

REPORT

ON THE IMPACT OF PROLONGED-CRISES ON FOOD SECURITY AND LIVELIHOODS OF LEBANESE HOST COMMUNITIES



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FOREWORD

The Eastern Mediterranean region (EMR) is under particularly challenging conditions caused by the economic crisis, COVID-19 pandemic, and the spill-over of several regional crises; in Lebanon, the situation is also aggravated by the Beirut port explosion. The Lebanese Government together with national and international non-governmental organizations (NGOs) are collaborating continuously to address the country's food security and nutrition challenges. In their support, and to study the current situation after 6 months of Beirut Port Explosions, the fall down of the Lebanese pound and the repeated lockdowns due to the breakout of COVID-19, with a view towards enabling the prioritization of policy reforms, the Eastern Mediterranean Regional office of the World Health Organization (WHO-EMRO) joined forces with the department of Public Health Nutrition at the Faculty of Public Health and the Lebanese Food, Drugs and Chemical Administration (LFDC) at the Lebanese University to commission an in-depth analysis of the country's food security and nutrition context. This comprehensive report builds on existing studies and research on food security and nutrition at regional level and at national level. To reduce long-term vulnerability and improve overall nutrition in Lebanon, this report aims to support and broaden the ongoing discussion on how to increase food security and on what needs to be done by all involved stakeholders. The discussion makes a case for economic, social and environmental policies that require greater integration and cooperation among many public, private and civil society institutions in Lebanon in order to "end hunger, achieve food security and improved nutrition and promote sustainable agriculture." On behalf of WHO-EMRO and the Lebanese university, we hope that the findings and recommendations of this strategic report will be helpful to the Government of Lebanon and the international community to make the most of their efforts in addressing the existing gaps and reach food security in Lebanon.

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EXECUTIVE SUMMARY

This national assessment of food security in Lebanon is crucial for the humanitarian and development community to determine in which areas are located the most vulnerable Lebanese households in line with many challenges facing food security and agriculture in Lebanon including prolonged crises of Beirut port explosion, the financial and economic crisis and COVID-19 pandemic. This assessment found that food insecurity is an immediate problem for households in Beirut and in many governorates in Lebanon. Nine in every sixteen households eat less than two meals per day and more than 70 percent of them skip their meals to spare food. Nearly, 53 percent of the Lebanese population has a poor food consumption score. Nevertheless, 82.4 percent do not rely on coping strategies. Beqaa and Akkar have the largest proportion of households with a poor Food Consumption Score, with 83 percent and 73 percent of households are calculated to have a poor food consumption score, respectively. In addition, in terms of livelihoods, the assessment found that a majority of Lebanese households reported a decrease in income (the top reasons for it being the inflations in prices and the lack of job opportunities) and having incurred debt in the last 24 months. Households reported that they generally incurred debt to be able to buy food. Improving food security in Lebanon requires efforts not only on the part of the government, but through regional and international actions. Actions toward improving food security in Lebanon need to focus on five key areas at the national level: 1) sustainable improvements in productivity (inputs, technology, extension), 2) promoting efficient supply chains (reduce waste, better logistics), 3) targeted safety nets for the vulnerable populations 4) better management of risks associated with high import dependency, (5) Improving employment prospects in agriculture, particularly for the young. At regional Level, three key areas of actions should be highlighted: cooperation in policies affecting pricing of common resources, cooperation in harmonizing trade policies, strengthening infrastructure in the region, improve market information systems and coordination of action to respond to world market volatility. At international level, strengthening the food security situation should be through the countering market volatility through new financing mechanisms to Lebanon.

LIST OF ABBREVIATIONS

ACF: Action Contre la faim (Action Against Hunger)

ACTED: Agency for Technical Cooperation and Development

AFSS: Arab family food security scale

ANERA: American Near East Refugee Aid

AVSI: Association of Volunteers in International Service

BI: Business Intelligent

CSI: coping strategy index

CSR: Corporate Social Responsibility

DPNA: Development for People and Nature Association

EMR: Eastern Mediterranean Region

EU: European Union

FCS: Food consumption score

FSC: Food Security Cluster

FIES: Food Insecurity Experience Scale

ICARDA: International Center for Agricultural Research in the Dry Areas

IOCC: International Orthodox Christian Charities

IRC: International Rescue Committee

IRW: Islamic Relief Worldwide

ISR: Individual Social Responsibility

LFDA: Lebanese Food, Drugs and Chemical Administration

LOST: Lebanese Organization for Studies and Training

MCC: Mennonite Central Committee

MENA: Middle East North Africa

MERATH: Middle East Revive and Thrive

MF: Makhzoumi Foundation

MSD: Migration for Services and Development

MSME: Micro, Small and Medium sized Enterprises

NAS: Nutrition Assessment System

NCDs: Non communicable diseases

NGOs: Non-governmental organizations

NPTP: National Poverty Targeting Program

rCSI: reduced Coping Strategy Index

RTE: Ready to eat

SDGs: Sustainable developmental goals

SI-FR: Secure Islamique France

SMEB: Survival Minimum Expenditure Basket

SQ: Share Q

TVTE: Technical and Vocational Education and Training

UNESCWA: United nation economic and social commission for west Asia

UNHCR: United Nations High Commissioner for Refugees

UNICEF: United Nations International Children's Emergency Fund

URDA: Union of Relief and Development Association

USAID: United States Agency for International Development

WFP: World Food Program

WHH: Welthungerhilfe

WHO: World Health Organization

WHO-EMRO: World Health Organization- Eastern Mediterranean Regional Office

WVI: World Vision International

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INTRODUCTION

Food security is one of the serious challenges and a topic of keen interest to policy makers, practitioners, and academics around the world and in Middle Eastern North Africa (MENA) region. The consequences of food insecurity can affect almost every facet of society. Worldwide COVID-19 pandemic led in 2020 to 265 million suffering from acute food insecurity across 55 countries which requires urgent food, nutrition and livelihoods assistance for survival. Moreover, 77 million were in conflict-afflicted countries. Climate change and economic shocks impacted another 34 million and 24 million people, respectively. The MENA region remains one of the area's most vulnerable to a food crisis. The issue for the region is not food availability whose numbers are statistically sufficient and stable since 2001. MENA countries are among the world's largest food importers: most depend on imports for over half their needs. Moreover, this region is the most

water-stressed region with massive subsidies for water and agriculture (1). MENA also faces conflicts in Libya, Syria and Yemen and sustained political protests in Algeria, Iraq and Lebanon with periodic outbursts. According to the Food and agriculture organization (FAO), it was noted that hunger had risen since 2011 due to conflict and protracted crisis. Nearly 52 million people in the region were chronically undernourished of which 34 million were in conflict-affected countries. The worst afflicted are Syria and Yemen, although Libya and Lebanon face a crisis in food security (1). Lebanon has faced multiple shocks over the past 12 months. The socio-economic situation, the political distress, the deterioration in the country's health system struggling under severe pressure because of COVID-19, the Beirut Port Explosions on 4 August; all together increased the number of households sinking into poverty, and aggravating the situation of already vulnerable communities.

DETERMINANT FACTORS AND INDICATORS FOOD INSECURITY IN LEBANON

Lebanon is a small country of 10,452 square kilometers and approximately 6,855,713 million people (2) subject to heightened demographic pressures, possessing limited crop land (Figure 1 and Figure 2) (39 percent of all land as of 2018, according to the FAO (2020), renewable fresh water (approximately

770 m³ per capita per year, (2), groundwater which accounts for 50 percent of irrigation water and 80 percent of potable water (3). Lebanon is highly reliant on food imports (as an example, more than 99 percent of all cereals and more than 65 percent of the food basket are imported (4). Figure 3 shows the dependence on importation in terms of food in Lebanon between 1970 and 2018.

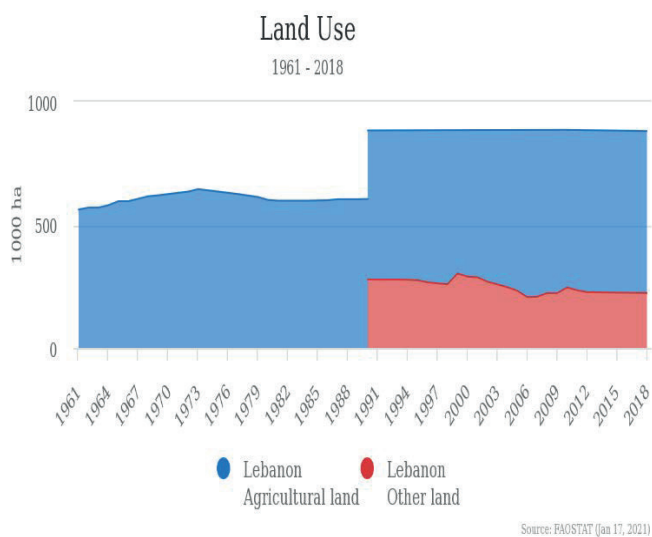


Figure 2. Land use in Lebanon

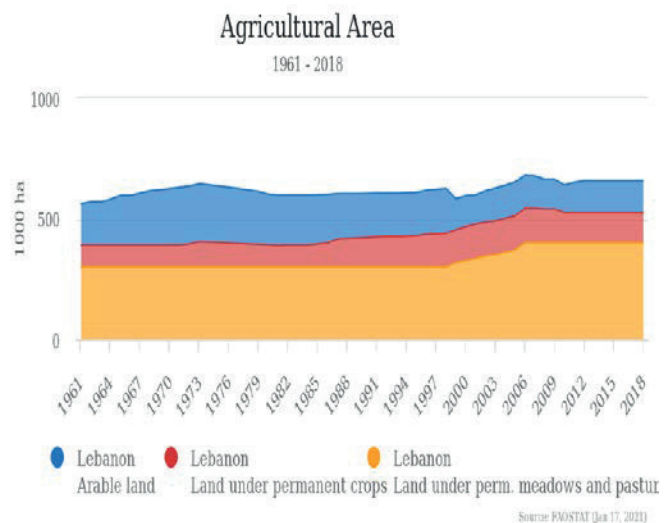


Figure 1. Agricultural area and its use in Lebanon

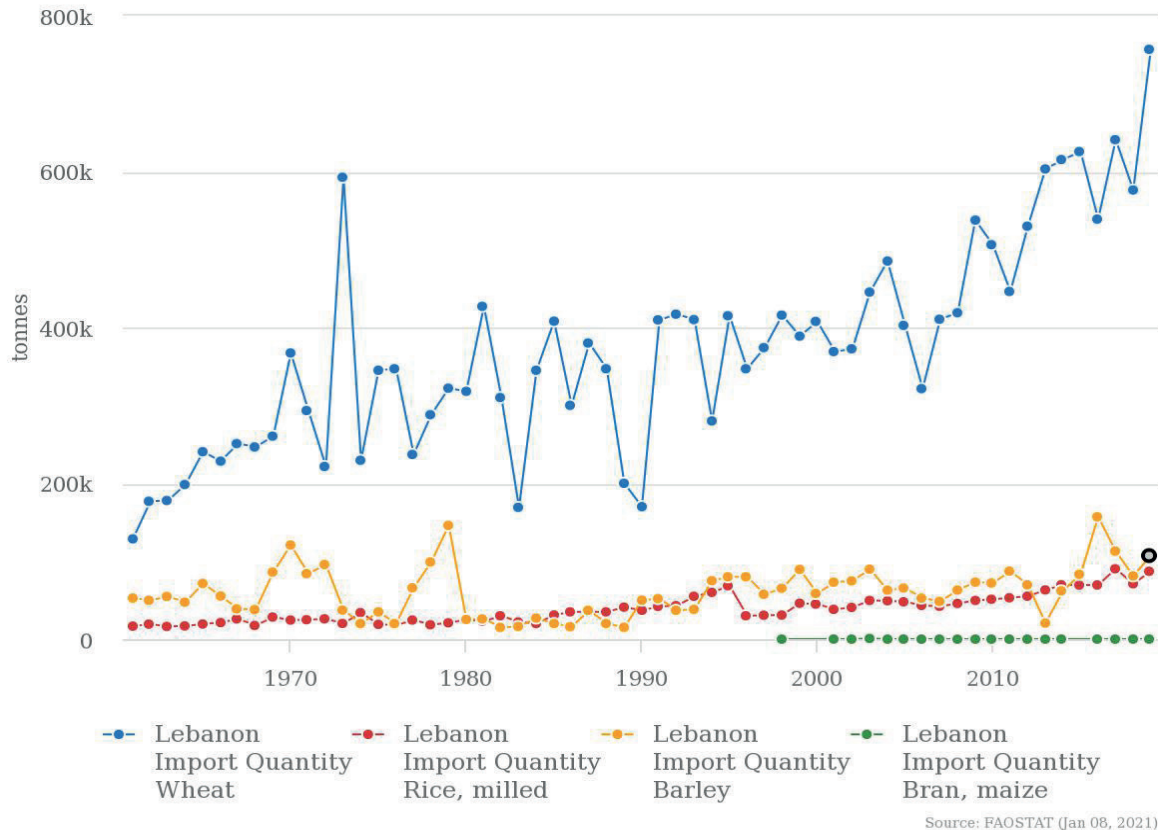


Figure 3. Food import of 4 major staple foods between 1970 and 2018 in Lebanon

Heavily indebted, Lebanon is also import dependent on the very foods that it consumes the most, such as bread and other cereals. The annual variability of production is quite pronounced, and the gap between total demand and production has continued to increase over years (4). Because of the extreme dependence on imports of food, agricultural and food trade balance in Lebanon is heavily in deficit. Figure 3 describes one of the economic situations worsening factor in Lebanon that aggravates the food security in

Lebanese citizens. Up to 80 percent of the country's food needs are imported in any given year. Since 1990, the end of the civil war, governments have come and gone and policy has been shattered, not least with respect to food and nutrition security. These successive governments have adopted the behavior of borrowing, mostly from local banks. Nowadays in 2020, the Lebanese pound had lost around 80 percent of its value since October 2019. This impacted the people's purchasing power, the value of their savings and salaries and

the importation of foods and goods which have been affected too. According to World Food Program (WFP) estimate, one in three Lebanese are today unemployed, and around fifth the population faced salaries reduction. Moreover, 85 percent of families are pushed to buy cheaper foods of poor nutritional value and 50 percent of the families reported skipping meals and limiting meal portions. According to the UNESCWA (United Nations Economic and Social Commission for West Asia) estimates, more than half the Lebanese population is now trapped in poverty, almost double the poverty rate in 2019 (28 percent), while 23 percent of the Lebanese population (approximately 1,576,813 people) are extremely poor (5). Since 2011, Lebanon was at the forefront of the Syrian crisis. As of January 2021, there are 865,531 Syrian refugees registered in Lebanon by United Nations High Commissioner for Refugees (UNHCR) (6). The war in Syria provoked an influx of about 1.5 million Syrians, expanding demand for food. To respond to rising food demand, people invested in agriculture, especially in greenhouses, vegetables, and potatoes.

Lebanese agriculture: from the Greater Lebanon foundation to the present crises

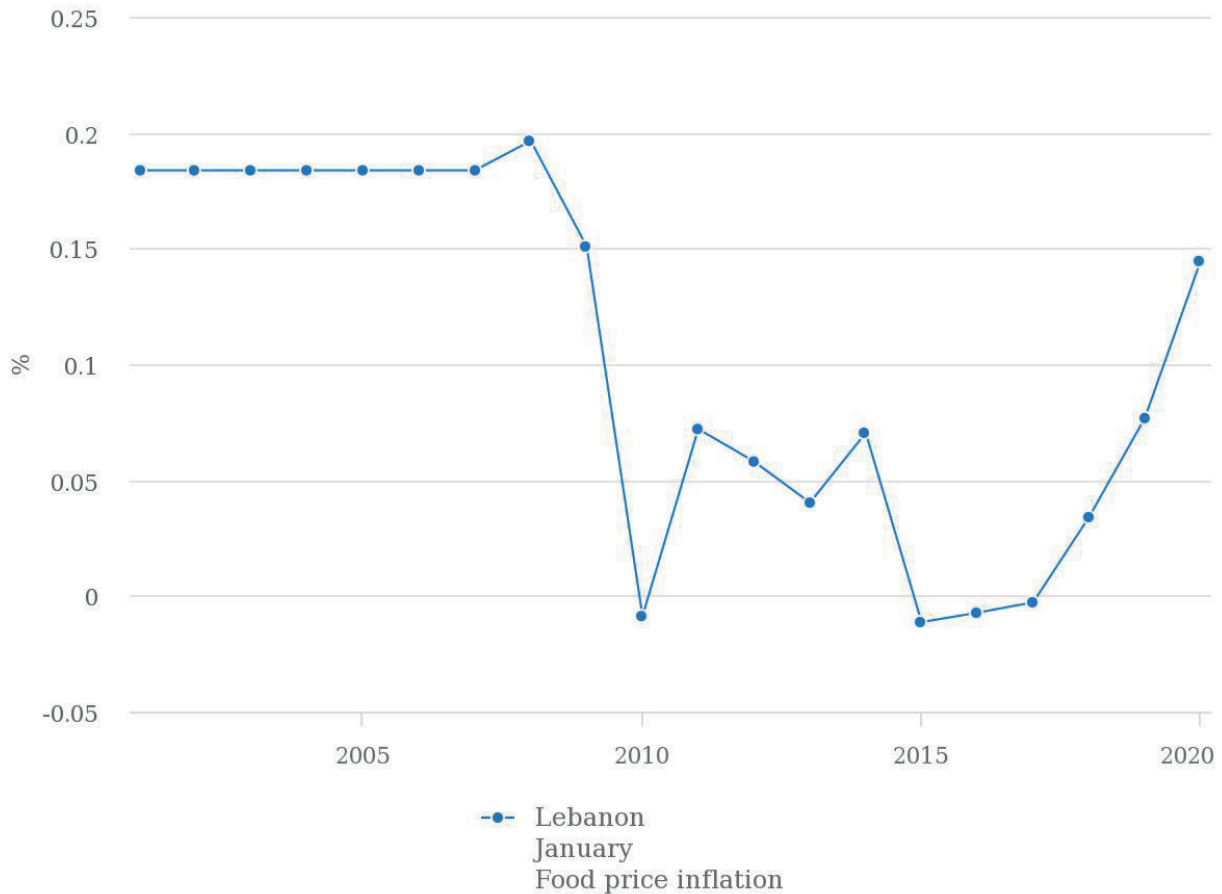
After the famine between 1915 and 1918, the political dynamics and regional and national socioeconomic conditions were continuously influencing the agricultural development in Lebanon. In 1920, the creation of Greater Lebanon motivated the government to implement food security imperatives. Thus, to ensure that Mount Lebanon would not suffer famine again, Akkar, the Beqaa Valley, and South Lebanon—all predominantly agricultural areas—were added to Mount Lebanon. Nevertheless, this addition faced political challenges. Between 1923 and 1943, the French Mandate (1923–1943) implemented a rural development plan in order to gain support from rural landlords. During the rise of what became known as the “merchant republic” between 1943 and 1958, the inflow of regional capital and low-wage Palestinian refugee labor to Lebanon along with the oil boom that increased trade opportunities with the Arab Gulf states, little importance was given to take advantage of economic growth to depend economically on agriculture. In the late 1950s and early

1960s, the Chehabist reforms did not alter the system. Export-oriented agriculture and politically affiliated agro-industrial investments failed to induce any economic development. In 1975, due to the lack of rural opportunities that led to an increased migration toward Beirut and the growth of the city's poverty belt, the civil war began and ended up after fifteen years. Lebanon found itself, in 1990, divided into several political and territorial spaces lacking any initiative to support agriculture, and the sector relied on the intervention of international donors. In 2011, despite a lack of governmental support, the Lebanese agricultural sector adapted quickly in response to food security shocks and generated social stability and resilience in rural areas. Akkar and northern Beqaa Valley regions show the expansion of agricultural land. This local investment was based on initiative and opportunities from Lebanese people in assistant of Syrian refugee agricultural workers (7). Today, the financial crisis and the collapse of the Lebanese pound have aggravated the food security of

vulnerable Lebanese and refugees as well. In an alarming context, the consumer price index jumped between October 2019 and October 2020, to reach 240 percent, while food prices increased by 367 percent. According to the monthly report released by the ministry of economy and trade in August 2020, an increase of 105 percent in the sale of basic foods such as cereals, pasta, sugar, and rice was observed in supermarkets in Beirut along with a 50 percent decrease in the volumes of sales of functional foods, and imported sweets (8). Until today, there is no data on the consumption patterns of vulnerable people.

Food insecurity indicators in Lebanon

As discussed previously, food prices have exponentially increased over the last year. Figure 3 depicts the evolution of demand for four staple crops in Lebanon against production between 1970 and 2018 and Figure 4 shows the food price inflations between 2005 and 2020 in Lebanon.



Source: FAOSTAT (Jan 08, 2021)

Figure 4. Food prices inflation between 2005 and 2020 in Lebanon.

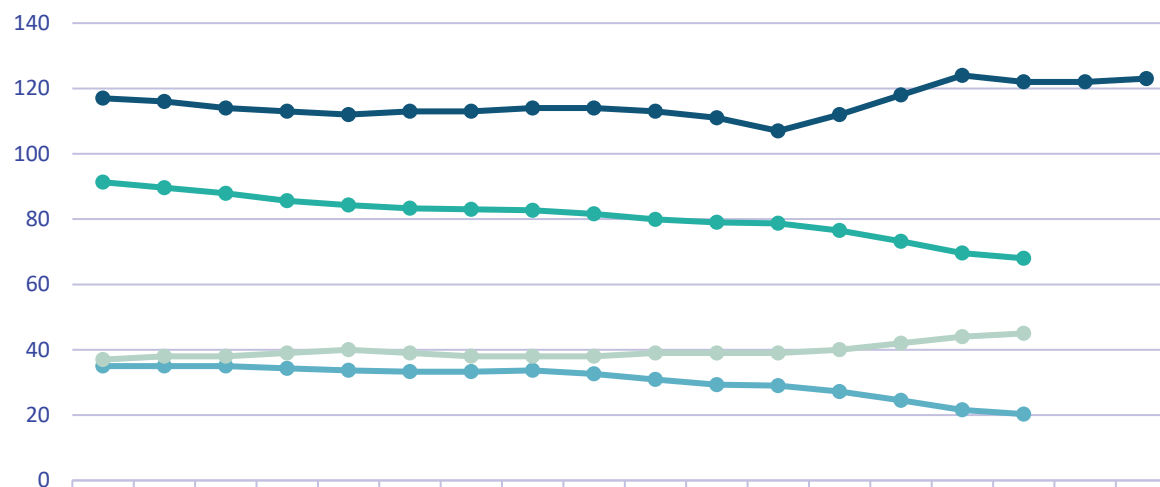
The financial crisis threatened Lebanon's capacity to produce food and affected food security by increasing prices of raw materials, feed materials, pesticides, grains and other agricultural products. Thus, the agricultural system has now collapsed, putting Lebanon's agricultural production capacity at risk. A loss of income-generating opportunities for many Lebanese was due to the pound's devaluation which has reached levels as high as 10,800 pounds to \$1.00. The following figures

show the trends and changes over years of food security indicators: food availability (Figure 5), food utilization (Figure 6), stability (Figure 7), food production (Figure 8) and food access (Figure 9). According to Figure 5, the average dietary energy supply adequacy was almost stable (117percent-123 percent) between 2000 and 2019. However, the average protein supply and the average supply of protein of animal origin decreased from 91.3 g/cap/day to 68 g/cap/day and from 35

g/cap/day to 20.3 g/cap/day, between 2000 and 2017, respectively. This was inversely shown in the dietary energy supply derived from cereals, roots and tubers which increased from 37 to 45 kcal/cap/day between 2000 and 2017. Figure 6 shows an increase in the prevalence of anemia among women of reproductive age (15-49 years) between 2000 (27%) and 2016 (31.2%) along with an increase in the prevalence of obesity in adult population between 2000 (24.6%) and 2016 (32%). Furthermore, the percentage of children under 5 years affected by wasting increased from 6.6% to 16.7 percent between 2004 and 2006. As for the use of basic drinking water services, the percentage of population used increase from 85.4% to 92.6% between 2000 and 2017. According to Figure 7, the food supply variability increased from 57 kcal/cap/day in 2000 to 187 kcal/cap/day in 2019. Nevertheless, the per capita food production variability decreased from 21.4 in 2000 to 10 in 2016 along with a decrease in the percentage of arable land equipped for irrigation. Furthermore, the value of food imports in total merchandise exports decreased from 102 percent in 2000 to 64 percent in 2017 and the cereal import dependency

ratio increased from 88 percent in 2000 to 99.5 percent in 2017. This increase was associated with instable political situation between 2000 and 2017. The Lebanese area harvested cereals decreased between 1961 and 2017, as shown in Figure 8. Cereal yield data for Lebanon from 1961 to 2017, including wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains, was 1831 kg per hectare with a minimum of 747 kg per hectare in 1968 and a maximum of 3386 kg per hectare in 2014. In 2017, cereal production for Lebanon was 163,595 metric tons. Though Lebanon cereal production fluctuated substantially in recent years, it tended to increase through the 1961 - 2017 period ending at 163,595 metric tons in 2017. Figure 9, shows a fluctuation in the gross domestic product per capita from 1,234\$ in 1988 to 7584\$ 2019.

