- United Nations High Commissioner for Refugees
- Unifert (agricultural input trader)
- World Bank

Annex 2 – Agriculture data used by CAS

Table A2a: Lebanon – CREAL estimates of planted areas for main staple crops, vegetables and fruits, 2017–2023 (hectares)

Crops	2017	2018	2019	2020	2021	2022	2023
Staple crops							
Wheat	15 460	17 078	17 103	17 615	18 230	18 881	19 591
Barley	2 520	2 705	2 635	2 702	2 532	2 537	2 553
Maize/sorghum	213	243	247	285	246	256	228
Potatoes	12 255	11 020	11 350	11 395	9 150	13 330	11 463
Chickpeas	246	256	248	317	288	284	270
Beans	23	16	18	37	28	30	32
Lentils	202	222	275	290	300	295	254
Vegetables							
Tomatoes - open field	1 674	1 549	2 057	1 684	1 580	1 404	1 386
Tomatoes - green house	1 780	1 790	1 689	1 605	1 381	1 336	1 248
Tomatoes total	3 454	3 339	3 746	3 289	2 961	2 740	2 634
Onions	1 497	1 180	1 250	1 330	1 400	1 325	1 185
Cucumbers - open field	506	531	600	643	647	878	761
Cucumbers - green house	1 063	1 142	1 271	1 204	1 097	1 176	1 059
Cucumbers total	1 569	1 673	1 871	1 847	1 744	2 054	1 820
Eggplants	835	858	906	970	730	727	756
Fruits							
Avocados	229	248	299	323	925	1 433	1 561
Bananas	5 801	5 809	5 813	5 907	6 368	6 325	6 360
Lemons and limes	1 334	1 334	1 334	1 334	1 336	1 394	1 394
Oranges	3 807	3 797	3 797	3 709	3 681	3 681	3 668
Table grapes	5 599	5 571	5 571	5 581	5 611	5 616	5 620
Wine grapes	1 185	1 185	1 185	1 185	1 285	1 288	1 288
Grapes total	6 784	6 756	6 756	6 766	6 896	6 904	6 908
Apples	6 302	6 186	6 182	6 709	6 704	6 689	6 689
Apricots	398	420	485	500	510	505	535
Cherries	1 548	1 539	1 534	1 534	1 533	1 533	1 533
Peaches and Nectarines	1 695	1 648	1 646	1 583	1 594	1 594	1 594
Plums	397	392	392	413	419	419	419
Almonds	987	946	925	920	931	929	1 009
Olives (oil and table)	24 416	24 345	24 563	24 610	24 610	24 609	24 613

Source: Author's own elaboration based on data from the CREAL provided to the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.

Table A2b: Lebanon – CREAL estimates of production for main staple crops, vegetables and fruits, 2017–2023 (tonnes)

Crops	2017	2018	2019	2020	2021	2022	2023
Staple crops							
Wheat	80 839	69 425	50 812	69 985	72 474	73 750	76 585
Barley	5 120	5 705	6 110	6 660	6 106	6 495	5 149
Maize[1/]	6 540 000	6 180 000	6 280 000	7 255 000	6 235 000	6 490 000	5 790 000
Potatoes	462 369	295 130	206 110	321 834	266 784	416 680	329 076
Chickpeas	360	362	328	313	283	279	267
Beans	56	42	42	119	91	77	63
Lentils	289	309	295	310	315	310	266
Vegetables							
Tomatoes - open field	103 335	91 210	133 820	118 170	105 865	101 630	104 160
Tomatoes - green house	183 335	200 820	207 018	185 460	155 470	152 850	136 555
Tomatoes total	286 670	292 030	340 838	303 630	261 335	254 480	240 715
Onions	81 380	53 500	60 540	77 050	73 940	71 000	63 174
Cucumbers - open field	24 700	24 288	27 870	33 785	33 655	45 850	39 670
Cucumbers - green house	80 345	85 210	89 175	76 815	63 475	70 145	62 349
Cucumbers total	105 045	109 498	117 045	110 600	97 130	115 995	102 019
Eggplants	25 660	27 895	30 535	33 225	24 450	24 810	24 595
Fruits							
Avocados	7 620	7 790	9 775	9 655	10 350	23 760	47 250
Bananas	159 850	230 995	231 145	239 330	255 785	254 400	255 285
Lemons and limes	33 692	36 892	36 868	38 787	53 674	56 168	52 645
Oranges	116 315	111 887	120 444	118 422	98 486	98 741	98 476
Table grapes	123 574	127 533	136 001	134 780	134 700	155 871	158 351
Wine grapes	16 935	15 470	16 935	12 205	13 205	13 223	13 223
Grapes total	140 509	143 003	152 936	146 985	147 905	169 094	171 574
Apples	249 770	250 977	164 715	288 411	268 421	257 901	257 971
Apricots	7 187	7 882	9 042	11 240	11 450	11 885	10 905
Cherries	23 861	27 507	26 813	26 717	26 706	26 547	26 598
Peaches and nectarines	46 820	47 080	49 676	50 325	50 720	43 290	44 106
Plums	8 377	9 102	9 067	10 554	10 448	10 359	10 380
Almonds	8 938	8 043	6 080	6 672	6 680	6 637	6 937
Olives (oil and table)	17 826	18 987	19 839	21 135	21 844	22 058	21 995