Food availability

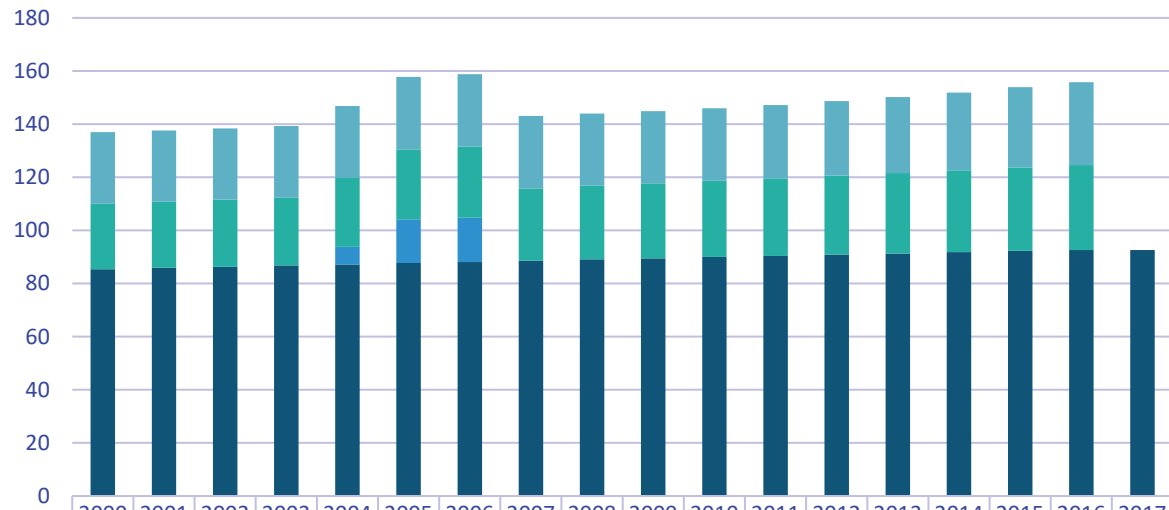


	2000-2002	2001-2003	2002-2004	2003-2005	2004-2006	2005-2007	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
● Average dietary energy supply adequacy (percent) (3-year average)	117	116	114	113	112	113	113	114	114	113	111	107	112	118	124	122	122	123
● Average protein supply (g/cap/day) (3-year average)	91.3	89.6	87.9	85.6	84.3	83.3	83	82.7	81.6	79.9	79	78.7	76.5	73.2	69.6	68		
● Average supply of protein of animal origin (g/cap/day) (3-year average)	35	35	35	34.3	33.7	33.3	33.3	33.7	32.6	30.9	29.3	29	27.2	24.5	21.6	20.3		
● Share of dietary energy supply derived from cereals, roots and tubers (kcal/cap/day) (3-year average)	37	38	38	39	40	39	38	38	38	39	39	39	40	42	44	45		

- Average dietary energy supply adequacy (percent) (3-year average)
- Average protein supply (g/cap/day) (3-year average)
- Average supply of protein of animal origin (g/cap/day) (3-year average)
- Share of dietary energy supply derived from cereals, roots and tubers (kcal/cap/day) (3-year average)

Figure 5. Food availability indicators in Lebanon between 2000 and 2019. Source: FAOSTAT January 8, 2021.

Food utilization

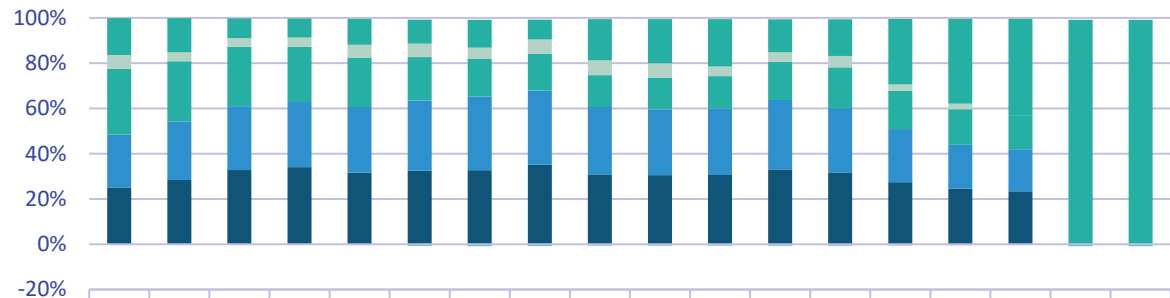


	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
■ Prevalence of anemia among women of reproductive age (15-49 years)	27	26.8	26.8	26.9	27.1	27.3	27.3	27.3	27.2	27.2	27.3	27.6	28.1	28.6	29.3	30.2	31.2	
■ Prevalence of obesity in the adult population (18 years and older)	24.6	24.9	25.3	25.6	25.9	26.3	26.7	27.2	27.7	28.2	28.7	29.2	29.7	30.3	30.8	31.4	32	
■ Percentage of children under 5 years affected by wasting (percent)					6.6	16.5	16.7											
■ Percentage of population using at least basic drinking water services (percent)	85.4	85.9	86.3	86.8	87.2	87.7	88.1	88.6	89.1	89.5	90	90.4	90.9	91.3	91.8	92.3	92.6	92.6

- Prevalence of anemia among women of reproductive age (15-49 years)
- Prevalence of obesity in the adult population (18 years and older)
- Percentage of children under 5 years affected by wasting (percent)
- Percentage of population using at least basic drinking water services (percent)

Figure 6. Food utilization indicators in Lebanon between 2000 and 2017. Source: FAOSTAT January 8, 2021.

Stability



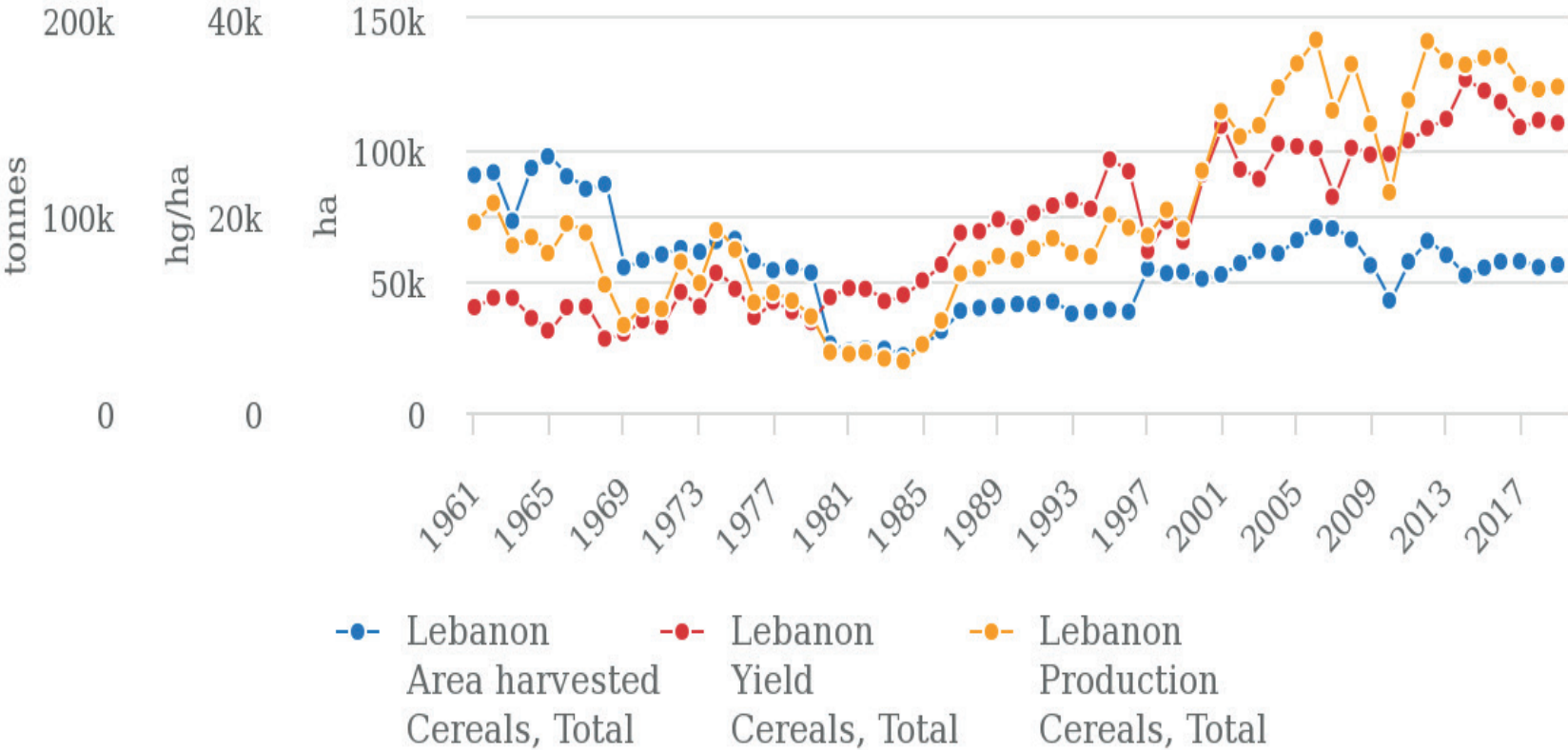
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
■ Per capita food supply variability (kcal/cap/day)	57	47	24	22	30	26	30	22	53	58	60	38	45	97	150	181	186	187		
■ Per capita food production variability (constant 2004-2006 thousand int\$ per capita)	21.4	12.4	10.8	10.8	14.6	14.5	11.7	15.5	19	18.8	12	11.2	13.8	9.3	10					
■ Political stability and absence of violence/terrorism (index)	-0.44	-0.36	-0.46	-0.71	-1	-1.81	-2.12	-1.88	-1.56	-1.63	-1.56	-1.66	-1.69	-1.7	-1.7	-1.62	-1.63	-1.64		
■ Value of food imports in total merchandise exports (percent) (3-year average)	102	83	72	64	57	47	41	41	41	42	41	44	50	57	62	64				
■ Percent of arable land equipped for irrigation (percent) (3-year average)	82.3	80.8	77.6	75.4	75.4	75.7	79.3	82.1	86.7	86.2	84.1	80.2	78.8	78.8	78.8	78.8				
■ Cereal import dependency ratio (percent) (3-year average)	88	88.6	90.3	89.2	82.6	79.6	79.8	87.9	89.9	90.9	87.7	86.5	88.1	92.2	98.1	99.5				

- Per capita food supply variability (kcal/cap/day)
- Per capita food production variability (constant 2004-2006 thousand int\$ per capita)
- Political stability and absence of violence/terrorism (index)
- Value of food imports in total merchandise exports (percent) (3-year average)
- Percent of arable land equipped for irrigation (percent) (3-year average)
- Cereal import dependency ratio (percent) (3-year average)

Figure 7. Food stability indicators in Lebanon between 2000 and 2019. Source: FAOSTAT January 8, 2021.

Cereals, total production

1961 - 2019



Source: FAOSTAT (Jan 17, 2021)

Figure 8. Food production (cereals) in Lebanon between 1961 and 2017.

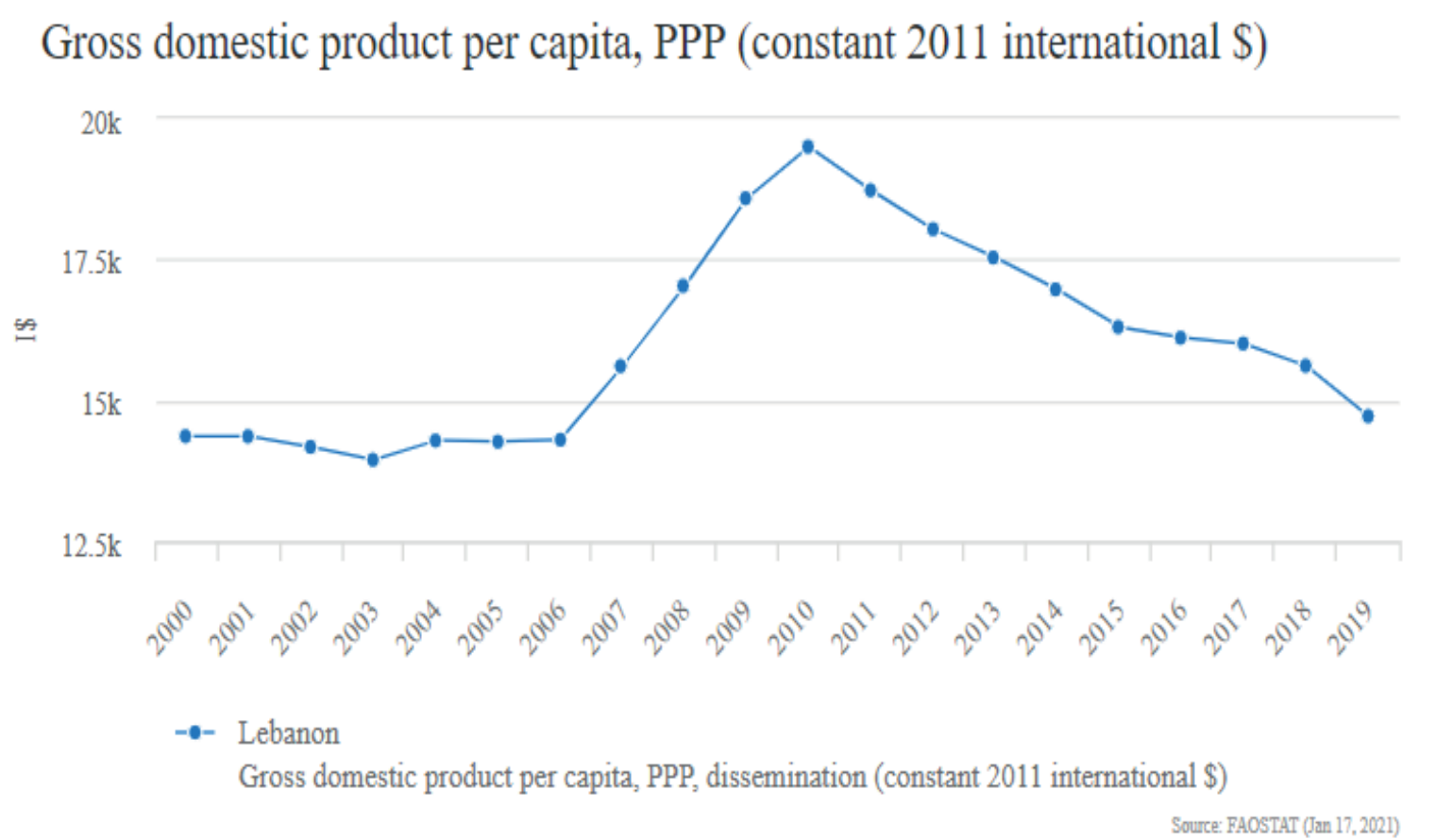


Figure 9. Food access indicators (Gross domestic product per capita) in Lebanon between 2000 and 2019.

Impact of COVID-19 pandemic on food insecurity in Lebanon

As of today, March 8, the total number of COVID-19 was reported as 2377 cases. Looking into both the impact of the financial disruptions in addition to COVID-19 confinement measures, an inflation of 56 percent (11) was registered

between the months of September 2019 and April 2020 and the price of the food basket comprised of eight items of the Survival Minimum Expenditure Basket (SMEB) has been steadily increasing over time with a cumulative inflation of 109% increasing from 37,706 to 58,868 LBP (11) (Figure 10).

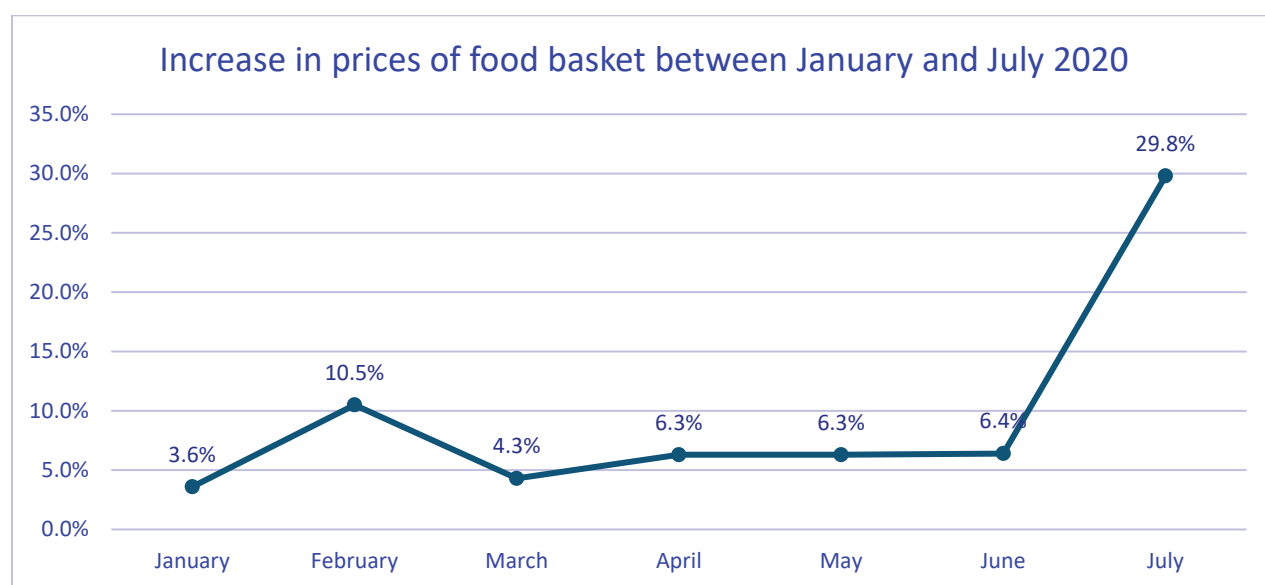


Figure 10. Inflation in food basket prices between January 2020 and July 2020. Source: FAOSTAT January 8, 2021.

According to the WFP web-based survey in 2020 that was done between July and August on 2418 Lebanese people from all over the country, a total of 40 percent of households across the country had difficulties accessing markets to cover their food and other basic needs, mainly in Akkar (55 percent) and Baalbek-El Hermel (48 percent) because of the deteriorated

purchasing power which was the main reason why the likelihoods of households were affected. It was observed that 19 percent of households consumed inadequate diets, with the highest prevalence observed in Akkar, North and Baalbek-El Hermel. The most frequently reported food-based coping mechanism were depending on less expensive, less preferred food and

reducing portion sizes. Akkar (25 percent), Baalbek-El-Hermel (23 percent), and Nabatieh (24 percent) are the governorates recording the highest reduced Coping Strategy Index (rCSI). In addition, 50 percent of households included at least one-member suffering from a chronic health conditions and having difficulties accessing healthcare nationwide, mainly in Akkar and Baalbek-El Hermel (9).

Impact of Beirut Port Explosions on food insecurity in Lebanon

The Beirut Port Explosions which occurred on 4 August 2020, resulted in the loss of life of over 200 people, 6,500 injured, 300,000 people homeless and the destruction of large parts of the city (10). The Beirut Port Explosions exacerbated needs in Beirut on top of the political instability, deteriorated economic situation and COVID-19 crises. Many humanitarian organizations reached Beirut to provide services, and others already in Beirut saturated the humanitarian space, and contributed to the identification and referrals of people in need in Beirut (11). According to Lebanon Food Security Sector report,

released on January 2021, since the blast, more than 27,943 ready-to-eat / hot meals have been distributed while community kitchens continue to be operational in several areas providing daily meals. Over 30,000 food parcels and vouchers have been distributed in addition to selected food items: bread, flour, potato bags, canned food and water distributed in specific regions. Food security organizations provided food assistance to the most impacted and vulnerable households. Cash-based assistance programs in the Beirut area have continued expansion and scale up, with over 52,000 receiving multi-purpose cash assistance (12). As the situation inside Lebanon continues to deteriorate, the Lebanon Country Strategic Plan (13) , which came into effect in January 2018, aligned with the Government-endorsed Lebanon Crisis Response Plan (2017–2020), the United Nations Strategic Framework (2017–2021), the Lebanon National Agriculture Strategy (2020 – 2025), the Lebanon Food Security sector and the Lebanon Food Security Cluster, WFP and many other partners (see Table 3) worked on assessing and monitoring how the livelihoods of the Lebanese population are affected over time.

RESEARCH OBJECTIVES

In line with many challenges facing food security and agriculture in Lebanon including Beirut port explosion, the financial and economic crisis and COVID-19 pandemic; and with the targets of Sustainable Development Goal 2 (SDG2), as well as support to the Government of Lebanon and other partner efforts to eliminate food insecurity and malnutrition in the country, this strategic report of food and nutrition security in Lebanon was conducted. The purpose of the survey is to meet three key objectives.

Main Objective:

- To establish a comprehensive situational analysis of Lebanon's food and nutrition security situation during prolonged crisis after 6 months from Beirut explosion;

Specific Objectives:

- To identify food and nutrition security goals or targets established in national plans and at regional frameworks to facilitate progress toward zero hunger;
- To inform policy making and prioritization of interventions that

would accelerate progress toward SDG target zero hunger;

METHODOLOGY

This report presents the key findings of the survey conducted by the Lebanese University and supported by the WHO-EMR Office. The main objective was to collect credible and timely information, through a mobile-application that was entitled NAS (Nutrition Assessment System), designed by the Lebanese University and funded by WHO EMR office, to enhance the understanding of the impacts of COVID-19, the economic crises and Beirut Port Explosions, on the lives and livelihoods of the Lebanese populations, including their ability to meet their food and other essential needs. Findings are meant to inform strategic planning and operational responses, including prioritization decisions and adjustments, filling an important knowledge gap for government, national partners and the international community. Data has been triangulated with other available secondary information.

Data collection tool

The mobile application NAS presents a viable tool in the context of Lebanon as

2020 because the internet coverage amounts to 78 percent of the population between 0-99 years and 68 percent of the population are connected to internet through their mobile (13). Moreover, the majority of the Lebanese population is literate (95 percent) (14). The food security status in Lebanon was measured using a composite indicator that combines two dimensions of food security: current consumption as determined by the food consumption score and asset depletion strategies (livelihood coping strategies) which indicate the long-term coping capacity of livelihoods to shocks. Nevertheless, despite that any technology used poses varying level of biases and the access to any mobile or web-based survey will concern only the populations with access to the internet, however, the mobile application NAS used to collect data in this survey was used by research assistants to facilitate data entry for those who were incapable of uploading and filling the questionnaires such as older adults, illiterate etc...

TOOLKIT DEVELOPMENT

The combination between the information technology, the information sciences and nutrition has led to the

generation of the concept of NAS of which the logo is presented in Figure 11. This logo can be edited according to the ownership requirements. The mobile-application NAS is a systematized approach to provide critical, reliable information for decision-making, and to establish shared systems and resources for government partners and humanitarian organizations. It is an improved survey method that balances simplicity (for rapid assessment of acute emergencies) and technical soundness. NAS is a cloud-based platform that uses the web-based and smart technology applications. The NAS platform was developed as a cross -platform using the open sources and software development tool kits, such as Xamarin or QT for Cross Platform Mobile App Development Kit, the Net software development kit used for developing the web-based cloud platform. The platform includes business intelligent (BI) analysis and reporting tools that generate automatic analysis and report the results on the platform dashboard. The BI was developed using R.4.0 and python 3.7 programming languages. The agile software development methodology was used for developing NAS software. The software engineering methods for

usability, accessibility, and availability were considered in the design and implementation phases.