[1/] Maize is reported as sold by number of cobs.

Source: Author's own elaboration based on data from the CREAL provided to the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.

Table A2c: Lebanon – CREAL estimates of livestock production, 2018–2023

Livestock products	2018	2019	2020	2021	2022	2023
Milk (tonnes)						
Cow milk	194 000	180 000	157 500	129 500	71 400	59 640
Sheep milk	17 600	18 040	28 820	30 800	19 800	19 250
Goat milk	27 000	22 200	39 000	39 600	25 800	27 000
Total	**238 600**	**220 240**	**225 320**	**199 900**	**117 000**	**105 890**
Meat (tonnes)						
Beef meat	12 000	11 400	6 075	5 995	2 754	2 300
Lamb meat	3 300	3 360	4 402	4 704	3 024	2 941
Goat meat	3 105	7 230	4 173	4 237	2 761	2 889
Poultry meat ('000 unit)	126 800	105 000	105 000	140 800	112 320	102 320
Eggs ('000 units)						
Eggs	550 000	1 120 000	784 000	394 000	450 000	500 000

Source: Author's own elaboration based on data from the CREAL provided to the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.

Annex 3 – CAS estimates comparison with MoA agriculture data, 2017–2023

Table A3a: Lebanon – CREAL crop planted area vs MoA data, 2017–2023 (percent)

Area	2017	2018	2019[/1]	2020[/1]	2021	2022[/1]	2023[/1]
Staple crops							
Wheat	-62.9	-62.0	-63.8	-64.3	-64.6	-64.6	-64.6
Barley	-82.5	-78.7	-78.4	-78.1	-79.2	-79.2	-79.2
Maize/sorghum	-80.2	-82.8	-80.9	-78.8	-74.8	-74.8	-74.8
Potatoes	-45.0	-53.3	-52.3	-51.3	-58.5	-58.5	-58.5
Chickpeas	-90.5	-75.3	-82.3	-85.5	-87.0	-87.0	-87.0
Beans	-97.4	-97.0	-96.2	-95.7	-82.6	-82.6	-82.6
Lentils	-83.4	-53.8	-75.1	-82.3	-87.2	-87.2	-87.2
Vegetables							
Tomatoes	-36.6	-51.0	-48.2	-44.5	-46.8	-46.8	-46.8
Onions	-40.6	-65.4	-65.7	-66.1	-60.2	-60.2	-60.2
Cucumbers	-62.7	-71.8	-66.5	-58.8	-38.1	-38.1	-38.1
Eggplants	-50.3	-65.3	-66.5	-67.5	-73.5	-73.5	-73.5
Fruits	**-7.7**	**-31.0**	**-23.6**	**-14.2**	**-5.8**	**-5.8**	**-5.8**
Avocados	-86.2	-86.0	-89.1	-90.4	-74.4	-74.4	-74.4
Bananas	164.5	179.0	221.9	279.1	409.4	409.4	409.4
Lemons and limes	-64.9	-62.1	-64.1	-65.9	-67.5	-67.5	-67.5
Oranges	-7.7	-31.0	-23.6	-14.2	-5.8	-5.8	-5.8
Grapes total	-33.1	-35.6	-36.8	-37.9	-37.8	-37.8	-37.8
Apples	-62.1	-62.0	-62.3	-62.6	-59.8	-59.8	-59.8
Apricots	-90.1	-86.8	-85.9	-85.9	-84.1	-84.1	-84.1
Cherries	-71.9	-70.0	-68.4	-66.6	-64.8	-64.8	-64.8
Peaches and nectarines	-54.8	-63.3	-63.6	-63.9	-65.3	-65.3	-65.3
Plums	-87.0	-87.2	-86.0	-84.7	-81.7	-81.7	-81.7
Almonds	-79.4	-79.4	-79.3	-79.3	-79.6	-79.6	-79.6
Olives (oil and table)	-59.3	-60.9	-61.3	-61.6	-61.6	-61.6	-61.6