This assessment method was validated (see supplementary file). The software was pilot-tested on a sample of 70 participants.



Figure 11. Logo of the mobile application NAS .

DATA COLLECTION

SURVEY 1: ASSESSMENT OF THE IMPACT OF PROLONGED CRISES ON HOUSEHOLD FOOD INSECURITY IN LEBANON

Covering all governorates, the Lebanese citizens were interviewed using this mobile application which was able to capture 1133 participants. Figure 12 show the distribution of participants across the country. The survey collected qualitative data, using the open questions in the “Food Security and Livelihoods national assessment” (15) questionnaire and quantitative data on the impacts of COVID-19 and the

economic crisis on people’s livelihoods and how they are coping, their food security situation and their health situation. This technology considers people who are literate internet users, with connectivity to the internet, hence, the sample is not necessarily representative of all populations but provided trends to help decision-making at administrative level for the Lebanese.

Survey design and sampling

It is a cross-sectional survey conducted in all Lebanese regions in November 2020. The sample representativeness was then optimized by a weighting procedure, according to the Central Administration of Statistics figures of the following variables: geographical dwelling region, gender and education level.

Ethical aspects

The Lebanese University ethical committee approved the study protocol, given that it was observational with respect of confidentiality and no traceability of respondents. Anonymity of respondents was guaranteed throughout the process of data collection and analysis.

Questionnaire

The "Food Security and Livelihoods national assessment" (15) questionnaire was used to collect data (see Questionnaires Appendices). It was about 30 min duration and was filled through NAS in a self-administered way, after an introduction explaining the context and objectives of the survey; answering the questionnaire was an implicit informed consent. The online questionnaire included in the mobile application was available in native Arabic, the native language in Lebanon.

Statistical tests

Data was converted from NAS database to Excel spreadsheet; it was then analyzed using SPSS version 26.0. A descriptive analysis was first conducted to evaluate sample characteristics. The sample size being higher than 1000, parametric tests were used in the bivariate analysis: means were compared using Student test and percentages using the Chi-squared test. A p-value lower than 0.05 was considered significant.

Results

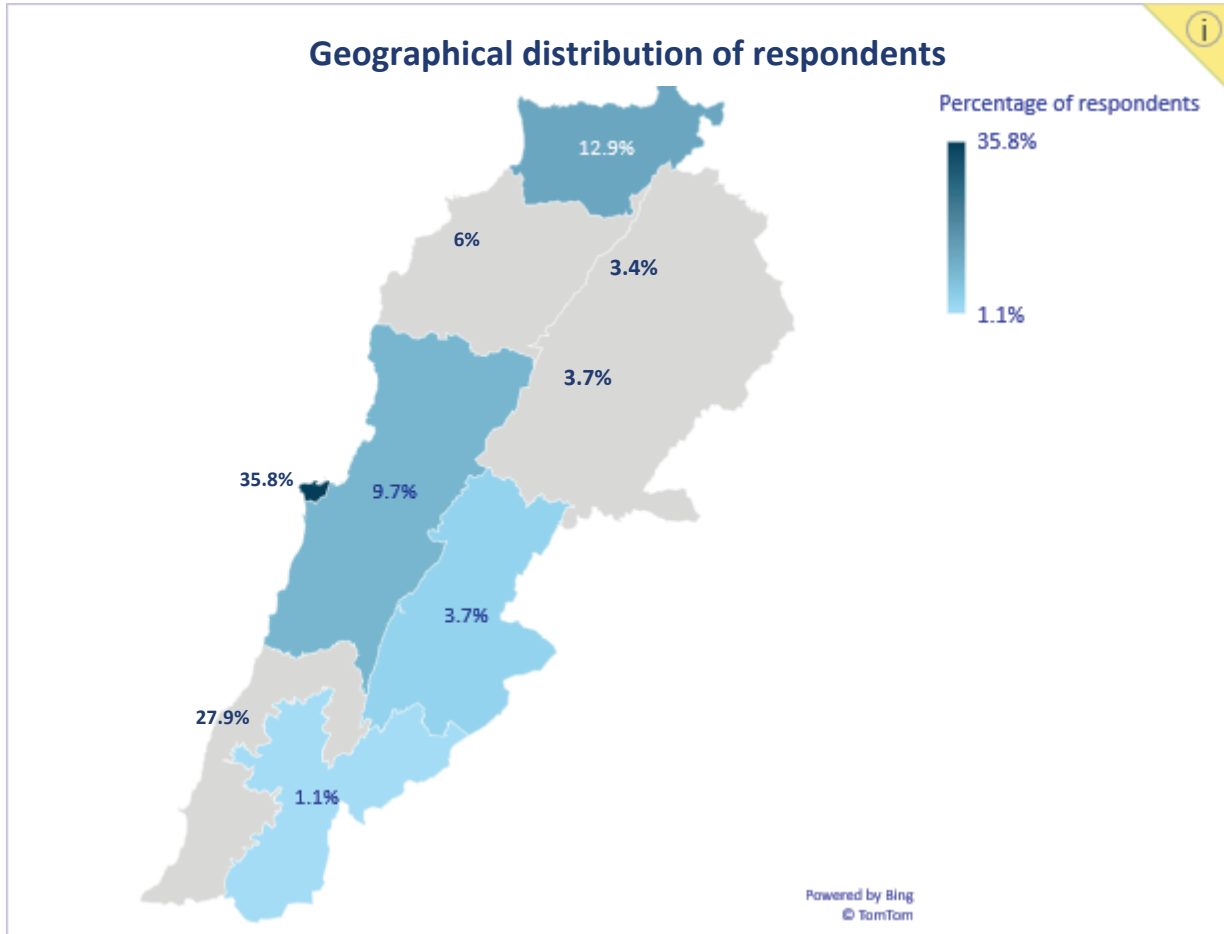


Figure 12. Geographical distribution of the Lebanese people who used NAS and were assessed for food insecurity.

Profile of mobile survey respondents

The study targeted individuals above 14 years of age. Of the Lebanese respondents, and after weighting, it included 52.4 percent females, 19.2 percent university education and 73.3 percent school education, while 49.8 percent were married and 47.1 percent single. The mean age of participants was 32 years (SD=12). For work status, 29.3

percent do not work (housewives and retired, mainly), 21.6 percent were university students, 10.8 percent were licensed from work and 38.4 percent were active workers. Among current workers, 60 percent are healthcare workers. The current household income was inexistent for 20.1 percent of participants, less than 1000 dollars for 45.8 percent, 1000-2000 dollars for 26.8

percent, and >2000 dollars for 6.9 percent. A total of 29 percent were current regular smokers (see Appendix I). Although the majority of households in all governorates have between 4 and 6 members, the highest number of children per family was observed only in Akkar. As for the financial situation, more than 40 percent of respondents in Akkar, 39

percent of respondents in Beqaa, more than 20 percent of respondents in North Lebanon, South Lebanon and Baalbek-El Hermel have no monthly income ($p < 0.001$). The majority of respondents in all governorates have a monthly income of less than 1,000\$ (Appendix I).

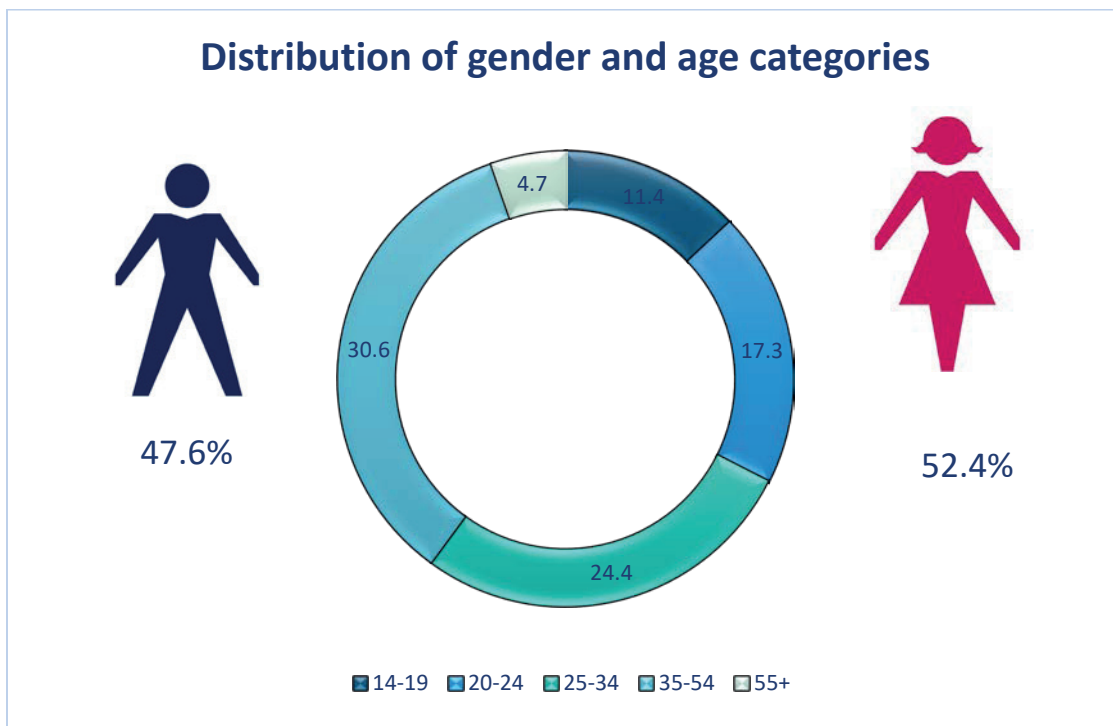


Figure 13. Distribution of the Lebanese people who used NAS by gender and age categories.

Health situation

45.2 percent of the respondents have no health insurance (Figure 14) and 19.8 percent suffer from non-communicable chronic diseases. As for chronic diseases, 20 percent declared having at least one diagnosed chronic disease: 8.5 percent hypertension, 4.5 percent diabetes, 3.9

percent anemia, 3.9 percent hypercholesterolemia, 1.6 percent cancer. 4.2 percent chronic lung disease (asthma/chronic obstructive pulmonary disease), 6.9 percent obesity, 4.9 percent depression and 8.0 percent anxiety (Data not shown). Women (22.2 percent) were more affected by chronic diseases

compared to men (17.2 percent) ($p=0.035$) (Appendix II). As for the health situation, the majority of respondents lacked medical insurances in Beirut, North, South, Beqaa and Akkar ($p<0.001$). Although more than half of

respondents from Beqaa suffer from non-communicable diseases compared to other governorates ($p<0.001$), only 1.1% are treated regularly and more than 19% are afraid of going out to be treated due to COVID19 pandemic.

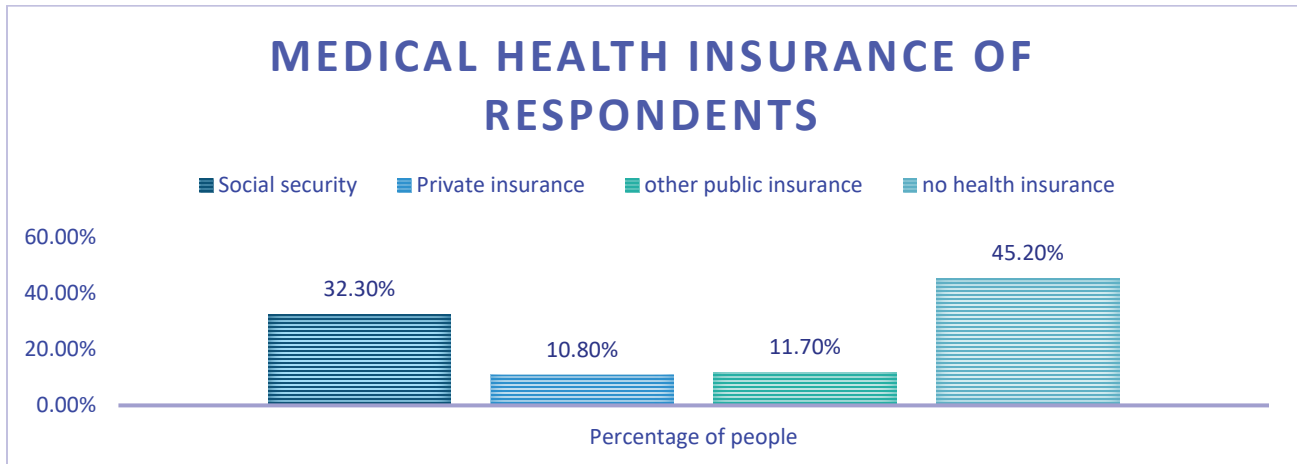


Figure 14. Medical health insurance of respondents.

Impact on livelihoods

Household income

In order to capture the impact on livelihoods, respondents were asked if their household income had undergone any changes compared to one year earlier, and about the main reasons for this change. More than 27 percent of the respondents from both genders had a change in their income compared to the previous year. The main reasons for change in household income of the respondents are presented in Figure 15.

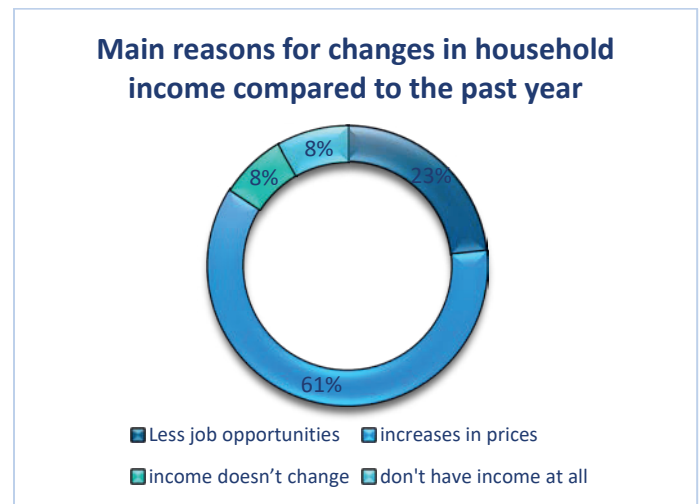


Figure 15. Main reason for changes in household income over the past year-by governorate

Economic situation and how it was affected by COVID-19

In order to capture the COVID-19 impact on economic situation in Lebanon, respondents were asked to assess their economic situation during the pandemic compared to the phase before and whether their individual ability to carry out their work activities has been jeopardized as a result of containment measures. As per figure 16, nearly 38.3 percent of Lebanese respondents reported being poor since the outbreak of COVID-19 and related containment measures. Almost all respondents in all governorates described their economic situation and financial status as in moderate situation except in Akkar where the majority of respondents described themselves poor ($p < 0.001$). Furthermore, more than 60 percent of respondents in all governorates were afraid from poverty due to COVID-19 pandemic and the highest percentage of people afraid from this situation was seen in Beqaa and Akkar ($p < 0.001$). The percentage of poverty in women-headed households increases 6 times during the pandemic compared to men-headed households ($p < 0.001$).

Furthermore, the percentage of respondents from both genders who reported being below the poverty line tripled from 4.6 percent before the pandemic to 13.5 percent since the outbreak. 63.1 percent of respondents from both genders are afraid of poverty due to the current situation and more than 65 percent of them are overstressed concerning the financial situation. A total of 77 percent of the population interviewed worried about the ability to meet the monthly expenses and more than 62 percent are financially incapable of eating out or doing any leisure activity and struggle all the month trying to financially manage the household needs. Out of those who lost their jobs, 61.2 percent were found to be between 25 and 54 years of age. According to the *InCharge Financial Distress/Financial Well-Being Scale* over the last 4 weeks, all respondents from all governorates are feeling overpressure concerning their financial situation. The highest percentage of respondents feeling pressures from the current situation was seen in Beqaa, Baalbek-El Hermel and Akkar (Appendix III).

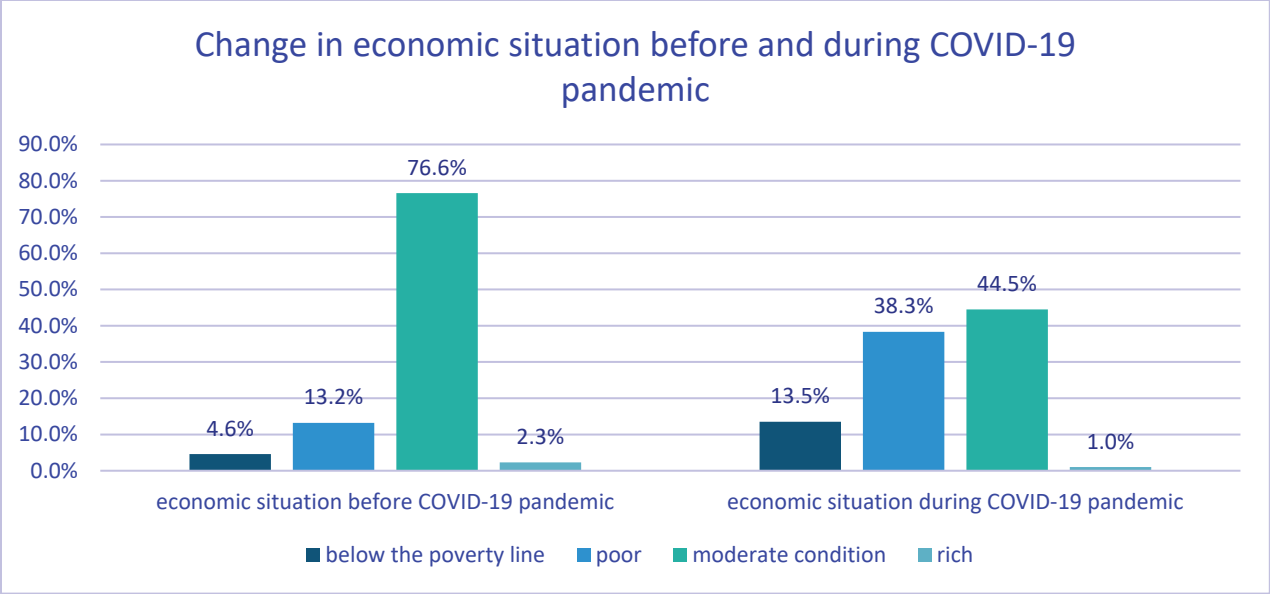


Figure 16. Change in economic situation before and during COVID-19 pandemic.

Debts or assistances

When asked about taking debt or being helped financially in the past 24 months to cover basic needs, about 54.1 percent of Lebanese respondents reported having to do so. Among them, more than 50 percent settle their debt through monthly payment. More than half of the respondents have incurred debts in the last 24 months. The highest percentage of debts were observed in Beqaa and Akkar ($p < 0.001$). As for assistances, the highest number of assistances were reported in Beqaa residents (41 percent) and the lowest to Akkar residents (6.6 percent). Moreover, the majority of respondents residing in

Beqaa and Baalbek-El Hermel received food vouchers ($p < 0.001$). Debt was incurred mainly to cover the cost of food (37.9 percent), rent payments (18.3 percent), education expenses (8.3 percent), health expenses (8.1 percent) and for investment (8.2 percent) (Figure 17). Food purchase was the main reason to contract debt (Data not shown). This goes to show that high levels of loss or reduced income has significantly impacted the ability of these populations to meet their immediate food and shelter needs, hence the need to resort to borrowing money or purchasing on credit (Appendix IV).

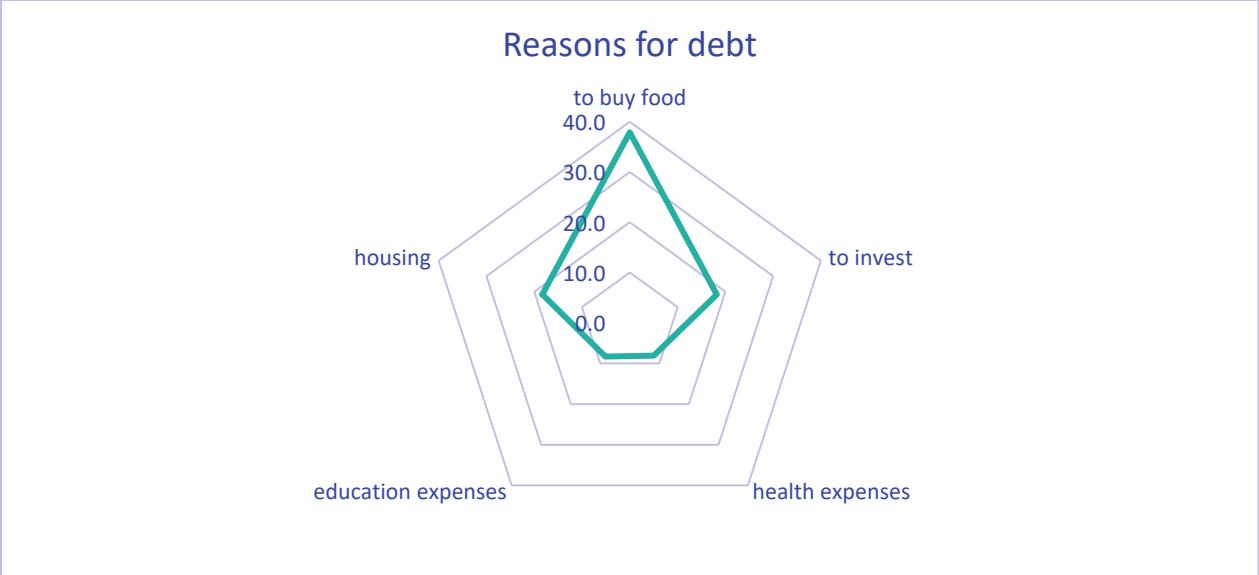


Figure 17.Reasons to incurring debts.

Despite the alteration of the economic situation, 78.5 percent of respondents' complaints were about being ignored in terms of assistance. Women were more ignored by governmental and non-governmental organizations compared to men ($p < 0.001$); however, they were helped by charities 2 times more compared to men ($p < 0.001$). Among those who were assisted, 14.7 percent reported receiving food vouchers. Many sources of assistances were nominated: charities (27.2 percent) governmental organizations (20.2 percent) and non-governmental organizations (16.2 percent), United nations agencies (14.2 percent), religious organizations (4.9

percent), local people (12.7 percent) and family abroad (4.6 percent).

Food based coping

Nearly 9 in every 16 respondents eat less than 2 meals per day while more than 70% of them considered this pattern as "usual pattern". Furthermore, apparent large percentages (70 percent) of the respondents from all governorates reported skipping their meals to spare food in the 30 last days. 13.7 percent were worried about not having enough to eat, 5.4 percent were unable to eat healthy food and 7 percent ate few kinds of foods. Furthermore, 5 percent ate less, spend their days not eating the whole day and staying hungry (Figure19).