[1/] Data collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.
Source: Author's own elaboration based on data from CREAL and MoA provided to the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.

Table A3b: Lebanon – Difference between CREAL crop yield vs MoA data, 2017–2023 (percent)

Yields	2017	2018	2019/1	2020/1	2021	2022/1	2023/1
Staple crops							
Wheat	73.4	38.4	36.6	33.0	36.3	36.3	36.3
Barley	-17.6	18.8	2.9	-8.8	-10.0	-10.0	-10.0
Potatoes	29.0	-16.6	-4.8	4.2	20.9	20.9	20.9
Chickpeas	36.8	41.4	5.7	-13.1	-37.1	-37.1	-37.1
Beans	-33.8	61.0	66.6	62.9	100.5	100.5	100.5
Lentils	-19.0	38.9	39.7	36.9	49.9	49.9	49.9
Vegetables							
Tomatoes	99.3	219.6	184.3	149.0	115.8	115.8	115.8
Onions	33.7	4.1	9.2	13.6	43.1	43.1	43.1
Cucumbers	155.5	229.3	173.4	118.4	26.7	26.7	26.7
Eggplants	46.3	5.6	22.5	42.1	86.7	86.7	86.7
Fruits							
Avocados	188.7	246.8	282.7	278.5	54.7	54.7	54.7
Bananas	-22.6	-14.5	-9.8	-3.1	11.7	11.7	11.7
Lemons and limes	-7.6	20.6	31.7	43.2	126.7	126.7	126.7
Oranges	-12.1	29.5	35.6	44.2	50.3	50.3	50.3
Grapes total	171.1	116.2	102.9	91.0	81.6	81.6	81.6
Apples	108.6	104.2	141.9	170.8	192.1	192.1	192.1
Apricots	95.2	82.1	93.7	118.3	275.9	275.9	275.9
Cherries	89.6	151.7	157.2	163.5	162.4	162.4	162.4
Peaches and Nectarines	49.4	133.6	115.4	100.3	105.8	105.8	105.8
Plums	71.0	104.1	123.2	144.5	218.4	218.4	218.4
Almonds	29.5	35.2	89.1	197.2	223.1	223.1	223.1

1/ Data collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.
Source: Author's own elaboration based on data from CREAL and MoA provided to the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.

Table A3c: Lebanon – Difference between CREAL crop production and MoA data, 2017–2023 (percent)