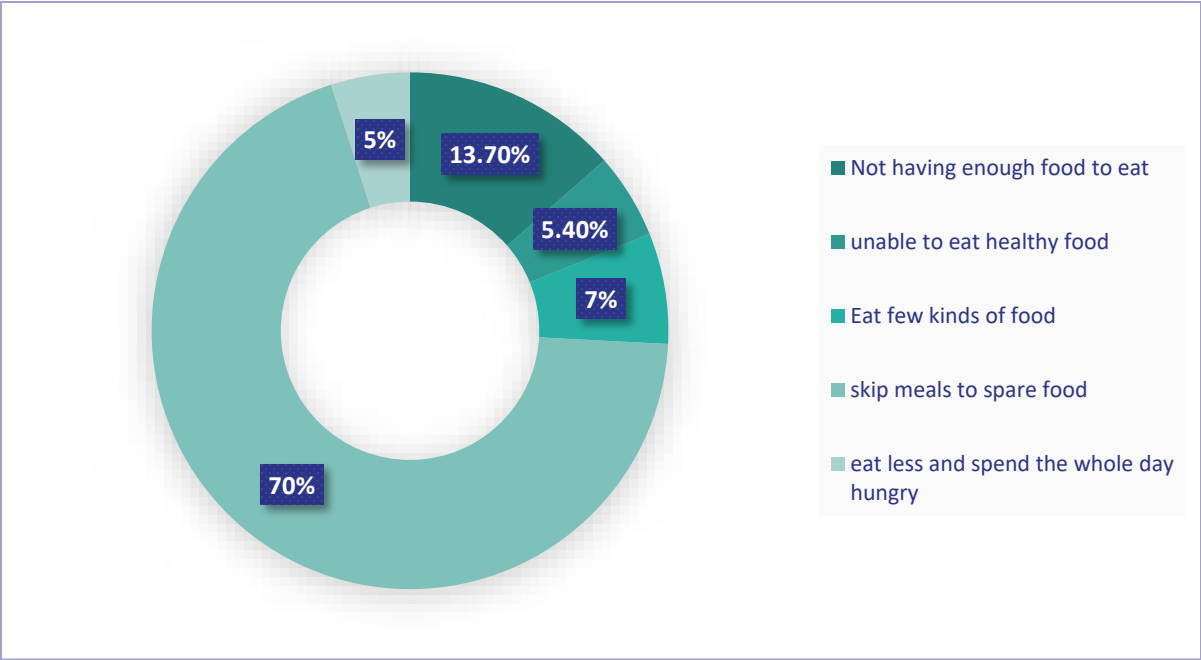


Figure 18. Food based coping strategies in last 30 days.

Food-based coping strategies in last 7 days

In the last 7 days, 23.5 percent of people, reported eating cheaper food in more than 4 days per week (Figure 19). Moreover, 17.3 percent of people are borrowing foods or receiving assistance and more than 25 percent eaten less meals and less portions and sizes in the last week of response. In addition, more than 30 percent of the respondents reported eating less to spare food for their children. This latter was remarked mainly in women (35.9 percent) compared to men (27.7 percent) (p=0.05). Baalbek-El Hermel had the biggest percentage of people relying on

coping strategies in frequency of 4 days and more per week (Figure 20). The assessment also used the Coping Strategies Index (CSI) as an indicator of household food security. The CSI is gauged through a series of questions about how households manage to cope with a shortfall in food for consumption and which results in a simple numeric score (15). The survey found that 84.2 percent have a low reliance on coping strategies. However, 9.5 percent of the population have a medium reliance on coping strategies and 6.3 percent rely heavily on coping strategies (Figure 21). At governmental level, South Lebanon, Mount Lebanon and Akkar had the

biggest proportion of households that rely heavily on coping mechanisms (see Figure 22-Map 2).

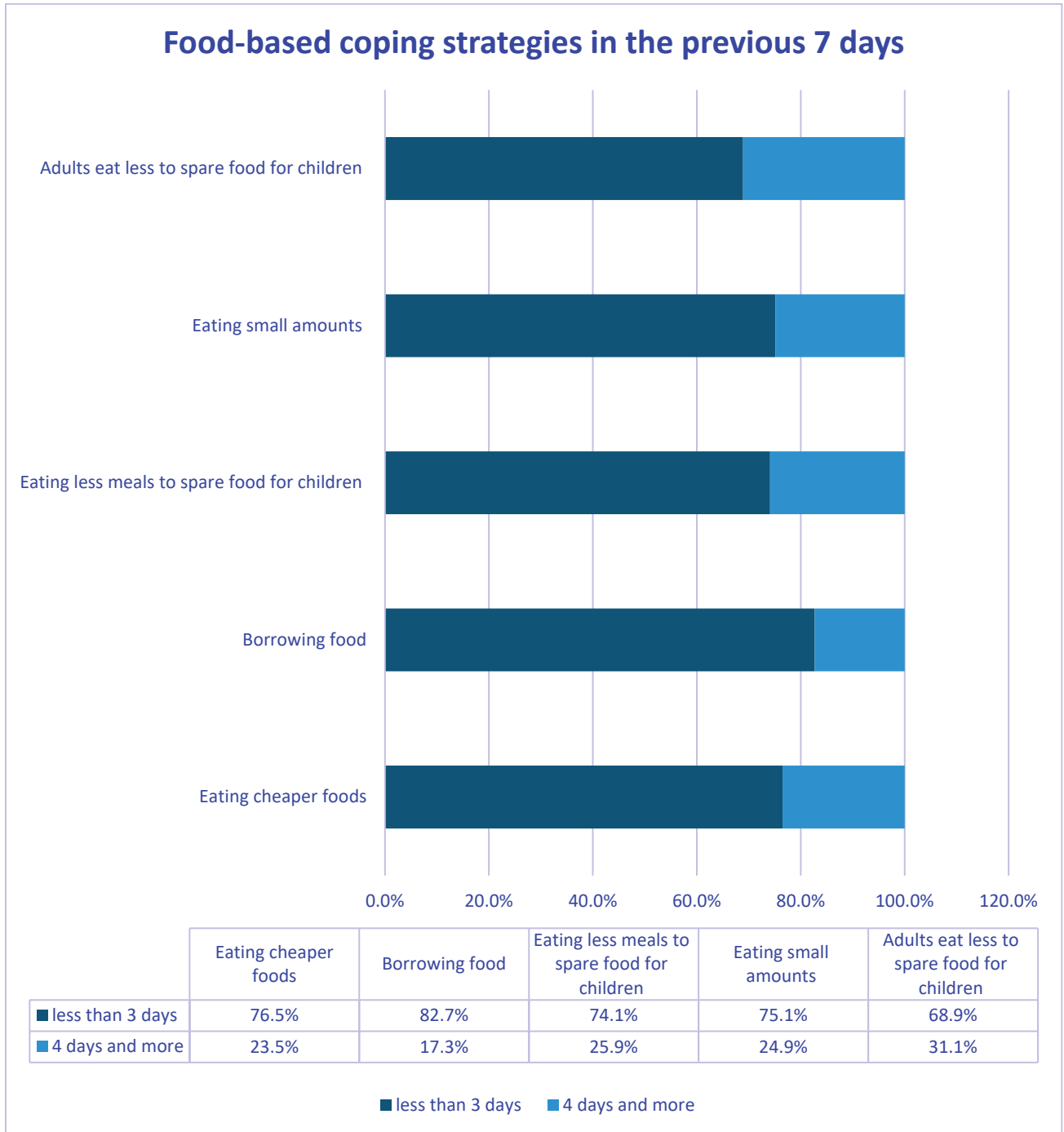


Figure 19. Food-based coping strategies over 7 days.

Food-based coping strategies in the previous 7 days Practices in a frequency of 4 days and more per week

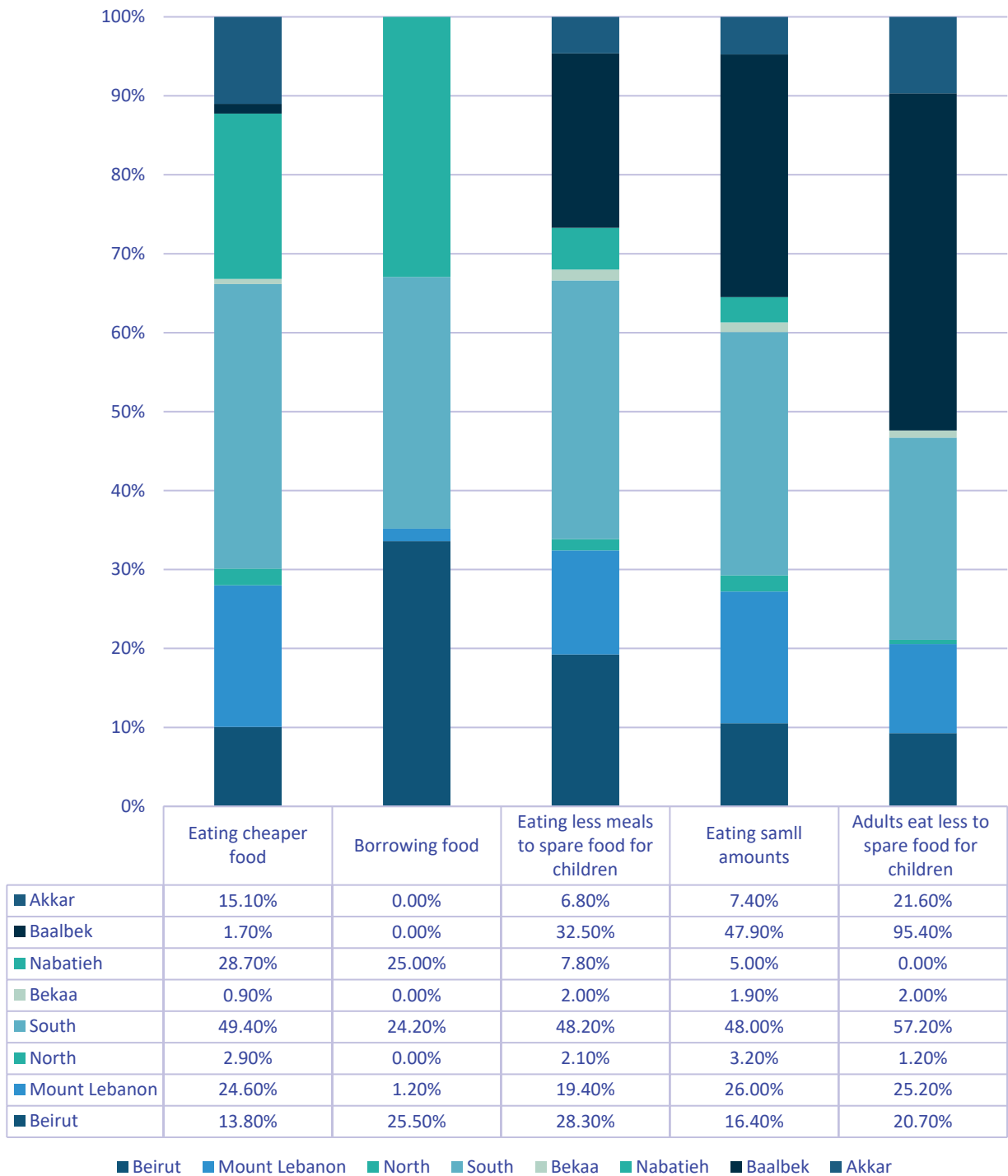


Figure 20. Food-based coping strategies over 7 days in all governorates.

Livelihood coping strategies in last 30 days

Figure 23 shows the practices to cope with lack in food or to meet basic needs for food in the last 30 days. About one in two Lebanese households resorted to severe crisis or emergency livelihood coping strategies including spent savings (27.7 percent), selling household (38.1 percent) and practices assets (24.1 percent). It was observed that women are coping with lack of food by asking charities to provide assistances compared to men ($p=0.012$) whom borrowed money, sold productive assets, took high risk labor or any type of labors to meet basic food needs. Figure 24 shows the coping practices by governorates where the aggravated situation appears in North Lebanon, Akkar and Beqaa.

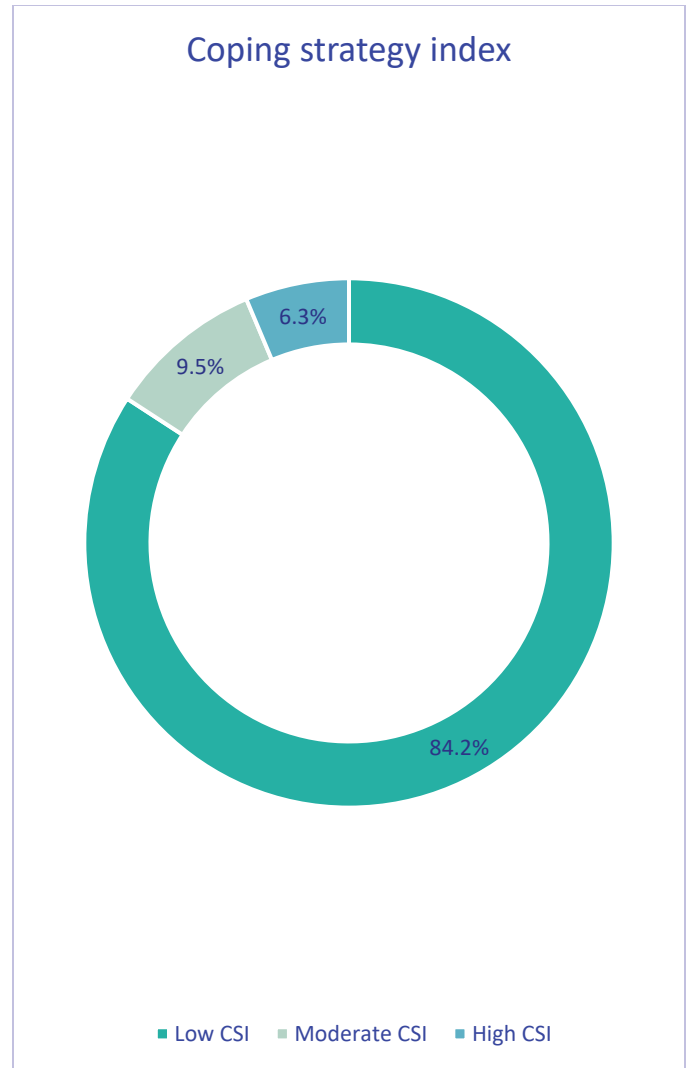


Figure 21. Coping strategy index in respondents.

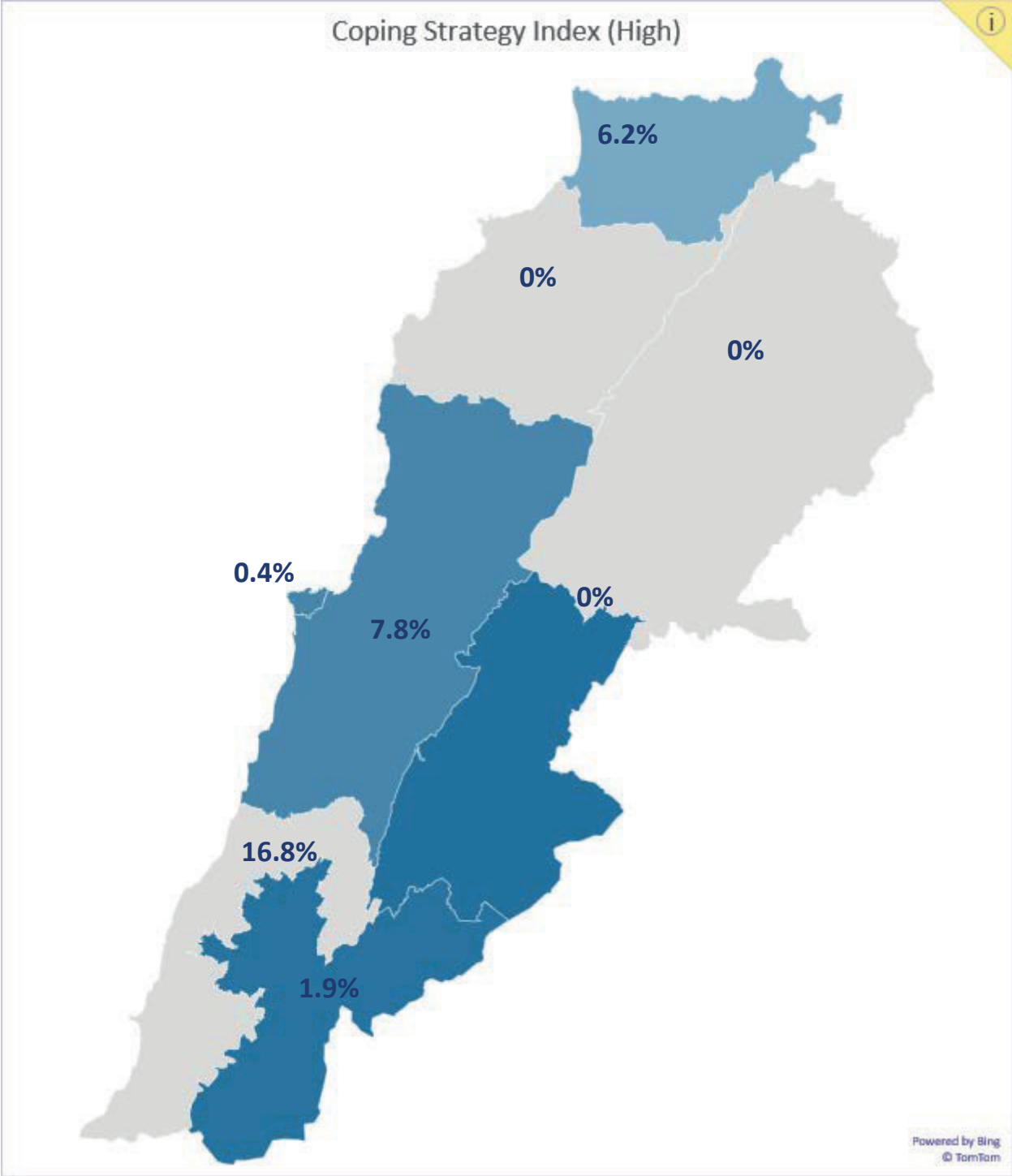


Figure 22-Map 2. Coping Strategy Index (highest reliance) among governorates.

Non-food based coping strategies over 30 days

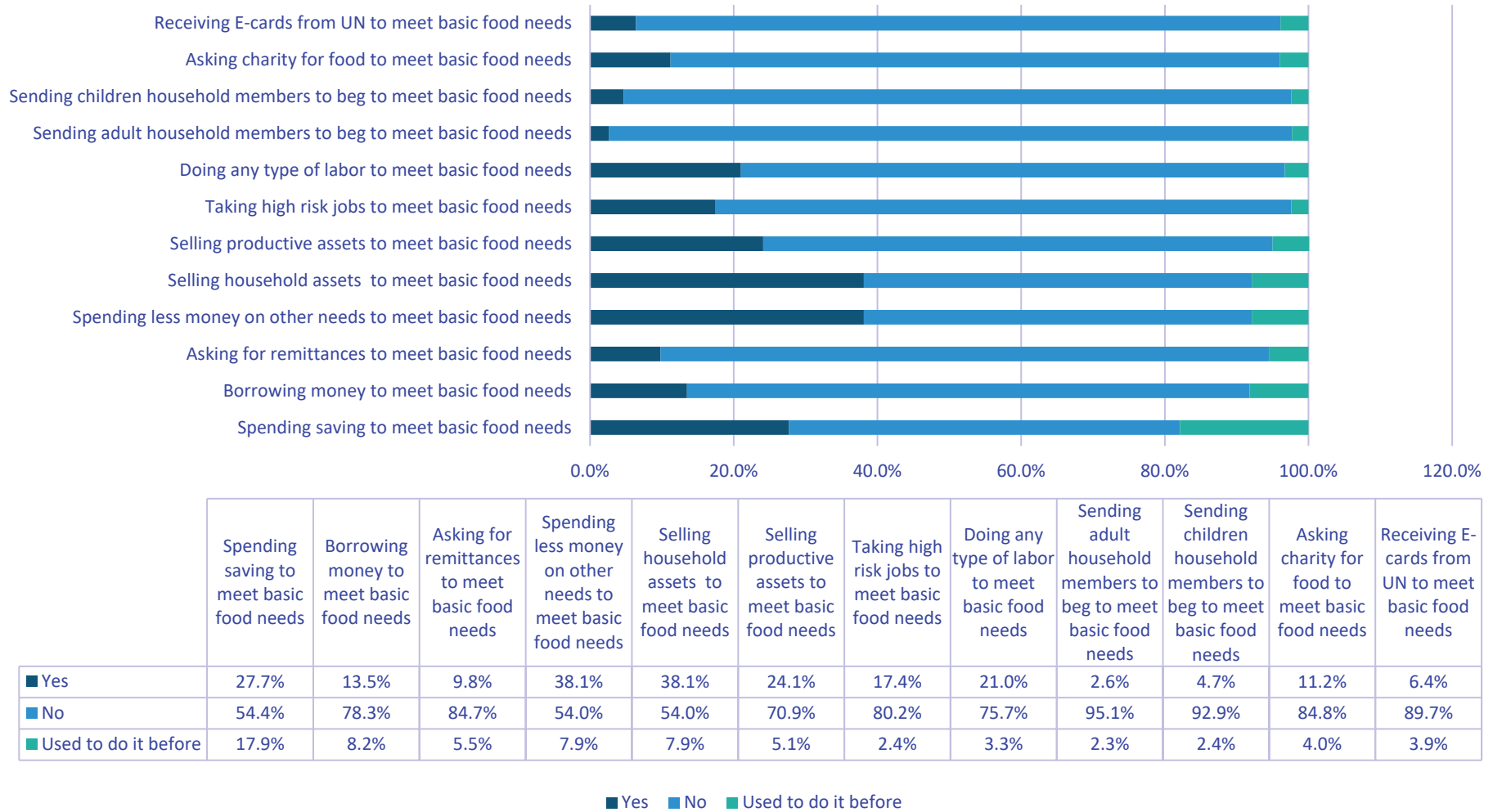


Figure 23. Non-food based coping strategies to meet basic needs for food over 30 days.

Non-Food based coping strategies over 30 days-by governorates

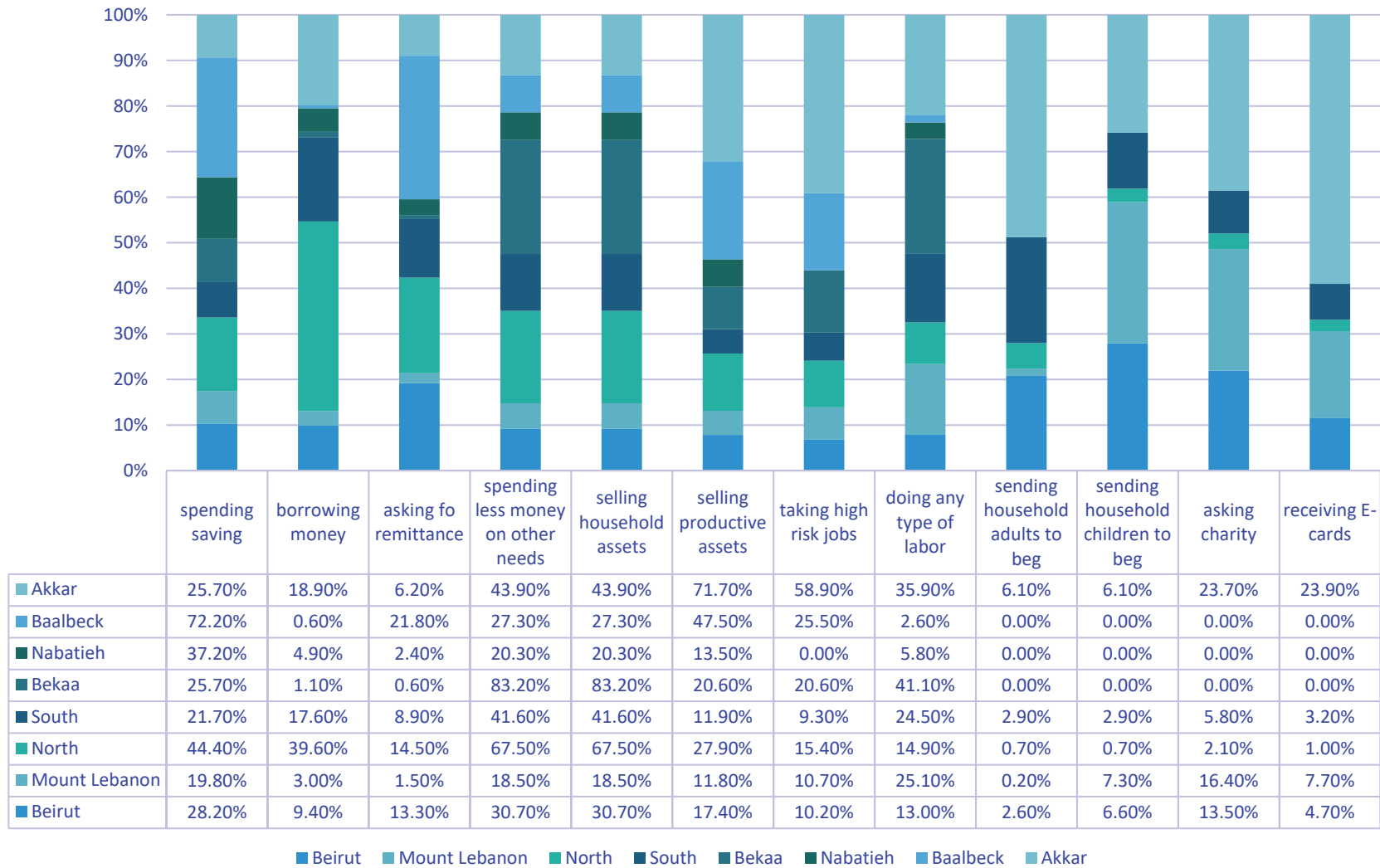


Figure 24. Non-food based coping strategies to meet basic needs for food over 30 days among governorates.