Production	2017	2018	2019[/1]	2020[/1]	2021	2022[/1]	2023[/1]
Staple crops							
Wheat	-35.7	-47.4	-50.5	-52.6	-51.8	-51.8	-51.8
Barley	-85.6	-74.7	-77.8	-80.0	-81.2	-81.2	-81.2
Potatoes	-29.1	-61.1	-54.6	-49.2	-49.9	-49.9	-49.9
Chickpeas	-87.1	-65.1	-81.3	-87.4	-91.8	-91.8	-91.8
Beans	-98.3	-95.2	-93.7	-93.0	-65.1	-65.1	-65.1
Lentils	-86.6	-35.8	-65.2	-75.7	-80.9	-80.9	-80.9
Vegetables							
Tomatoes	26.4	56.5	47.3	38.1	14.8	14.8	14.8
Onions	-20.5	-64.0	-62.6	-61.4	-43.1	-43.1	-43.1
Cucumbers	-4.6	-7.0	-8.5	-10.0	-21.6	-21.6	-21.6
Eggplants	-27.3	-63.3	-58.9	-53.9	-50.4	-50.4	-50.4
Fruits							
Avocados	-60.3	-51.4	-58.4	-63.7	-60.4	-60.4	-60.4
Bananas	104.7	138.4	190.2	267.3	468.9	468.9	468.9
Lemons and limes	-67.6	-54.3	-52.7	-51.2	-26.3	-26.3	-26.3
Oranges	-18.9	-10.6	3.6	23.7	41.5	41.5	41.5
Grapes total	81.4	39.3	28.3	18.6	13.0	13.0	13.0
Apples	-21.0	-22.4	-8.8	1.3	17.4	17.4	17.4
Apricots	-80.6	-75.9	-72.6	-69.2	-40.1	-40.1	-40.1
Cherries	-46.7	-24.4	-18.7	-12.0	-7.6	-7.6	-7.6
Peaches and nectarines	-32.5	-14.2	-21.5	-27.7	-28.7	-28.7	-28.7
Plums	-77.7	-73.8	-68.7	-62.5	-41.7	-41.7	-41.7
Almonds	-73.3	-72.1	-60.9	-38.5	-34.1	-34.1	-34.1

[1/] Data collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.
Source: Author's own elaboration based on data from CREAL and MoA provided to the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.

Table A3d: Lebanon – Difference between CREAL livestock production and MoA data, 2018–2023 (percent)

Milk	2018	2019[/1]	2020[/1]	2021	2022[/1]	2023[/1]
Cow milk	-38.5	-33.1	-36.0	-47.2	-64.6	-64.6
Sheep milk	23.3	28.0	31.0	142.9	64.1	64.1
Goat milk	2.3	10.7	16.1	84.6	29.3	29.3
Total	**-33.0**	**-27.3**	**-20.8**	**-28.5**	**-58.2**	**-62.1**
Meat						
Beef meat	58.6	44.5	23.9	-38.0	-71.1	-71.1
Lamb meat	-47.3	-43.9	-41.0	-7.7	-40.1	-40.1
Goat meat	-29.9	-27.1	-21.7	30.7	-16.1	-16.1
Poultry meat	-2.8	-11.5	-2.3	38.7	20.3	-84.1
Total	**-2.4**	**-10.8**	**-4.4**	**30.3**	**-5.2**	**-83.3**

[1/] Data collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.
Source: Author's own elaboration based on data from CREAL and MoA provided to the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic. FAO, 2024.

Table A4a: Lebanon – Vegetables and fruits planted area, 2015-2024 (hectare unless otherwise stated)

	2015	2016	2017	2018	2019	2020	2021	2022	2023 estimate	Average 2015/19	Average 2020/23	2024 forecast	Change prior crisis (percent)[1/]	Change since crisis (percent)[2/]
Vegetables														
Tomatoes	6 149	5 363	5 446	6 819	7 232	5 931	5 563	5 148	4 949	6 202	5 398	5 400	-13	0
Onions	3 048	3 029	2 519	3 408	3 648	3 919	3 521	3 332	2 980	3 130	3 438	3 400	9	-1
Cucumbers	4 098	3 751	4 204	5 925	5 590	4 483	2 817	3 318	2 940	4 713	3 389	3 200	-33	-6
Eggplants	844	1 396	1 679	2 472	2 703	2 987	2 750	2 739	2 848	1 819	2 831	3 000	66	7
Vegetables (all)	**29 179**	**28 654**	**29 353**	**33 707**	**36 815**	**34 870**	**32 660**	**32 386**	**30 252**	**31 542**	**32 542**	**33 900**	**7**	**4**
Fruits														
Avocados	1 366	1 642	1 665	1 770	2 750	3 367	3 619	5 607	6 107	1 839	4 675	6 800	272	46
Bananas	2 531	2 320	2 193	2 082	1 806	1 558	1 250	1 242	1 248	2 187	1 324	1 200	-46	-11
Lemons and limes	4 785	3 534	3 805	3 519	3 715	3 912	4 108	4 286	4 286	3 871	4 148	4 200	10	2
Oranges	5 080	5 676	4 123	5 502	4 971	4 325	3 909	3 909	3 895	5 070	4 009	3 800	-25	-5
Grapes	9 904	10 443	10 136	10 484	10 684	10 900	11 085	11 098	11 104	10 330	11 047	11 300	10	3
Apples	16 341	16 573	16 641	16 280	16 404	17 937	16 684	16 647	16 647	16 448	16 979	16 100	-2	-5
Apricots	3 508	4 285	4 006	3 178	3 432	3 546	3 203	3 172	3 360	3 682	3 320	3 400	-9	1
Cherries	5 502	4 919	5 511	5 127	4 852	4 594	4 353	4 353	4 353	5 182	4 413	4 500	-13	3
Peaches and Nectarines	4 038	4 231	3 753	4 488	4 520	4 384	4 599	4 599	4 599	4 206	4 545	4 700	10	2
Plums	2 997	3 212	3 048	3 054	2 798	2 693	2 287	2 287	2 287	3 022	2 388	2 200	-26	-6
Almonds	4 109	4 298	4 797	4 583	4 475	4 444	4 564	4 554	4 946	4 452	4 627	4 900	11	7
Fruits and Nuts (all)	**71 834**	**73 493**	**74 385**	**73 041**	**72 202**	**72 466**	**69 860**	**71 011**	**71 608**	**72 991**	**71 236**	**72 300**	**-1**	**2**
Olives	59 628	59 780	59 990	62 233	63 404	64 139	64 074	64 071	64 082	61 007	64 092	64 600	6	1

[1/] Average 2015–2019.
[2/] Average 2020–2023.
Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL, and collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic (forecast), 2024.

Table A4b: Lebanon – Vegetables and fruits yields, 2015–2024 (tonnes/hectare unless otherwise stated)

	2015	2016	2017	2018	2019	2020	2021	2022	2023 estimate	Average 2015/19	Average 2020/23	2024 forecast	Change prior crisis (percent)[1/]	Change since crisis (percent)[2/]
Vegetables														
Tomatoes	46.1	46.6	41.6	27.4	32.0	37.1	40.9	43.0	42.4	38.7	40.8	43.6	13	7
Onions	37.0	36.2	40.7	43.6	44.4	51.0	36.9	37.5	37.3	40.4	40.7	39.1	-3	-4
Cucumbers	32.7	26.2	26.2	19.9	22.9	27.4	44.0	44.6	44.2	25.6	40.0	42.5	66	6
Eggplants	22.9	16.5	21.0	30.8	27.5	24.1	17.9	18.3	17.4	23.7	19.4	22.3	-6	15
Fruits														
Avocados	15.7	11.4	11.5	9.1	8.5	7.9	7.2	10.7	19.6	11.2	11.4	20.0	77	76
Bananas	37.2	47.3	35.6	46.5	44.1	41.8	36.0	36.0	35.9	42.1	37.4	34.5	-18	-8
Lemons and limes	34.9	32.8	27.3	22.9	21.0	20.3	17.7	17.8	16.7	27.8	18.1	18.2	-35	0
Oranges	28.4	33.3	34.8	22.8	23.4	22.1	17.8	17.8	17.9	28.5	18.9	19.6	-31	4
Grapes	34.8	32.0	7.6	9.8	11.2	11.4	11.8	13.5	13.7	19.1	12.6	14.6	-23	16
Apples	18.4	20.8	19.0	19.9	11.0	15.9	13.7	13.2	13.2	17.8	14.0	12.0	-33	-14
Apricots	8.9	9.3	9.2	10.3	9.6	10.3	6.0	6.3	5.4	9.5	7.0	5.9	-38	-15
Cherries	8.8	6.6	8.1	7.1	6.8	6.6	6.6	6.6	6.6	7.5	6.6	6.9	-8	4
Peaches and ectarines	18.5	15.0	18.5	12.2	14.0	15.9	15.5	13.2	13.4	15.6	14.5	14.5	-7	0
Plums	15.1	13.1	12.3	11.4	10.4	10.5	7.8	7.8	7.8	12.5	8.5	8.3	-33	-2
Almonds	7.5	6.0	7.0	6.3	3.5	2.4	2.2	2.2	2.1	6.1	2.3	2.1	-66	-7
Olives	3.0	2.6	2.6	2.6	2.7	2.9	1.9	1.9	1.9	2.7	2.1	2.2	-19	2

[1/] Average 2015–2019.
[2/] Average 2020–2023.
Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL, and collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic (forecast), 2024.