Food groups consumption score per week

The weekly consumption of food groups is shown in Figure 25.

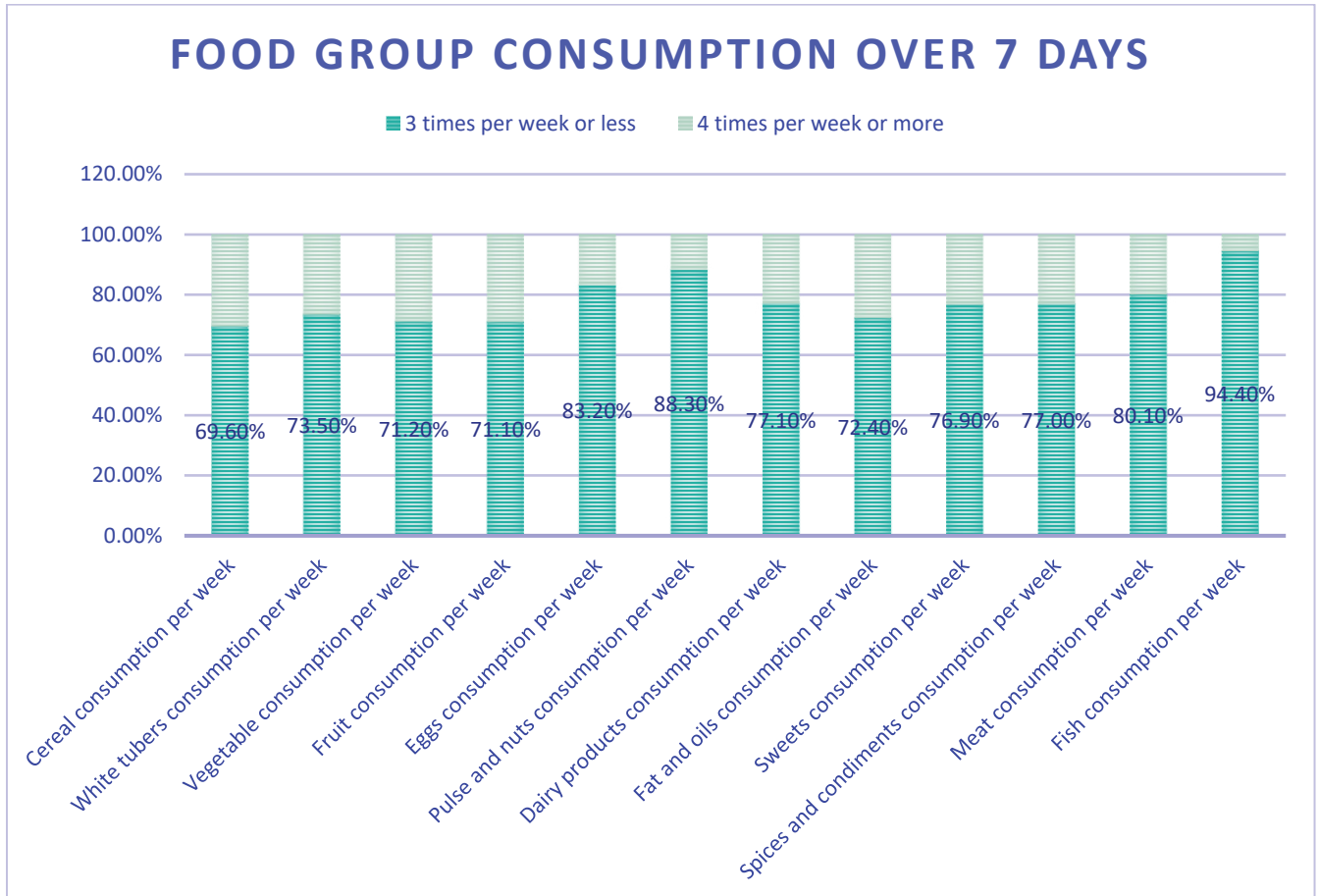
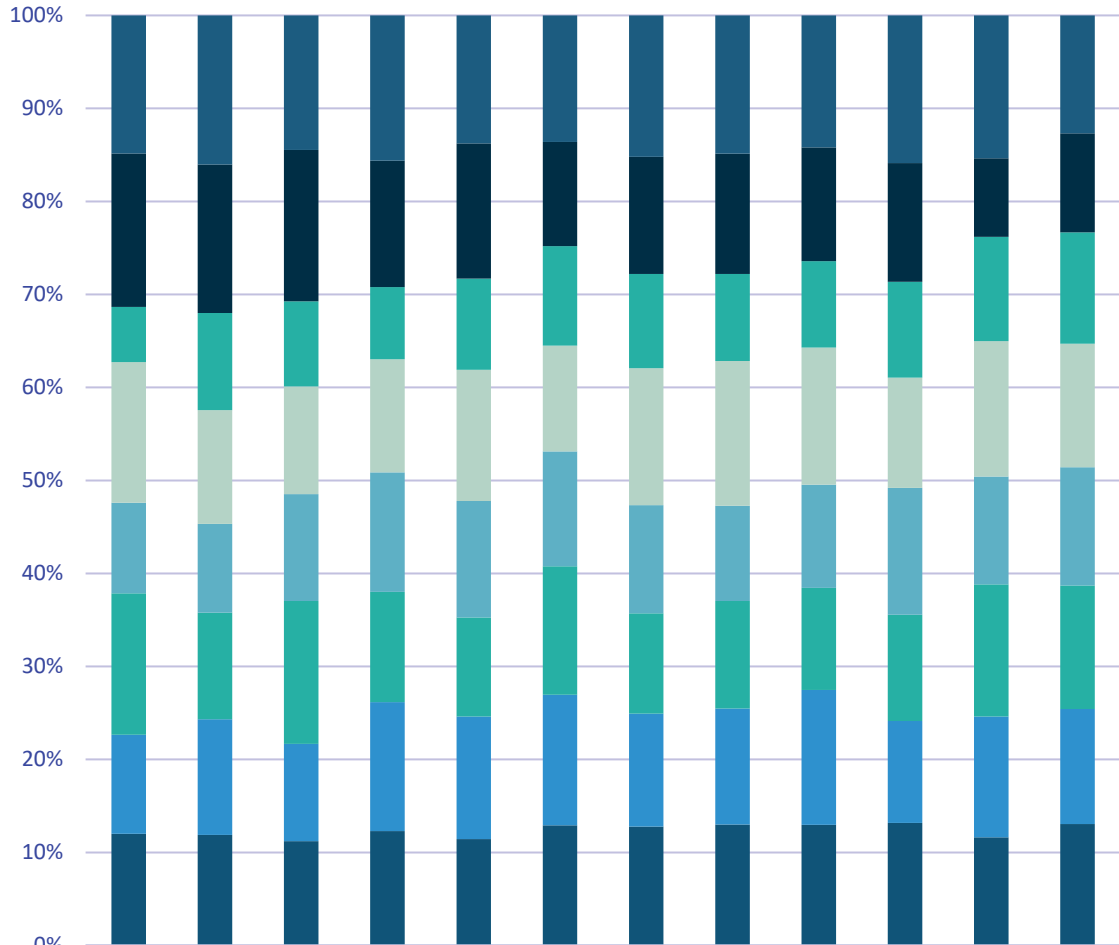


Figure 25. Food group consumption over 7 days.

According to the food consumption results, it was observed that almost all respondents eat main food groups in a frequency of less than 3 days per week. Respondents men were consuming fewer white tubers (i.e. potatoes, onions and carrots) ($p=0.014$), less vegetables ($p=0.045$), less fruits ($p=0.006$), less dairy products ($p=0.002$), more fats and oils

($p=0.004$), more sweets ($p=0.002$) and more spices and condiments ($p<0.001$) compared to women. Both genders are eating cereals, meats, eggs, pulses, nuts and fish similarly ($p>0.05$) (Appendix V). The majority of households in all governorates except in Nabatieh and South Lebanon consumed non-diversified food groups (Figure 26).

Food groups consumption by governorates (3 days and less per week)



	Cereals	White tubers	Vegetables	Fruits	Eggs	Pulse and nuts	Dairy products	Fat and oils	Sweets	Spices and condiments	Meat	Fish
■ Akkar	86.00%	98.60%	85.50%	85.50%	92.70%	93.20%	92.70%	86.70%	86.30%	92.30%	99.40%	93.70%
■ Baalbeck	95.60%	98.20%	96.20%	74.40%	98.00%	76.80%	76.90%	75.60%	74.40%	74.20%	54.60%	78.80%
■ Nabatieh	34.30%	64.30%	54.10%	42.50%	66.20%	73.40%	61.80%	54.60%	56.50%	59.90%	72.50%	88.40%
■ Bekaa	87.60%	75.20%	68.40%	66.60%	95.00%	77.90%	89.80%	90.90%	89.70%	68.80%	94.20%	98.30%
■ South	56.50%	58.80%	67.90%	70.30%	84.50%	84.60%	70.90%	59.70%	67.50%	79.30%	75.00%	94.00%
■ North	88.10%	70.50%	90.80%	64.90%	71.80%	94.70%	65.80%	67.50%	66.80%	66.40%	91.90%	98.10%
■ Mount Lebanon	61.60%	76.50%	61.80%	76.00%	88.80%	96.20%	74.10%	72.80%	88.20%	63.70%	84.00%	91.50%
■ Beirut	69.60%	73.10%	66.30%	67.30%	77.10%	88.60%	78.00%	75.90%	78.90%	76.60%	75.20%	96.50%

■ Beirut ■ Mount Lebanon ■ North ■ South ■ Bekaa ■ Nabatieh ■ Baalbeck ■ Akkar

Figure 26. Food groups consumption over 7 days by governorates.

Food consumption, measured in kilocalories, is one of the most theoretically grounded indicators for analyzing food security. However, measuring the actual kilocalorie consumption requires the collection of detailed food intake data, which can be difficult and resource demanding. As a result, proxy indicators are increasingly being used for food security analysis. Such indicators generally capture diet diversity, meaning how many different food types or food groups are included within a diet, as well as food frequency meaning how often, (over a given period of time) are the various food types, or food groups, consumed. WFP has adopted this approach measuring dietary diversity and food frequency, using an indicator known as the food consumption score (FCS) (16). The FCS is a weighted diet diversity score calculated using the frequency of consumption of different food groups

consumed by a household during the 7 days before the survey.

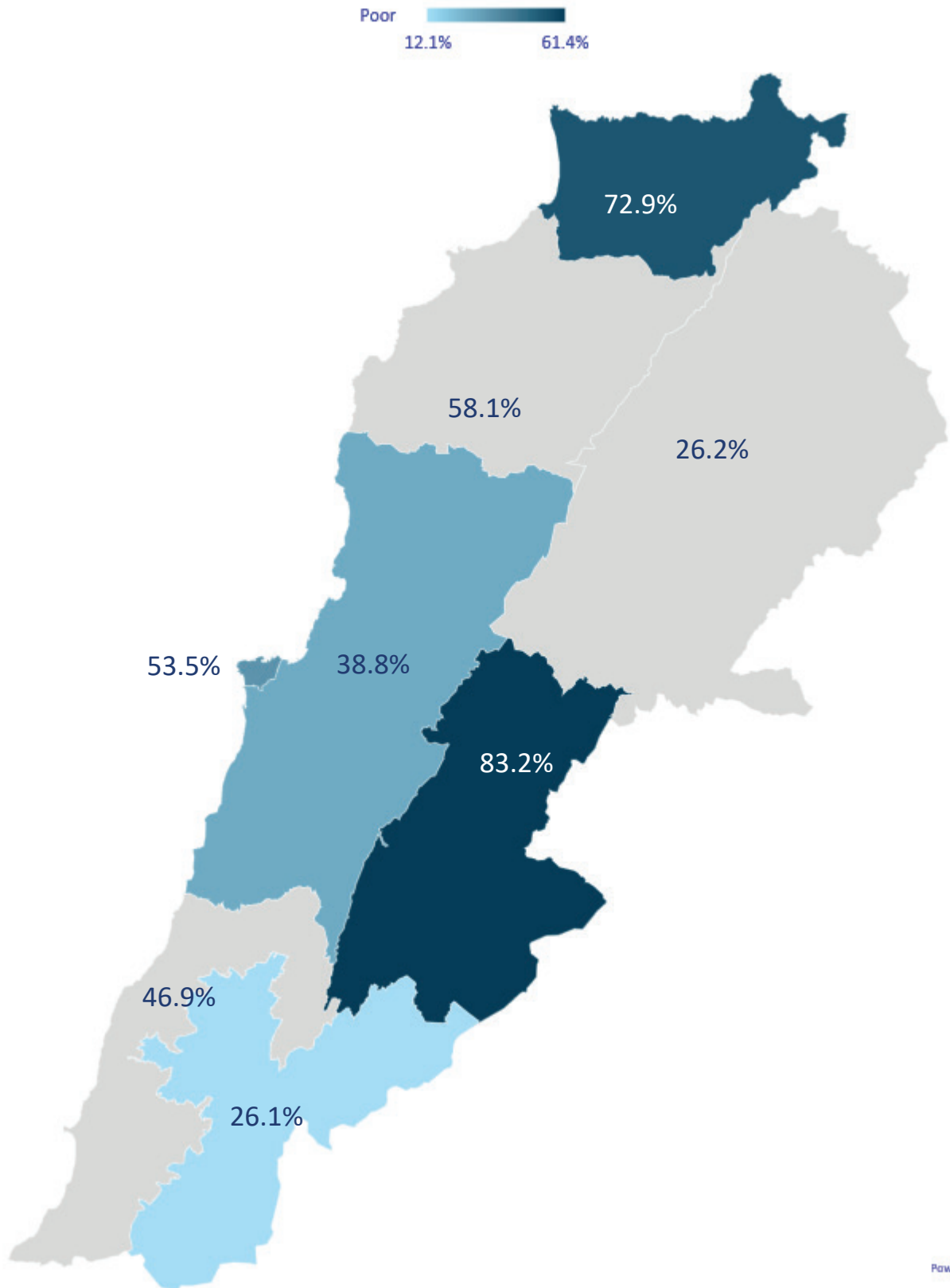
The calculation formula of the score FCS is: (starches x 2) + (pulses x3) + vegetables+ fruits+ (meat x4) + (dairy products x4) + (fats x0.5) + (sugar x 0.5) (14).

According to the assessment, 53 percent of the Lebanese population has a poor Food Consumption Score. Furthermore, 29 percent has an acceptable FC. Among those who had poor FCS, the highest percentage was in the age range between 20 and 54 (p<0.001). Beqaa has the largest proportion of households with a poor FCS, with 83 percent of households calculated to have a poor FCS, followed by Akkar which sees 73 percent of its inhabitants with a poor FC. Nabatieh has the highest proportion of households with an acceptable food consumption score (more than 40 percent) (Figure 27. Map3 and Table 2).

FCS	Beirut	Mount Lebanon	North	South	Beqaa	Nabatieh	Baalbek-El Hermel	Akkar
Poor	53.5%	38.8%	58.1%	46.9%	83.2%	26.1%	26.2%	72.9%
Borderline	17.1%	37.3%	4.8%	14.0%	3.9%	25.6%	48.7%	19.3%
Acceptable	29.3%	24.0%	37.1%	39.1%	13.0%	48.3%	25.0%	7.8%

Table 1. FCS of respondents among governorates.

Food consumption score among governorates (Poor)



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Figure 27. Household Food consumption score among governorates.

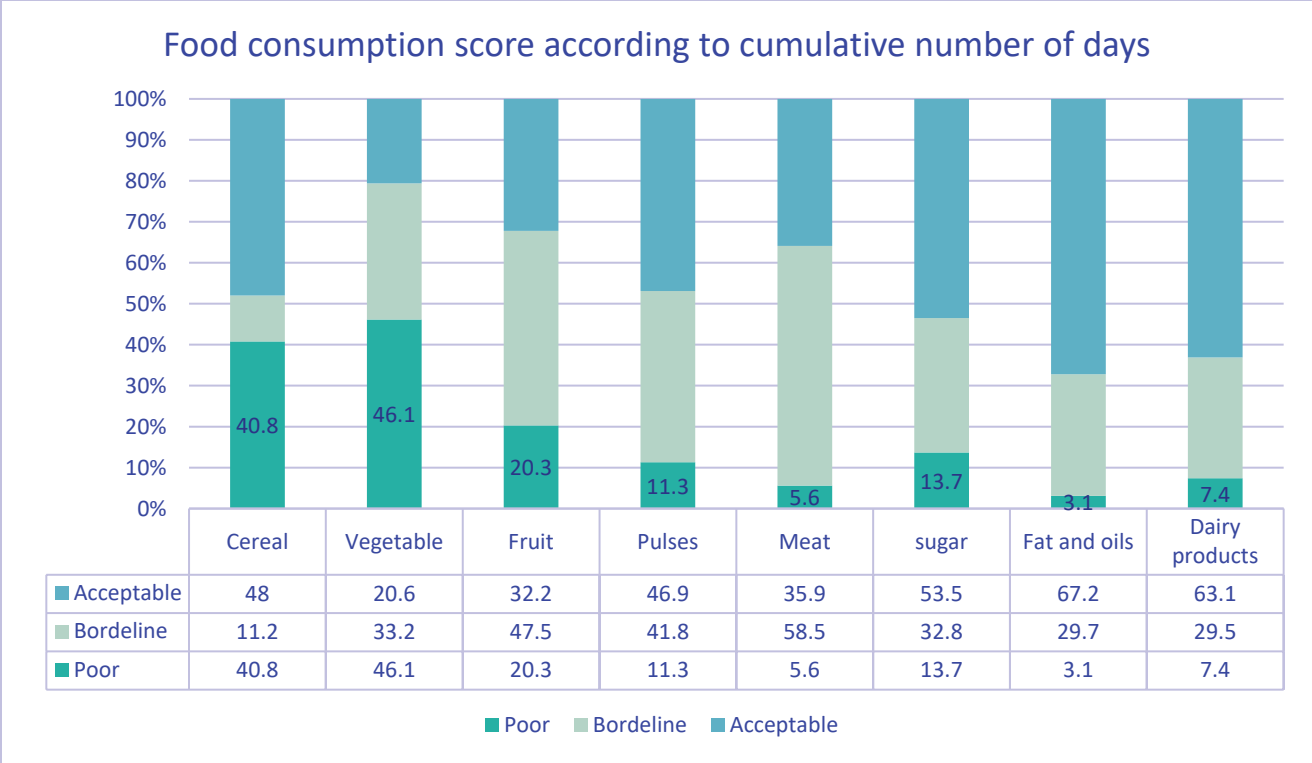


Figure 28. Households Food consumption score according to the cumulative number of days.

As per figure 28, and according to the cumulative number of consumption of food groups per week, the households having poor FCS rely mainly on cereals and vegetables. Nevertheless, fruits, pulses, meat and dairy products are less consumed due to the prices inflations discussed previously in this report. On the other hand, households with acceptable FCS consume fewer amounts of vegetable, higher amounts of fruits, pulses, meat, dairy products, sugar and fat and oils compared to those who have low FCS.

Sources of drinking water

The primary sources of drinking water are listed in Figure 29. The majority (40%) of respondents drink water from market stores and no one reported drinking water from municipal connection. Half the women were buying water from market stores compared to 31% men (p<0.001) (Appendix VI). 49.3% of respondents complain about not having access to water for more than 3 days each month (Data not shown). The majority of respondents in almost all governorates also drink water from market stores or from private donors and more than half of respondents complaint

about inaccessibility to water for more than 3 days each month (Data not shown).

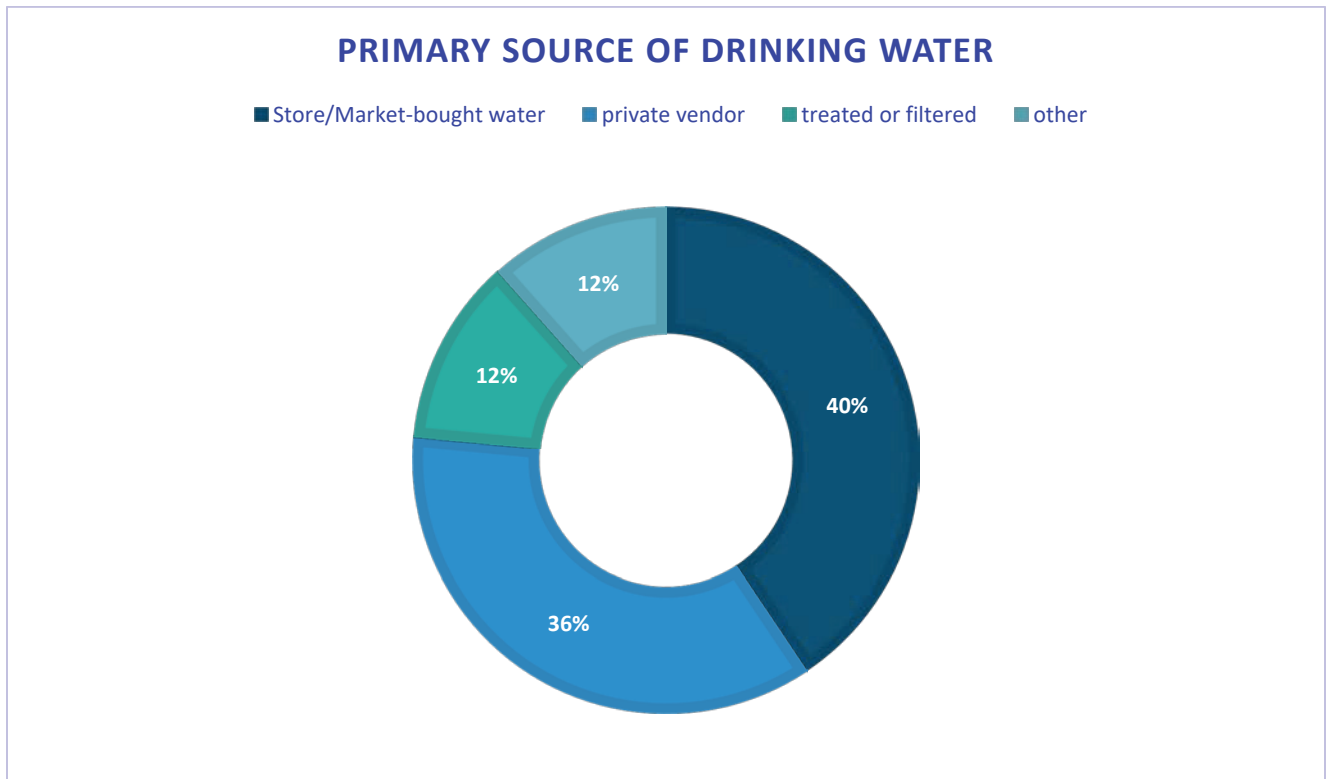


Figure 29. Primary sources of drinking water.

Planting crops

Despite that the majority of respondents (more than 60%) are interested in planting crops, and 62 percent of them requested training in agricultural production, only 23% of respondents were planting crops except for Nabatieh and Baalbek-El Hermel ($p < 0.001$). 23% of the crops were tomatoes, cucumber and potato and 10% are planting olive trees. Almost all 75% of the crops were consumed by the household itself and

25% were sold to increase monthly income or freely given for community support. The majority of those who plant crops report planting in a surface area of less than 500 m². In addition, more than 20% of these lands are owned by their legal owners, the respondents themselves. The majority of these lands are irrigated (18%) and the sources of irrigation are localized irrigation, surface irrigation and sprinklers (15%).