Table 4Ac: Lebanon – Vegetables and fruits production 2015–2024 (tonnes unless otherwise stated)

	2015	2016	2017	2018	2019	2020	2021	2022	2023 estimate	Average 2015/19	Average 2020/23	2024 forecast	Change prior crisis (Percent)[1/]	Change since crisis (Percent)[2/]
Vegetables														
Tomatoes	283 350	249 877	226 771	186 620	231 457	219 836	227 560	221 591	209 605	235 615	219 648	235 300	0	7
Onions	112 808	109 765	102 420	148 471	161 844	199 816	129 978	124 810	111 053	127 062	141 414	132 900	5	-6
Cucumbers	134 031	98 350	110 147	117 771	127 905	122 878	123 820	147 869	130 052	117 641	131 155	134 800	15	3
Eggplants	19 321	23 018	35 277	76 082	74 363	71 996	49 325	50 051	49 618	45 612	55 247	67 300	48	22
Vegetables (all)	**818 083**	**793 766**	**791 291**	**845 104**	**953 264**	**903 401**	**822 904**	**839 890**	**775 438**	**840 301**	**835 408**	**868 500**	**3**	**4**
Fruits														
Avocados	21 433	18 695	19 193	16 031	23 495	26 586	26 169	60 075	119 467	19 769	58 074	136 500	590	135
Bananas	94 223	109 675	78 094	96 881	79 638	65 151	44 962	44 719	44 874	91 702	49 926	40 600	-56	-19
Lemons and limes	166 919	115 740	103 979	80 665	77 994	79 434	72 808	76 191	71 412	109 059	74 961	77 100	-29	3
Oranges	144 399	188 844	143 386	125 223	116 254	95 756	69 585	69 765	69 578	143 621	76 171	75 000	-48	-2
Grapes	344 181	333 796	77 440	102 625	119 183	123 974	130 913	149 668	151 863	195 445	139 104	165 700	-15	19
Apples	300 575	344 469	316 155	323 480	180 696	284 791	228 673	219 711	219 770	293 075	238 236	194 000	-34	-19
Apricots	31 287	39 801	37 051	32 748	33 028	36 518	19 130	19 857	18 219	34 783	23 431	19 900	-43	-15
Cherries	48 581	32 432	44 795	36 401	32 982	30 364	28 900	28 728	28 783	39 038	29 194	31 100	-20	7
Peaches and nectarines	74 784	63 337	69 391	54 876	63 318	69 560	71 123	60 704	61 848	65 141	65 809	67 500	4	3
Plums	45 151	42 181	37 612	34 740	28 997	28 143	17 911	17 758	17 794	37 736	20 402	18 600	-51	-9
Almonds	30 977	25 862	33 532	28 811	15 554	10 844	10 136	10 071	10 526	26 947	10 394	10 300	-62	-1
Fruits and nuts (all)	**1 220 728**	**1 192 661**	**1 068 648**	**1 052 160**	**898 342**	**965 268**	**822 105**	**837 974**	**858 378**	**1 086 508**	**870 931**	**867 000**	**-20**	**0**
Olives	176 659	157 646	152 978	164 188	170 127	183 941	122 077	122 323	121 769	164 320	137 528	141 179	-14	3

[1/] Average 2015–2019.
[2/] Average 2020–2023.
Note: Figures may not add up due to rounding.
Source: Author's own elaboration based on data from the MoA Department of Agriculture Statistics and CREAL and collected during the 2024 FAO/WFP Crop and Food Security Assessment Mission (CFSAM) to the Lebanese Republic (forecast), 2024.

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