Physical access to food: Markets, shopping behaviors and food stocks

Transport and market infrastructure are key determinants of market accessibility. Without these, physical access to food is compromised. To evaluate the Lebanese access to markets, the assessment asked households which type of market they usually go to in order to purchase food, which mode of transport they use to get there, and how long it takes them. Nearly 68 percent of households all over Lebanon, access

local shops to purchase food and only 17.1 percent access open air markets. 85 percent of the respondents need around 30 minutes to access food markets and around half the respondents use cars to reach markets. Only 28.5 percent walk on feet. People who plant crops were asked about the place of selling their products; the majority 38,2 percent sell their crops at the market places and around 12 percent sell at farms and agriculture cooperatives (Data not shown).

SURVEY II. ASSESSMENT OF THE IMPACT OF PROLOGNED-CRISES ON HOUSEHOLD FOOD INSECURITY IN AREAS AFFECTED BY BEIRUT EXPOSION

The distribution of the survey respondents is presented in Figure 30. Map 4. The characteristics of the respondents are presented in Appendix VII.

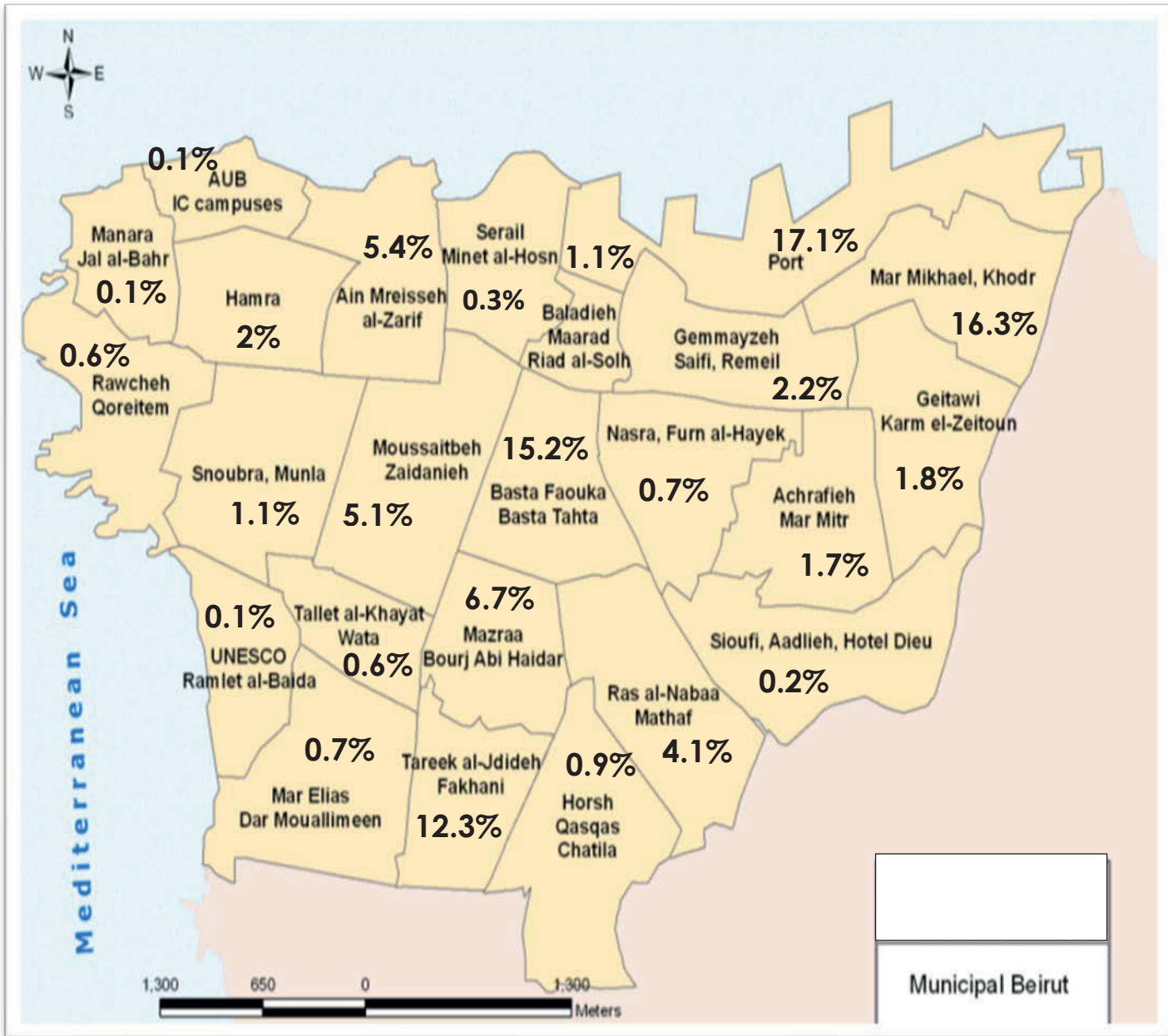


Figure 30. Distribution of respondents among Beirut streets.

Survey Design and Sampling

This cross-sectional study was conducted using a representative random sampling of Lebanese participants from Beirut province in Lebanon. A minimal sample size of 384 participants was needed to allow for adequate power for statistical analyses to be carried out according to the Epi info sample size calculation with a total Beirut population size of 450,413 residents according to the population estimates of 2019, based on the Ministry of Public Health data, a 50 percent expected frequency and a 5 percent confidence limits*. This number was, then, multiplied by 2 to reach a representative sample of 768 participants that takes cluster effect and refusals into account. A simple random selection sampling was then performed to this targeted number of participants to account for all regions in Beirut and start data collection based on the number of residents obtained for each region. Despite that the calculated number was a sample of 768 participants, however, we collected more participants and we reached a total number of 1388 participants.

*Centers for disease control and prevention. Epi info 7 available on <http://wwwn.cdc.gov/epiinfo/7/index.htm>

Ethical aspects

The Lebanese University ethical committee approved the study protocol, given that it was observational with respect of confidentiality and no traceability of respondents. Anonymity of respondents was guaranteed throughout the process of data collection and analysis.

Questionnaire

The "Arab Food Security Scales" (17) questionnaire was used to collect data. It was about 7 min duration and was filled through NAS in a self-administered way, after an introduction explaining the context and objectives of the survey; answering the questionnaire was an implicit informed consent. The online questionnaire included in the mobile application was also available in Arabic, the native language in Lebanon (Appendix questionnaires).

Statistical tests

Data was converted from NAS database to Excel spreadsheet; it was then analyzed using SPSS version 26.0. A descriptive analysis was first conducted to evaluate sample characteristics. The sample size being higher than 1000,

parametric tests were used in the bivariate analysis: means were compared using Student test and percentages using the Chi-squared test. A p-value lower than 0.05 was considered significant.

Survey's Results

A sample of 1388 respondents was reached. It includes 52.5 percent females, 70.5 percent school education, while 10.3 percent were illiterate. 72.7 percent were married and the majority (76.1 percent) have more than 4 family members and less than 3 children (74.6 percent) in the same household. The mean age of respondents was 41.5 years (SD=14.2). Concerning work status, 20.1 percent were active workers where only 7.7 percent worked in the health sector, 43.7 percent do not work (housewives and retired) and 31.5

percent were licensed from work. Almost all the respondents were current smokers and around 1.9 percent of alcohol drinker consume more than 1 cup per day (Appendix VII). Among participants, 88.8 percent declared being severely affected by Beirut Port Explosions in August 4, 2020.

Food security status

Measuring food insecurity in respondents using the scale Arab Family Food Security Scale and Food Insecurity Experience Scale

Using the scale Arab Family Food Security Scale (AFFSS), the majority (75.4 percent) of respondents were severely food insecure as presented in Figure 31. Similarly, as high as 43 percent of respondents also were shown to be severely food insecure, using Food Insecurity Experience Scale (FIES).

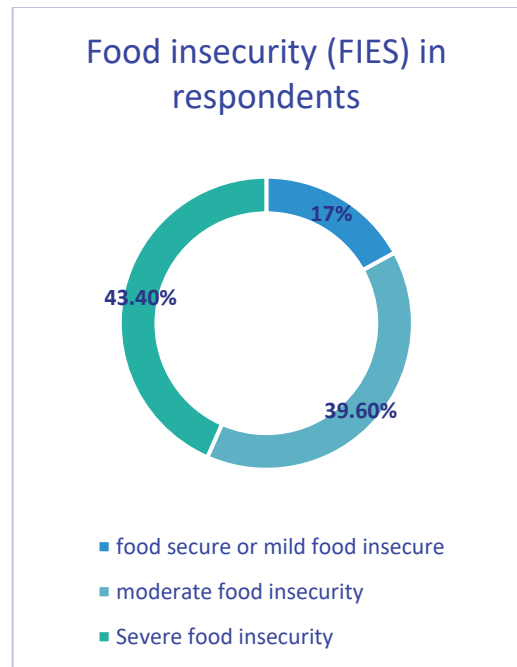
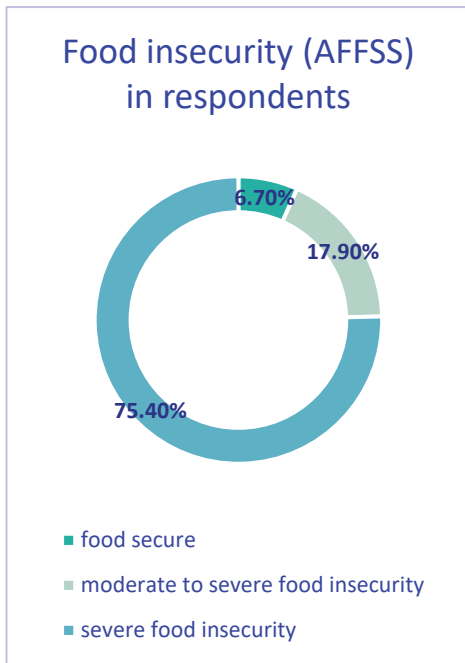


Figure 31. Assessment of food security using AFFSS score and FIES score.

Food insecurity by gender and age groups

Using both scales AFFSS and FIES, more than 60% of men and women are food insecure and the highest percentage of

food insecurity was observed in the age category between 14 and 47 years (youth group) (Figure 32). More details about AFFSS are available in Figure 35.

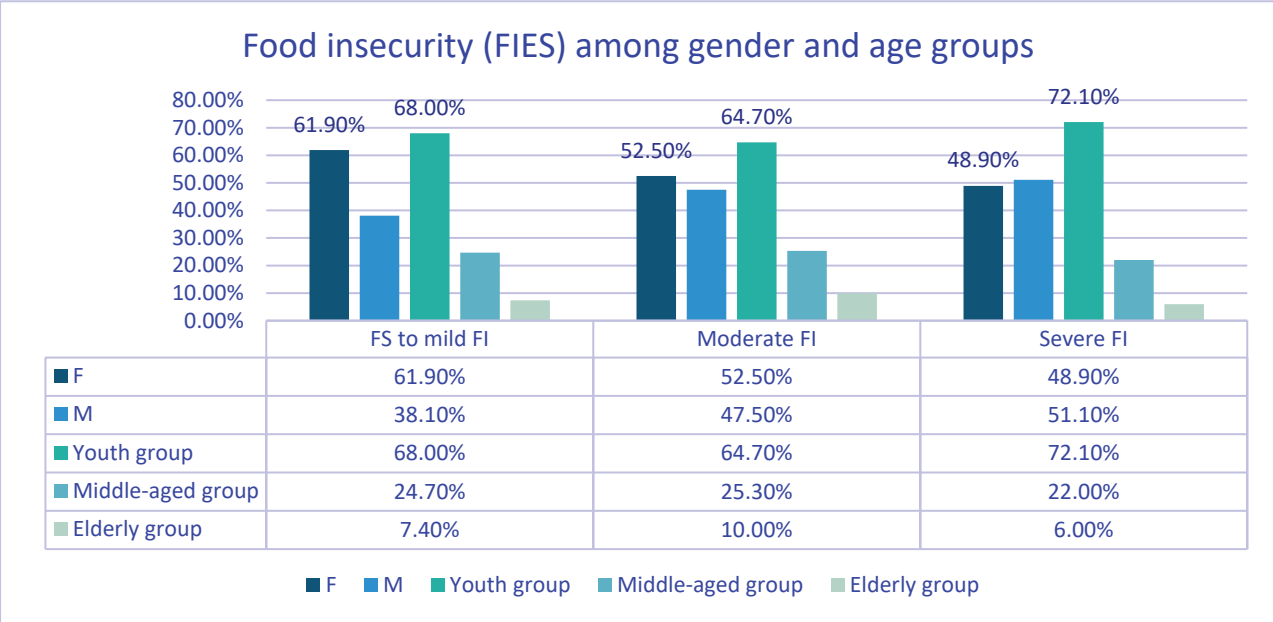
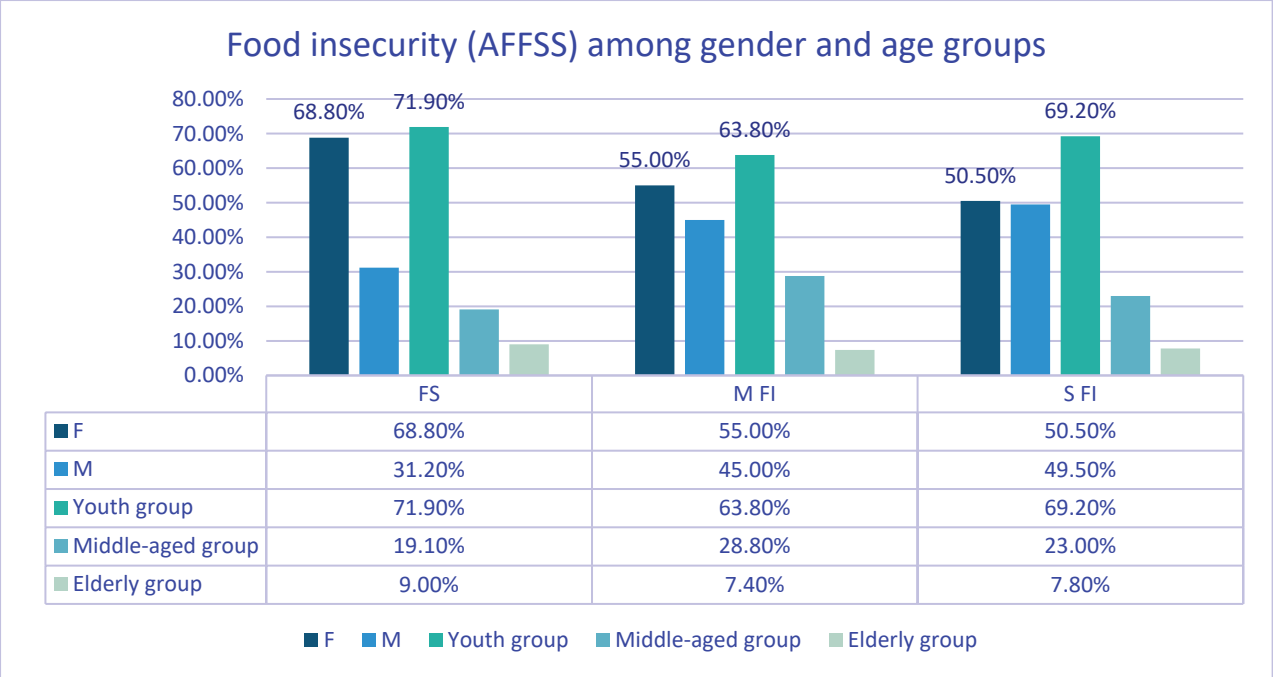


Figure 32. Assessment of food insecurity using AFFSS and FIES among genders and age groups.

Which of these sentences applies the most to the food eaten by your household during the past 6 months?

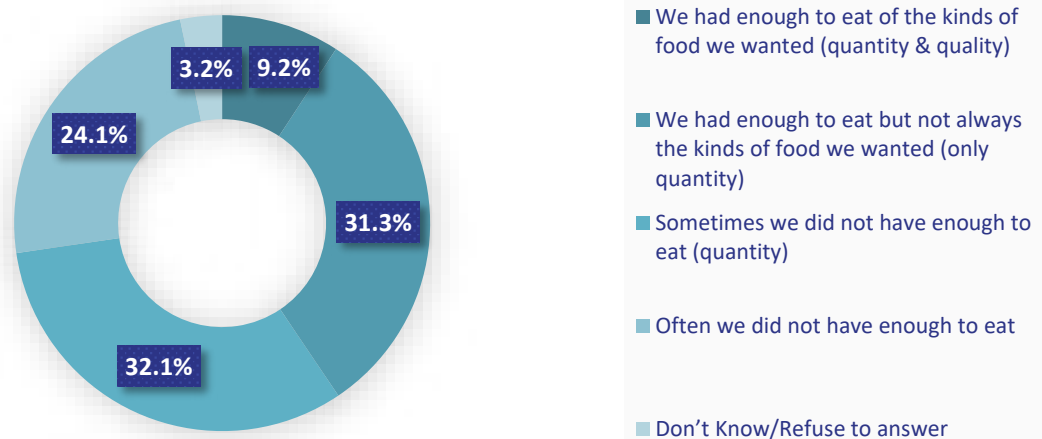


Figure 33. Respondents' answers concerning the household status during the past 6 months.

The survey respondents were asked about the most appropriate sentence describing the household status during the previous 6 months. 31 percent of households were consuming what they want to consume in enough quantity. On the other hand, the same percentage of people were also consuming enough quantity of food but not as they want. Furthermore, there was a percentage of households, in a range between 3 percent and 9 percent, who did not

have enough to eat (Figure 33). The same result was observed also when asking men and women each alone (Figure 34). As shown in appendix VIII, many factors influenced the food security status of households including the number of family members, the number of children in each household, education and occupation.

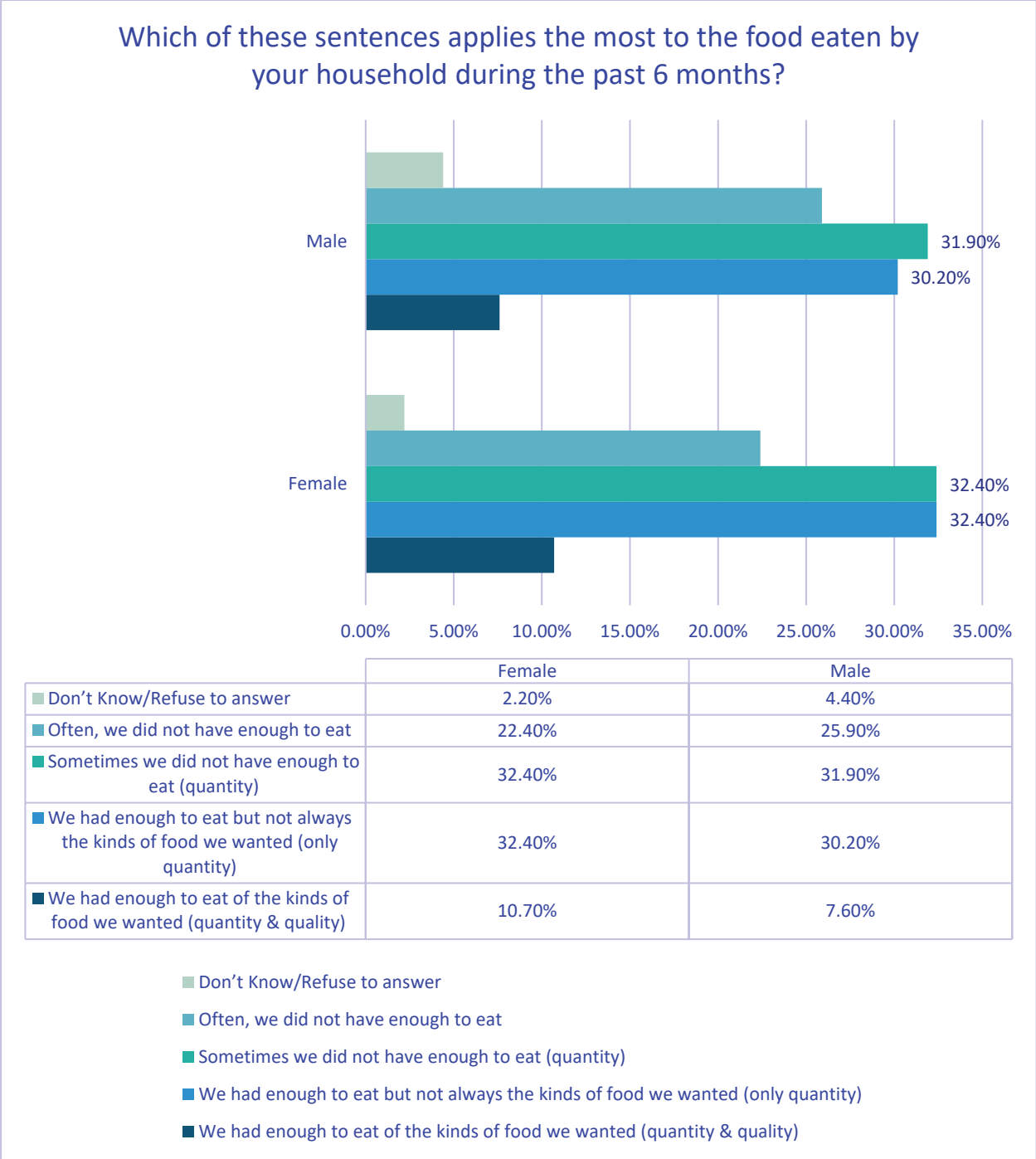
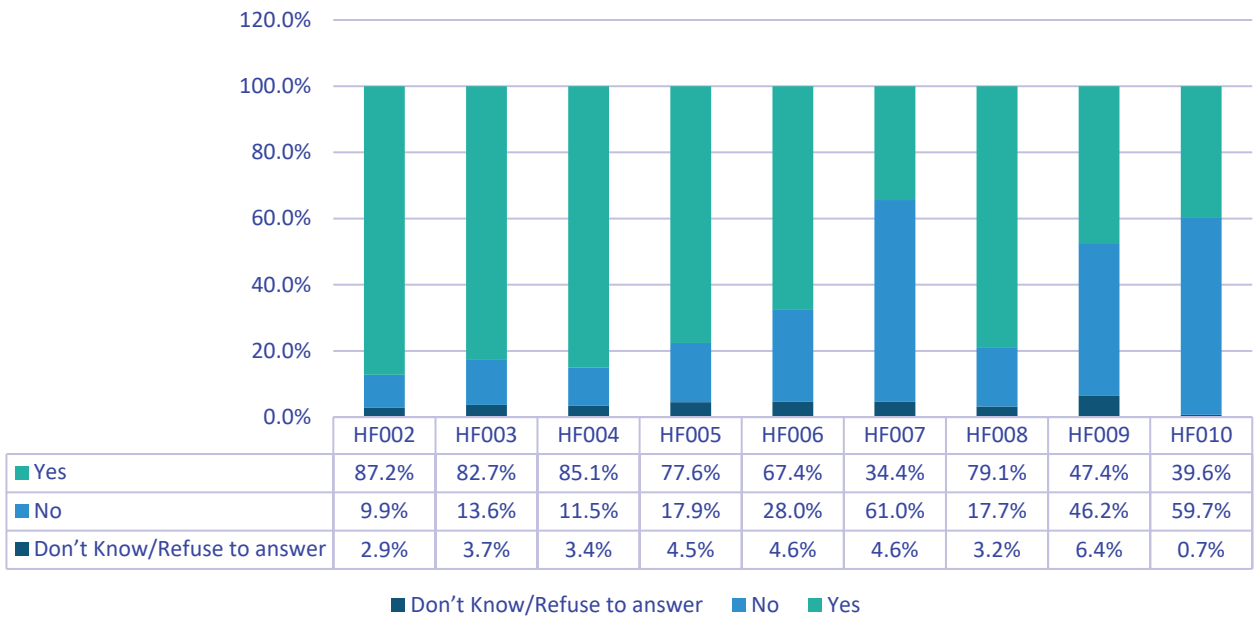
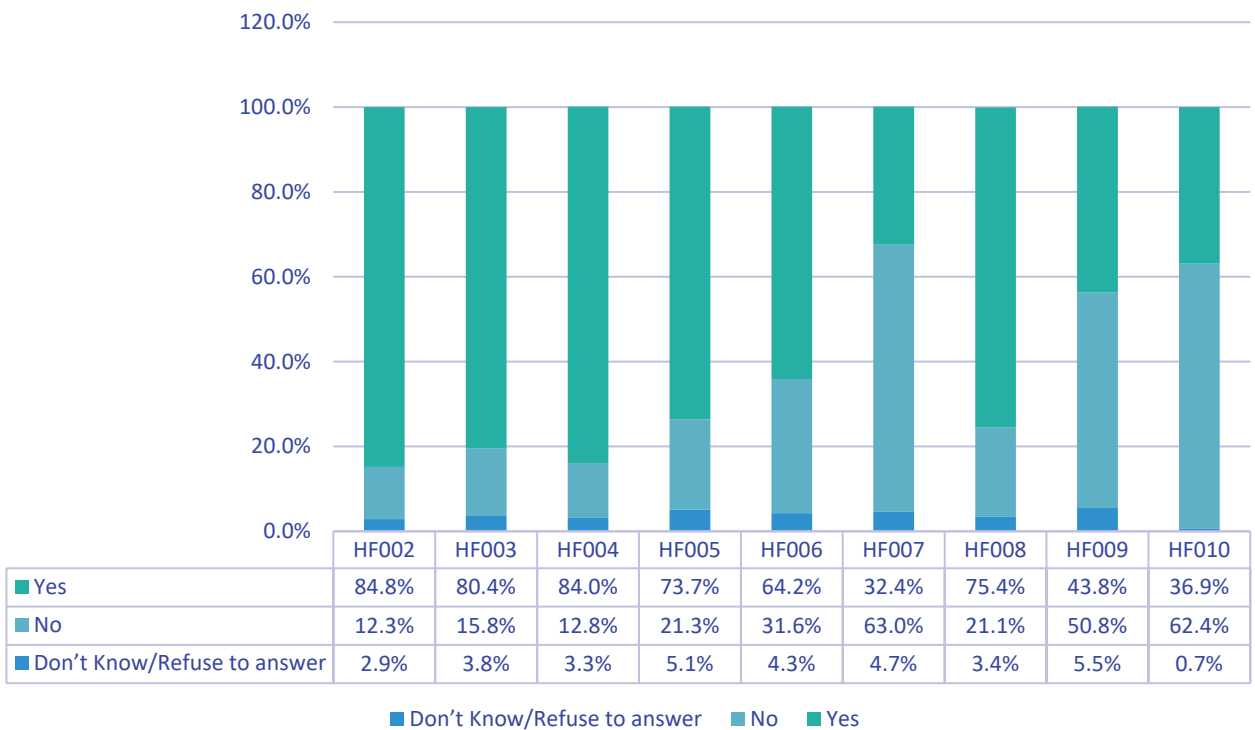


Figure 34. Women and men answers concerning the household status during the past 6 months.

Arab food security scale indicator



Arab food security scale indicator in females



Arab food security scale indicator in males

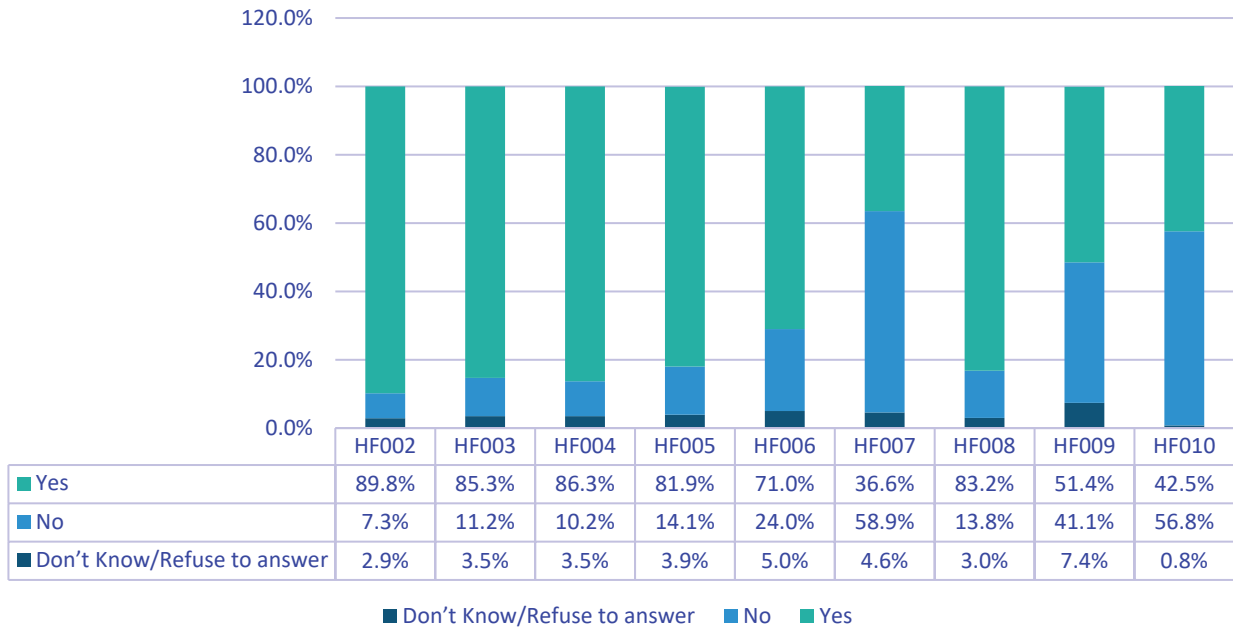


Figure 35. Overall and by gender assessment of food insecurity using the AFSS indicator in respondents.

*HF002: In the last 6 months, was there a time when you were concerned that you would run out of food for your household for the next month?

*HF003: Did the following statement apply to your household in the last 6 months? "The food that we bought was not enough and we didn't have money to get more."

*HF004: Are there any foods you feel your family does not eat enough of?

*HF005: In the past 6 months, did you or any other adult in your household ever cut the size of your meal because there was not enough food?

*HF006: In the past 6 months, did you or any other adult ever skip a meal because there was not enough food?

*HF007: In the past 6 months did you or any adult in your household not eat for a whole day or go to bed hungry because there was not enough food?

*HF008: During the last 6 months, was there a time when you or any adult in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?

*HF009: During the last 6 months, was there a time when you or any adult in your household were hungry but did not eat because there was not enough money or other resources for food?

*HF010: During the last 6 months, was there a time when you or any adult in your household went without eating for a whole day because of a lack of money or other resources

CONCLUSION

The national assessment of food security in Lebanon was conducted to provide humanitarian and development actors, the government of Lebanon and other NGOs partners with baseline information in order to facilitate the development of a comprehensive evidence-based strategy for food security interventions targeting Lebanese communities. This assessment is therefore crucial for the humanitarian and development community to determine in which areas the most vulnerable Lebanese households are located. Overall, the assessment found that food insecurity is an immediate problem for households in Beirut and in many governorates in Lebanon. 9 in every 16 households eat less than 2 meals per day and more than 70% of them skip their meals to spare food. According to the assessment, 53 percent of the Lebanese population has a poor FCS. Nevertheless, 82.4 percent do not rely on coping strategies. At the governorate level, Beqaa and Akkar have the largest proportion of households with a poor FCS, with 83 percent and 73 percent of households are calculated to have a poor FCS, respectively.

In addition, in terms of livelihoods, the assessment found that a majority of Lebanese households reported a decrease in income (the top reasons for it being the inflations in prices and the lack of job opportunities) and having incurred debt in the last 24 months. Households reported that they generally incurred debt to be able to buy food.

RECOMMENDATIONS

The overarching aim is always a continuation in the reduction of food insecurity for all in Lebanon and the improvement in resilience of the agricultural sector. Universally valid recommendations, based on outcomes of our surveys are presented in Table 4 in which the recommendations are based on food security indicators. Moreover, in Table 5, recommendations are distributed based on short, intermediate and long-term periods. Table 6 shows the recommendations for assistances from the Lebanese government and each UN partners in order to improve the food security status in Lebanon.

FOOD SECURITY INDICATORS

Food availability

Food availability is promoted through in-kind food assistance and sustainable food value chains.

Reasonable measures:

1. Kind-food assistance that is provided to the most vulnerable through distribution of food parcels, community kitchens and school feeding (See short-term assistances in Table 4).
2. Lebanese small-scale and family-farming production and the adoption of climate-smart technologies can be enhanced through the promotion of sustainable agricultural and livestock production, water use efficiency and conservation, and energy saving farming practices.
3. Marketing of small-scale and family farms which is improved through the promotion of food transformation and preservation, the creation and reinforcement of linkages between small-scale producers and local markets, the distribution of unsold/un-marketed quality food from producer/retailer to local markets and market-based diversification/contract farming.
4. Food wastage and losses should be reduced by improving post-harvest management and working on valorization of organic waste and least valued products (e.g. composting, awareness).
5. Trans-boundary animal and plant diseases should be controlled through support to the monitoring and early warning systems for plants and animal diseases awareness, capacity building and interventions to control the spread of transboundary diseases during emergencies.

Food access

Food accessibility is promoted through cash-based food assistance and agricultural livelihoods.

Reasonable measures:

1. Highly vulnerable populations, including displaced Syrians, Palestine Refugees from Syria and vulnerable Lebanese should have direct access to food through cash-based transfers for food such as e-cards and food vouchers.
2. Agricultural institutions are needed to improve agriculture sector livelihoods, with farmers' associations, agricultural cooperatives, markets and government institutions should be supported. Small farmer/private investments in agriculture should be supported through financial and technical support (e.g. land reclamation, irrigation/water management), and promotion of innovative credit/loan schemes for Lebanese, and/or agricultural inputs such as seeds, livestock and equipment.
3. Agricultural labor market should be strengthened by supporting the Lebanese small-scale agriculture businesses and improving the employability of individuals especially women in agriculture through improved technical education programs and trainings in agriculture and support for enrolments in agricultural technical schools in compliance with Lebanese labor laws.

4. Sector members are encouraged to provide direct food assistance through the "Common Card" platform, which is cost effective and allows for better coordination of assistance.
5. The rehabilitation and building of agricultural productive infrastructure and communal assets such as agriculture roads, irrigation networks, forests, wind breaks, hill lakes, water reservoirs, etc. creating better access to farmers to services which will assist production and reduce costs, and at the same time increase opportunities for most vulnerable individuals in accessing temporary seasonal and casual labor opportunities in agriculture and related sectors.

Food utilization

Food safety and nutrition practices should be improved through the promotion of consumption of diversified and quality food

Reasonable measures:

1. Nutrition-related behavior and practices as well as food diversity should be improved for households vulnerable to food insecurity specifically targeting female-headed households and households with pregnant and lactating women and children under five, through the promotion of small-scale production of diversified nutritious food for vulnerable households. Interventions include trainings, awareness and behavior change activities, school, backyard and roof micro-gardens and promotion of food preservation/ transformation technologies at the household level.
2. Food safety measures and policies towards a balanced, safe and nutritious diet should be enhanced by assisting the Government in improving the food inspection and safety measures, promoting Integrated Pest Management and Good Agriculture Practices and Standards, conducting value chains in regard to food safety and promoting policies supporting the local production of high value nutritious foods.
3. The improvement of food safety and quality of locally produced and imported products is needed; and strengthening agricultural research and laboratories

Stabilization

Promote and stabilize food security through support/ capacity building and strengthening of national public institutions and their decentralized services

Reasonable measures:

1. National institutions working in food security/agriculture, disaster reduction and social protection should have strengthened capacities to improve service delivery for vulnerable population. Targeted national institutions should receive technical assistance and strengthen their capacities in areas such as vulnerability. Training will also include how to budget to purchase nutritious foods with limited resources. analysis, targeting, beneficiary management, communication, monitoring and evaluation and climate smart agriculture and Standards (management of soil resources, pest management and efficient use of water resources) and food safety and quality. This will strengthen national institutions'

- capacities and ultimately support the provision of basic services through national services.
2. Sex-disaggregated data on food security should be collected and analyzed. Information to monitor and report on the situation of food security in Lebanon are needed for preparedness and long-term stabilization, including assessments with specific focus on vulnerable farmers, women and agricultural livelihoods.
 3. National institutions and actors involved in food security should be supported through development national capacity in the areas of safety nets, integration of social protection systems for farmers, contribution to the development of disaster and crisis management, support national policies and strategies related to food security, coordination and technical support to all agriculture and food security actors and promotion involvement of the private sector.
 4. Regional/decentralized public institutions involved in agriculture, food security, disaster reduction and social protection should strengthen capacities to improve service delivery for vulnerable population. Targeted regional/decentralized public institutions, including extension services and staff development centers, should work on allocations of equipment-material and build their capacities to provide delivery of services to vulnerable local populations.

Table 2. Recommendations based on food security indicators

Short-term Recommendations	Intermediate-term Recommendations	Long-term Recommendations
The government should provide Cash & Voucher support to farmers (22)	Nutrition surveys should be planned to detect malnutrition (22)	Focused support to Strengthening national social safety net systems (22)
Issuing electronic in-kind food assistance cards and expanding cash assistance programs to facilitate access to basic food needs for the most vulnerable. This ensures that assistance covers high dietary energy food and prevents market price hikes (23)	Intensifying food price monitoring to curtail food inflation and ensuring basic food needs have a ceiling shelf price. Publishing weekly price lists reduces market abuse and facilitates access to food for the most vulnerable groups (23)	Focused support to Strengthening local food production (22)
Serve food to those in need through volunteering via the concept of Social Responsibility (24)	Encouraging direct sales from local producers to local consumers using digital technologies to connect them, while establishing a legal framework and standards for e-commerce of perishable products (23)	Accelerating the implementation of a farmers' registry as a tool to disburse any kind of assistance to farmers in the future(23)
Food parcels for families suffering from hunger (25)	Exploring and promoting new business opportunities to encourage local production and processing, and replacing	Supporting cooperatives to initiate service centers that supply collective services to members through a social

	some imported agriculture inputs by locally produced ones such as seeds, compost and irrigation systems (23)	enterprise modality, making consumption and production more sustainable (23)
In-kind food assistance, hot meals, food vouchers, cash-based transfer, Micro, Small and Medium sized Enterprises support, nutrition support via NGOs responsibilities (see Table 3)	Facilitating access to seeds and arable land that are not yet exploited, including abandoned land, and encouraging farmers to produce cereals and wheat (rain fed or supplementary irrigated) (23)	Developing youth-tailored agriculture programs to facilitate the adoption and scale-up of digital and green technologies in the agriculture sector. National incentives for such programs should be encouraged (23)
	Revising the legal framework of wholesale market licensing to enforce conditioning (cooling, controlled atmosphere) in infrastructures as a core measure for reducing food waste (23)	Ensuring that the international community prioritizes and expands food security programs targeting refugees and host communities to address growing levels of vulnerability for both communities and to diffuse potential social tension (23)
	Ensuring food trade is prioritized at the Port of Tripoli, the main operational port after the Port of Beirut. Subsidies to cover additional transaction costs of food trade or reduce import tariffs are essential to avoid price inflation (23)	Dedicating special credit line facilities for input suppliers to allow minimum imports based on official or subsidized exchange rates comparable to basic products, such as wheat and medicines (23)
	Promote agricultural investment to improve agricultural opportunities for Lebanese small-scale farmers to protect their assets, stabilize their livelihood opportunities and enhance long-term competitiveness; and to create, at the same time, adequate job and livelihood opportunities for men and women;	Adjusting existing bilateral trade agreements to ensure more sustainable and resilient food supply chains (23)
		Support national and local food security systems, including social safety nets, capacity building and social protection to promote stabilization.

Table 3. Universally valid recommendations, based on outcomes of our survey's recommendations based on short, intermediate and long-term periods.

UN partners	Type of assistance
WFP	<ul style="list-style-type: none"> - Cash assistance and debit cards to buy food and empower vulnerable families to meet their essential needs - Enhance the skills and employability of both Lebanese and Syrians, and improve their livelihoods – including by linking smallholder farmers to markets - Distributing daily nutritious snacks to vulnerable Lebanese and refugee school children in public schools across Lebanon and during emergencies - Assisting the Lebanese government develop its social assistance system, and design programs to promote the equal participation of women in society and the economy. - Ensures the continuity of essential health care (medical supplies and pharmaceuticals) - Help in replenishment in the supply of wheat in Lebanon to ameliorate the country’s food reserves as part of a rapid logistics operation that will also involve setting up warehouses and mobile grain storage units. - Bringing in equipment to render the port operational enough to facilitate the import of wheat and other bulk grains into Lebanon - Procurement of food parcels to distribute to families impacted by the economic crisis and COVID-19 lockdown measures
Agency for Technical Cooperation and Development	<ul style="list-style-type: none"> - Implementation of multi-sectoral integrated programs such as community-led, area-based Water, Sanitation and Hygiene (WASH), shelter, and multi-purpose cash assistance - Targeting water authorities for trainings to improve infrastructure management and engaging with members of the public to promote household-level approaches to water management such as rainwater harvesting - Working to develop technical trainings and business development services, as well as supporting local institutions to provide market-based skill development - Integrated livelihood and protection program, working through Social Development Centers to provide trainings, career counseling, and support to the self-employed - Trainings should go beyond work skills, incorporating intensive courses aimed at developing life skills through building an understanding of gender equality in employment, conflict resolution and general job readiness

<p>Food security Sector</p>	<ul style="list-style-type: none"> - Food assistance through E-cards the National Poverty Targeting Program framework (NPTP), cash based and in-kind modalities to vulnerable people - Training for the most vulnerable farmers to provide with agricultural inputs - Rehabilitation of agricultural productive infrastructure and communal assets - Funds to increase the investment in agricultural worksite through private sector - Technical support to the ministry of agriculture through different interventions by UN partners and capacity building of its staff particularly through the agricultural Technical and Vocational Education and Training (TVET) program for the agricultural technical schools and the green plan with its decentralized offices - Providing of daily ready-to-eat / hot meals by community kitchens in operational areas - Providing food parcels and vouchers in addition to selected food items: bread, flour, potato bags, canned food and water in specific vulnerable regions - Cash-based assistance programs for vulnerable people and areas - Counselling to pregnant and lactating women in need of prenatal, breastfeeding and infant and young child feeding (IYCF) practices through lactation specialists, phone calls and extended tents
<p>USAID</p>	<ul style="list-style-type: none"> - Grants, funds and awards in humanitarian assistance to aid the people of Lebanon - Ensures the continuity of essential health care (medical supplies and pharmaceuticals); sponsors risk-communications and community-outreach activities; increases access to water, sanitation, and hygiene, and provides emergency food assistance to refugees and members of vulnerable Lebanese host communities who have lost their livelihoods or are unable to leave their homes - Targeting food system capacity building in Lebanon (food safety), hinders hundreds of small-, medium- and large-scale agro-food producers and processors from providing products that meet international standards required for export to other countries - USAID's water and sanitation programs are needed to promote water resource management and water quality to expand reliable public service delivery, improve health conditions and promote economic growth. - Increasing domestic sales and international exports of high-value fruits, vegetables and flowers by building the technical capability and capacity of domestic greenhouses to convert to hydroponic production and strengthening their links to the horticulture export market - Upgrading the certification, capacity and quality of Lebanese agricultural laboratories and agricultural product development plants to create certified and internationally recognized "one-stop-export shops."

Ministry of social affairs-National Solidarity Program	<ul style="list-style-type: none"> - Assistance of vulnerable households through cash-based transfers Likewise, reform and expansion of the NPTP, which could benefit as many as extreme poor Lebanese households as an emergency social safety net - Ensuring that food needs of the poorest Lebanese families are covered through a food "e-card" that can be used as a means of payment at food retailers.
United nations interim force in Lebanon	<ul style="list-style-type: none"> - Providing agricultural equipment's in support of local farmers that will improve food security of the village - Women empowering activities in villages - Implementation of projects which are intended to address some of the most pressing needs of the host population in terms of agriculture and plant crops
Food blessed organization	<ul style="list-style-type: none"> - Providing free meals and food assistances to those in need - Training on cutting down food waste and volunteering via the concept of Social Responsibility including Individual Social Responsibility (ISR) and Corporate Social Responsibility (CSR) to serve food to vulnerable people
UNICEF	<ul style="list-style-type: none"> - Establishment of job and income security for those who perform agricultural or casual labor and instigating social protection schemes and community programs for the benefit of vulnerable groups and those who are unemployed due to lockdowns - Ensuring access to sufficient, safe and nutritious foods - Creating a food security and nutrition surveillance system that assist in collecting and updating necessary information to identify populations at risk and address factors that will negatively affect said populations
FAO	<ul style="list-style-type: none"> - Improvement of food availability through in kind food assistance and sustainable food value chain - Improvement of food access through cash-based food assistance and agricultural livelihoods - Improve food utilization: food safety and nutrition practices improved through the promotion of consumption of diversified and quality food - Improve food security stabilization through enhanced information on food security, coordination of agriculture activities and supporting national institutions
The EU Regional Trust Fund in Response to the Syrian Crisis	<ul style="list-style-type: none"> - Developing adequate agriculture production support system for vulnerable smallholders that support good agriculture practices and timely response to shocks - Rehabilitating the capacity of the agriculture extension systems to be able to respond to the increasing demand of support - Supporting the vulnerable smallholders and the small family based agrifood enterprises to increase productivity and financial feasibility of their activities - Support communal assets and management of natural resources with employment and training
UNHCR	<ul style="list-style-type: none"> - Funds, awards and grants to purchase proper medical equipment in response to all emergencies

The Food for Assets project implemented by LOST	- Assistance in the development of skills for both genders
Caritas Lebanon	- to support socio-economically vulnerable households, including elderly, persons with disabilities and female-headed households, in meeting their basic needs: basic assistance, mainly in the form of cash transfers through ATM cards, Food and fuel vouchers and in-kind distributions
IOCC	- food assistance through community kitchens - Awareness sessions, especially those related to food storage and healthy eating habits, have also been considered as beneficial by the households. - Involvement of women from both Syrian and Lebanese nationalities in common activities
ICARDA	- Enable of the lining of canals, installing of modern irrigation systems and improvement in rainfed agriculture. - Enhancement of the efficiency and productivity of irrigated farmlands and introducing improved seed varieties and new agricultural practices suitable for cereal-based systems. - Promotion of the participation of farmers, both men and women, in the capacity building program. - Construction of water structures assist in the creation short-term employment opportunities for both vulnerable local Lebanese and Syrian workers.
EMERGENCY RESPONSE FRAMEWORK	- In-kind food rations for highly vulnerable people - Expansion of cash assistance in emergency area - Assistance in wheat flour supply

Table 4. Type of assistances recommended from UN partners.

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APPENDIXES

Appendix I: socio-demographic and socio-economic characteristics of the survey respondents by gender and by their place of living

		Gender						Sig.
		Overall		Female		Male		
		N (%)		N (%)		N (%)		
Age categories	Missing	132	11.6%	50	8.4%	82	15.2%	0.000*
	14-19	129	11.4%	88	14.8%	41	7.5%	
	20-24	196	17.3%	100	16.9%	95	17.7%	
	25-34	276	24.4%	119	20.1%	157	29.2%	
	35-54	347	30.6%	210	35.4%	137	25.3%	
	55+	53	4.7%	26	4.4%	27	5.1%	
Gender	Female	593	52.4%	593	100.0%	0	0.0%	-
	Male	539	47.6%	0	0.0%	539	100.0%	
Marital Status	Single	534	47.1%	250	42.1%	284	52.6%	0.000*
	Married	563	49.8%	317	53.4%	246	45.7%	
	Widow	0	0.0%	0	0.0%	0	0.0%	
	Divorced	35	3.1%	26	4.4%	9	1.7%	
Number of family members	1-3 members	263	23.2%	137	23.2%	125	23.3%	0.001
	4-6 members	752	66.5%	406	68.5%	347	64.4%	
	7-9 members	98	8.6%	49	8.2%	49	9.1%	
	More than 9 members	19	1.6%	1	0.2%	17	3.2%	
Number of children	0 children	353	31.2%	137	23.1%	216	40.1%	0.000*
	Less than 3 children	524	46.2%	296	49.9%	227	42.2%	
	More than 3 children	256	22.6%	160	27.0%	96	17.8%	
Education	illiterate	25	2.2%	8	1.4%	17	3.2%	0.000*
	primary	59	5.2%	24	4.1%	35	6.5%	
	intermediate	830	73.3%	395	66.6%	435	80.7%	
	university	218	19.2%	166	28.0%	52	9.6%	
Occupation	Working	434	38.4%	136	22.9%	298	55.4%	0.000*
	Fired	122	10.8%	23	3.9%	99	18.4%	
	Not working	331	29.3%	270	45.5%	61	11.4%	
	Student	244	21.6%	164	27.7%	80	14.9%	
Health Occupation	Yes	64	5.6%	55	9.3%	8	1.6%	0.000*
	No	1069	94.4%	538	90.7%	531	98.4%	
Smoking	Yes	331	29.2%	69	11.7%	262	48.5%	0.000*
	No	735	64.9%	500	84.2%	235	43.7%	
	Sometimes	52	4.6%	22	3.8%	30	5.6%	
	Old smoker	14	1.2%	2	0.3%	12	2.2%	
Monthly income	No income	228	20.1%	94	15.9%	133	24.7%	0.000*
	less than 1,500,000 LBP	427	37.7%	221	37.3%	206	38.2%	
	1,500,000- 3,000,000 LBP	238	21.0%	140	23.6%	98	18.2%	
	More than 3,000,000 LBP	44	3.9%	30	5.1%	14	2.6%	
	Less than 1000\$	96	8.5%	50	8.5%	46	8.6%	
	1000\$-2000\$	65	5.8%	52	8.8%	13	2.5%	
	More than 2000\$	34	3.0%	6	1.0%	28	5.2%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		
Age categories	Missing	20	4.9%	11	10.1%	2	2.4%	45	14.6%	9	21.1%	1	5.8%	9	23.1%	35	24.1%	0.000*
	14-19	58	14.4%	11	9.7%	18	26.3%	37	11.8%	2	4.7%	0	3.9%	1	2.4%	2	1.1%	
	20-24	74	18.1%	32	29.0%	5	7.5%	45	14.4%	4	9.1%	5	45.9%	9	24.6%	21	14.6%	
	25-34	102	25.2%	10	8.6%	25	37.2%	70	22.6%	10	24.8%	4	33.8%	2	4.4%	53	36.3%	
	35-54	125	31.0%	38	34.5%	17	25.5%	105	33.7%	17	40.3%	1	8.2%	17	45.5%	26	17.9%	
	55+	26	6.4%	9	7.9%	1	1.0%	9	2.9%	0	0.0%	0	2.4%	0	0.0%	9	6.0%	
Gender	Female	234	57.6%	70	63.7%	47	68.6%	144	46.3%	40	96.5%	10	83.0%	28	74.0%	20	14.0%	0.000*
	Male	172	42.4%	40	36.3%	21	31.4%	167	53.7%	1	3.5%	2	17.0%	10	26.0%	126	86.0%	
Marital Status	Single	194	47.9%	50	45.4%	38	54.9%	141	45.2%	23	55.9%	8	70.6%	11	30.2%	68	46.6%	0.000*
	Married	211	52.0%	51	46.0%	31	44.8%	154	49.4%	18	44.1%	3	27.5%	26	69.2%	70	47.7%	
	Widow	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.2%	
	Divorced	0	0.1%	9	8.5%	0	0.3%	17	5.4%	0	0.0%	0	1.9%	0	0.6%	8	5.5%	
Number of family members	1-3 members	96	23.8%	42	38.5%	31	45.5%	33	10.8%	11	25.4%	5	39.6%	9	23.7%	35	24.0%	0.000*
	4-6 members	299	73.9%	65	59.4%	21	30.1%	238	76.5%	31	73.5%	6	46.9%	28	73.9%	66	44.9%	
	7-9 members	9	2.3%	2	1.9%	17	24.3%	39	12.6%	0	1.1%	2	13.5%	1	1.8%	28	19.0%	
	More than 9 members	0	0.0%	0	0.2%	0	0.0%	0	0.1%	0	0.0%	0	0.0%	0	0.6%	18	12.1%	
Number of children	0 children	138	34.1%	22	20.0%	18	26.4%	102	32.9%	28	66.6%	6	48.3%	2	5.8%	37	25.1%	0.000*
	Less than 3 children	159	39.2%	60	54.5%	40	58.9%	167	53.8%	12	28.1%	4	37.7%	26	68.9%	55	37.4%	
	More than 3 children	108	26.7%	28	25.5%	10	14.6%	41	13.3%	2	5.2%	2	14.0%	10	25.3%	55	37.5%	
Education	Illiterate	8	2.0%	0	0.0%	0	0.0%	9	2.8%	0	0.0%	0	0.0%	0	0.0%	9	6.0%	0.000*
	Primary	9	2.1%	0	0.0%	17	24.5%	25	8.2%	0	0.0%	0	0.0%	0	0.0%	8	5.5%	
	intermediate	300	74.2%	75	68.1%	33	48.1%	235	75.7%	32	77.2%	0	0.0%	33	86.6%	121	83.0%	
	University	88	21.7%	35	31.9%	19	27.4%	41	13.3%	10	22.8%	12	100.0%	5	13.4%	8	5.6%	
Occupation	Working	173	42.8%	40	36.3%	34	49.1%	134	43.1%	1	3.4%	6	48.3%	10	26.7%	36	24.7%	0.000*
	Fired	30	7.4%	19	17.5%	0	0.3%	29	9.3%	0	0.6%	0	3.9%	8	21.2%	35	24.0%	
	Not working	105	26.0%	27	24.9%	10	14.5%	86	27.6%	33	78.4%	1	12.1%	9	23.7%	60	41.0%	
	Student	97	23.9%	23	21.3%	25	36.1%	62	20.0%	7	17.7%	4	35.7%	11	28.4%	15	10.3%	
Health Occupation	Yes	27	6.7%	11	9.6%	4	5.5%	7	2.2%	3	6.1%	4	31.9%	9	23.1%	0	0.2%	0.000*
	No	378	93.3%	100	90.4%	65	94.5%	304	97.8%	39	93.9%	8	68.1%	29	76.9%	146	99.8%	
Smoking	Yes	74	18.3%	36	32.3%	18	26.0%	105	33.8%	9	21.3%	1	4.4%	9	23.7%	80	54.6%	0.000*
	No	298	73.6%	72	65.2%	48	70.5%	187	60.2%	33	78.7%	10	86.9%	28	74.9%	58	39.9%	
	Sometimes	30	7.4%	2	1.8%	2	3.0%	9	3.0%	0	0.0%	1	6.3%	0	0.6%	8	5.5%	
	Old smoker	3	0.7%	1	0.6%	0	0.4%	10	3.1%	0	0.0%	0	2.4%	0	0.8%	0	0.0%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)		
Monthly income	No income	31	7.6%	1	1.0%	20	29.0%	81	26.1%	16	39.2%	1	4.4%	9	22.6%	69	47.3%	0.000*
	less than 1,500,000 LBP	146	36.0%	52	46.8%	30	43.2%	138	44.5%	18	44.0%	3	28.0%	2	6.2%	37	25.6%	
	1,500,000-3,000,000 LBP	111	27.5%	22	19.8%	14	19.8%	45	14.4%	4	9.5%	4	31.4%	19	49.3%	20	13.8%	
	More than 3,000,000 LBP	19	4.8%	13	11.5%	2	3.4%	4	1.2%	2	3.9%	3	26.1%	0	0.0%	1	1.0%	
	Less than 1000\$	46	11.4%	2	1.7%	1	1.1%	30	9.6%	1	1.7%	0	3.9%	8	21.2%	9	6.0%	
	1000\$-2000\$	40	9.8%	20	18.2%	1	0.8%	4	1.1%	1	1.2%	1	6.3%	0	0.6%	0	0.0%	
	More than 2000\$	12	2.9%	1	0.9%	2	2.8%	10	3.1%	0	0.6%	0	0.0%	0	0.0%	9	6.3%	

Appendix II : Medical conditions and health characteristics of the survey's respondents according to gender and their place of living.

		Gender						Sig.
		Overall		Female		Male		
		N (%)		N (%)		N (%)		
Medical Insurance	Social Security	366	32.3%	213	35.9%	153	28.3%	0.025
	Private insurance	123	10.8%	62	10.4%	61	11.3%	
	Other public insurance	133	11.7%	73	12.3%	60	11.1%	
	No health insurance	511	45.2%	246	41.4%	266	49.3%	
Having any chronic disease	yes	224	19.8%	132	22.2%	93	17.2%	0.035
	no	908	80.2%	462	77.8%	447	82.8%	
Anyone in the house having chronic illness	missing	908	80.2%	462	77.8%	447	82.8%	0.112
	yes	167	14.7%	94	15.9%	73	13.5%	
	no	56	5.0%	36	6.1%	20	3.7%	
	not applicable	1	0.1%	1	0.2%	0	0.0%	
Getting treatment regularly	missing	908	80.2%	462	77.8%	447	82.8%	0.000*
	yes	70	6.2%	50	8.4%	20	3.7%	
	no	65	5.7%	46	7.8%	19	3.5%	
	Not reaching medicines	70	6.2%	34	5.7%	36	6.6%	
	not applicable	20	1.8%	2	0.3%	18	3.4%	
Being afraid for going out to get the treatment	Missing	908	80.2%	462	77.8%	447	82.8%	0.000*
	Yes	66	5.8%	30	5.0%	36	6.7%	
	No	145	12.8%	98	16.5%	47	8.7%	
	not applicable	13	1.2%	4	0.6%	10	1.8%	
Afraid of not being able to get the treatment	Missing	908	80.2%	462	77.8%	447	82.8%	0.012
	Yes	179	15.8%	107	18.0%	72	13.4%	
	No	31	2.8%	21	3.5%	10	1.9%	
	not applicable	14	1.2%	4	0.7%	10	1.8%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)			
Medical Insurance	Social Security	166	40.9%	53	47.6%	24	34.8%	85	27.3%	13	30.6%	5	44.0%	10	27.5%	11	7.2%	0.000*
	Private insurance	38	9.3%	21	19.0%	12	17.4%	30	9.7%	1	2.3%	2	18.4%	9	22.5%	10	7.1%	
	Other public insurance	28	6.9%	4	3.9%	5	7.0%	56	18.0%	10	23.7%	1	10.2%	18	47.5%	10	7.2%	
	No health insurance	174	43.0%	32	29.5%	28	40.8%	140	45.0%	18	43.3%	3	27.5%	1	2.6%	115	78.5%	
Having any chronic disease	Yes	75	18.6%	21	19.1%	10	14.8%	73	23.3%	25	59.0%	1	6.3%	1	2.0%	19	13.0%	0.000*
	No	330	81.4%	89	80.9%	58	85.2%	238	76.7%	17	41.0%	11	93.7%	37	98.0%	127	87.0%	
Anyone in the house having chronic illness	Missing	330	81.4%	89	80.9%	58	85.2%	238	76.7%	17	41.0%	11	93.7%	37	98.0%	127	87.0%	0.000*
	Yes	65	15.9%	19	17.6%	10	14.1%	30	9.5%	24	58.5%	1	6.3%	1	1.4%	18	12.4%	
	No	11	2.6%	1	1.1%	0	0.7%	43	13.7%	0	0.6%	0	0.0%	0	0.6%	1	0.6%	
	not applicable	0	0.1%	0	0.4%	0	0.0%	0	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
Getting treatment regularly	Missing	330	81.4%	89	80.9%	58	85.2%	238	76.7%	17	41.0%	11	93.7%	37	98.0%	127	87.0%	0.000*
	Yes	38	9.4%	11	9.9%	1	2.0%	18	5.7%	0	1.1%	1	4.4%	1	1.4%	0	0.2%	
	No	19	4.7%	1	0.8%	9	12.5%	2	0.6%	24	57.9%	0	1.9%	0	0.6%	10	6.7%	
	Not reaching medicines	9	2.3%	8	7.6%	0	0.3%	43	13.8%	0	0.0%	0	0.0%	0	0.0%	9	6.2%	
	not applicable	9	2.2%	1	0.8%	0	0.0%	10	3.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
Being afraid for going out to get the treatment	Missing	330	81.4%	89	80.9%	58	85.2%	238	76.7%	17	41.0%	11	93.7%	37	98.0%	127	87.0%	0.000*
	Yes	12	2.9%	17	15.5%	0	0.7%	18	5.8%	8	19.3%	0	1.9%	0	1.2%	10	6.9%	
	No	54	13.4%	2	2.2%	9	13.5%	53	17.0%	17	39.7%	0	1.9%	0	0.8%	9	6.1%	
	not applicable	9	2.3%	2	1.5%	0	0.7%	2	0.5%	0	0.0%	0	2.4%	0	0.0%	0	0.0%	
Afraid of not being able to get the treatment	Missing	330	81.4%	89	80.9%	58	85.2%	238	76.7%	17	41.0%	11	93.7%	37	98.0%	127	87.0%	0.000*
	Yes	63	15.6%	19	17.0%	1	1.3%	61	19.6%	24	58.5%	1	4.4%	1	2.0%	10	6.5%	
	No	2	0.5%	1	0.9%	9	12.8%	10	3.1%	0	0.6%	0	0.0%	0	0.0%	10	6.5%	
	not applicable	10	2.5%	1	1.3%	0	0.7%	2	0.6%	0	0.0%	0	1.9%	0	0.0%	0	0.0%	

Appendix III: Economic status and *InCharge Financial Distress/Financial Well-Being Scale* over the last 4 weeks related to the survey's respondents according to gender and their place of living.

		Gender						Sig.
		Overall		Female		Male		
		N	(%)	N	(%)	N	(%)	
Income change	Yes	327	28.9%	167	28.1%	160	29.7%	0.56
	No	805	71.1%	427	71.9%	379	70.3%	
Ongoing income	Yes	469	41.4%	265	44.7%	204	37.8%	0.000*
	half income	160	14.1%	91	15.3%	69	12.9%	
	less than half income	78	6.9%	24	4.1%	54	10.0%	
	Without income anymore	426	37.6%	214	36.0%	213	39.4%	
	monthly payments	592	52.3%	305	51.4%	287	53.2%	
economic situation before Covid-19	below the poverty line	52	4.6%	17	2.8%	35	6.6%	0.000*
	Poor	149	13.2%	40	6.7%	110	20.3%	
	moderate condition	867	76.6%	485	81.7%	383	71.0%	
	Rich	27	2.3%	16	2.7%	11	2.0%	
	no answer	37	3.3%	36	6.1%	1	0.2%	
economic situation after Covid-19	below the poverty line	153	13.5%	45	7.6%	108	20.1%	0.000*
	Poor	434	38.3%	210	35.4%	224	41.5%	
	moderate condition	504	44.5%	307	51.8%	197	36.5%	
	Rich	11	1.0%	2	0.3%	9	1.7%	
	no answer	30	2.6%	29	4.9%	1	0.2%	
Afraid of poverty because of covid-19 pandemic	Score 1 to 5=Not afraid	418	36.9%	208	35.1%	209	38.8%	0.197
	score 6 to 10=Afraid	715	63.1%	385	64.9%	330	61.2%	

		Gender						Sig.
		Overall		Female		Male		
		N	(%)	N	(%)	N	(%)	
Financial stress	Overpressure	755	66.7%	392	66.1%	363	67.3%	0.658
	Less pressure or no pressure	378	33.3%	201	33.9%	176	32.7%	
Satisfaction of the current financial situation	Overpressure	801	70.7%	394	66.4%	407	75.4%	0.001
	less pressure or no pressure	332	29.3%	199	33.6%	133	24.6%	
Ability to meet normal expenses	Overpressure	759	67.0%	386	65.1%	372	69.0%	0.161
	less pressure or no pressure	374	33.0%	207	34.9%	167	31.0%	
Payment of financial emergency amount of 1000\$	Overpressure	759	67.1%	399	67.2%	361	66.9%	0.944
	Less pressure or no pressure	373	32.9%	195	32.8%	178	33.1%	
Affordability of doing leisure activities	Overpressure	703	62.1%	352	59.3%	351	65.1%	0.042
	less pressure or no pressure	430	37.9%	242	40.7%	188	34.9%	
Satisfaction of financial management	Overpressure	761	67.2%	368	62.0%	393	72.9%	0.000*
	less pressure or no pressure	372	32.8%	225	38.0%	146	27.1%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		
Income change	Yes	132	32.6%	51	46.7%	37	54.7%	57	18.3%	2	4.0%	2	19.8%	0	0.6%	45	30.8%	0.000*
	No	273	67.4%	59	53.3%	31	45.3%	254	81.7%	40	96.0%	10	80.2%	38	99.4%	101	69.2%	
Ongoing income	Yes	209	51.6%	45	40.4%	26	38.6%	104	33.5%	21	50.1%	7	58.0%	19	51.3%	37	25.6%	0.000*
	half income	48	11.8%	31	28.5%	12	17.5%	47	15.2%	1	2.3%	3	21.7%	0	1.2%	18	12.1%	
	less than half income	11	2.7%	10	8.8%	9	12.8%	37	11.9%	2	3.9%	0	0.0%	0	1.2%	10	6.5%	
	Without income anymore during the last 24 months or more	138	33.9%	25	22.3%	21	31.0%	123	39.5%	18	43.7%	2	20.3%	18	46.3%	82	55.9%	
		90	22.3%	52	47.4%	11	16.7%	65	20.8%	18	42.1%	2	17.9%	2	4.4%	45	30.5%	
economic situation before Covid-19	below the poverty line	17	4.2%	0	0.2%	0	0.0%	26	8.5%	0	0.0%	0	2.4%	0	0.0%	8	5.5%	0.000*
	Poor	14	3.5%	2	2.0%	0	0.0%	37	11.8%	16	39.2%	0	1.9%	1	1.4%	79	54.1%	
	moderate condition	360	88.9%	105	95.3%	42	60.9%	229	73.7%	24	58.6%	11	91.8%	37	97.4%	59	40.2%	
	Rich	3	0.8%	2	1.4%	10	15.2%	10	3.3%	0	0.6%	0	3.9%	0	1.2%	0	0.2%	
	no answer	10	2.6%	1	1.0%	16	23.9%	8	2.7%	1	1.7%	0	0.0%	0	0.0%	0	0.0%	
economic situation after Covid-19	below the poverty line	20	4.9%	10	9.3%	9	13.0%	54	17.4%	24	58.5%	0	2.4%	0	0.0%	35	24.3%	0.000*
	Poor	148	36.6%	44	39.5%	13	19.3%	118	38.1%	10	23.9%	3	29.0%	9	24.9%	88	60.0%	
	moderate condition	225	55.5%	55	49.9%	37	54.0%	130	41.8%	7	16.0%	8	68.5%	29	75.1%	14	9.6%	
	Rich	1	0.3%	0	0.0%	1	0.8%	0	0.1%	0	0.0%	0	0.0%	0	0.0%	9	6.1%	
	no answer	11	2.7%	1	1.3%	9	12.9%	8	2.6%	1	1.7%	0	0.0%	0	0.0%	0	0.0%	
Afraid of poverty because of covid-19 pandemic	Score 1 to 5=Not afraid	159	39.4%	45	41.1%	25	36.7%	121	38.9%	4	9.7%	6	51.7%	19	50.2%	37	25.5%	0.000*
	score 6 to 10=Afraid	246	60.6%	65	58.9%	43	63.3%	190	61.1%	38	90.3%	6	48.3%	19	49.8%	109	74.5%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)		
Financial stress	Overpressure	269	66.5%	63	57.0%	37	53.4%	207	66.7%	37	87.6%	7	55.5%	28	73.0%	108	74.0%	0.002
	Less pressure or no pressure	136	33.5%	47	43.0%	32	46.6%	104	33.3%	5	12.4%	5	44.5%	10	27.0%	38	26.0%	
Satisfaction of the current financial situation	Overpressure	251	61.9%	82	74.3%	52	76.7%	226	72.7%	29	69.5%	6	52.2%	28	73.6%	126	86.5%	0.000*
	less pressure or no pressure	155	38.1%	28	25.7%	16	23.3%	85	27.3%	13	30.5%	6	47.8%	10	26.4%	20	13.5%	
Ability to meet normal expenses	Overpressure	243	59.9%	82	74.8%	46	66.7%	199	64.1%	37	89.2%	6	52.7%	28	73.1%	117	80.2%	0.000*
	less pressure or no pressure	162	40.1%	28	25.2%	23	33.3%	112	35.9%	4	10.8%	6	47.3%	10	26.9%	29	19.8%	
Payment of financial emergency amount of 1000\$	Overpressure	239	59.1%	85	77.5%	44	64.5%	218	70.2%	39	92.8%	7	60.4%	27	72.4%	99	67.5%	0.000*
	Less pressure or no pressure	166	40.9%	25	22.5%	24	35.5%	93	29.8%	3	7.2%	5	39.6%	10	27.6%	47	32.5%	
Affordability of doing leisure activities	Overpressure	234	57.6%	53	47.8%	44	63.8%	187	60.3%	37	87.6%	5	44.5%	28	73.0%	116	79.4%	0.000*
	less pressure or no pressure	172	42.4%	58	52.2%	25	36.2%	124	39.7%	5	12.4%	7	55.5%	10	27.0%	30	20.6%	
Satisfaction of financial management	Overpressure	215	53.1%	81	73.4%	43	63.2%	209	67.2%	37	87.6%	6	52.2%	36	94.8%	134	91.4%	0.000*
	less pressure or no pressure	190	46.9%	29	26.6%	25	36.8%	102	32.8%	5	12.4%	6	47.8%	2	5.2%	13	8.6%	

Appendix IV: Depts incurrence and assistance related to the survey's respondents according to gender and their place of living.

		Gender						Sig.
		Overall		Female		Male		
		N (%)		N (%)		N (%)		
Incurred any debts in the last 24 months	Yes	613	54.1%	307	51.7%	306	56.7%	0.092
	No	520	45.9%	286	48.3%	233	43.3%	
Amount of dept the participant currently has	more than or equal 10,000\$	45	4.0%	16	2.7%	29	5.4%	0.001
	less than 10,000\$	157	13.8%	92	15.4%	65	12.0%	
	no debt	666	58.8%	360	60.6%	306	56.7%	
	less than 15 million LBP	209	18.5%	109	18.3%	100	18.6%	
	more than or equal 15 million LBP	56	4.9%	17	2.9%	39	7.2%	
When the participant took the dept	Missing	520	45.9%	286	48.3%	233	43.3%	0.000*
	one month ago	21	1.9%	3	0.6%	18	3.3%	
	during the last 6 months	154	13.6%	88	14.9%	65	12.1%	
	during the last 12 months	153	13.5%	62	10.5%	91	16.8%	
	during the last 24 months or more	285	25.2%	153	25.8%	132	24.5%	
Way of dept payment	Missing	520	45.9%	286	48.3%	233	43.3%	0.000*
	total payments	21	1.8%	2	0.3%	19	3.5%	
	monthly payments	592	52.3%	305	51.4%	287	53.2%	
Receiving assistance in the last 12 months	Yes	244	21.5%	140	23.6%	104	19.3%	0.08
	No	889	78.5%	454	76.4%	435	80.7%	
Type of assistance the participant get	Missing	889	78.5%	454	76.4%	435	80.7%	0.05
	Food	166	14.7%	91	15.4%	75	13.8%	
	Cash	58	5.1%	30	5.0%	28	5.2%	
	non food items	1	0.0%	0	0.0%	0	0.1%	
	Education	17	1.5%	17	2.8%	1	0.1%	
	Health	1	0.1%	1	0.2%	0	0.1%	
	Protection	0	0.0%	0	0.0%	0	0.0%	
	Shelter	0	0.0%	0	0.0%	0	0.0%	
WASH	0	0.0%	0	0.0%	0	0.0%		
Source of assistance	Missing	889	78.5%	454	76.5%	435	80.7%	0.001
	Government	49	4.3%	22	3.6%	28	5.1%	
	NGO	39	3.5%	20	3.4%	19	3.6%	
	Charity	66	5.8%	48	8.1%	18	3.4%	
	UN agency	35	3.0%	17	2.8%	18	3.3%	
	religious organization	12	1.1%	11	1.9%	1	0.2%	
	local people	31	2.7%	13	2.1%	18	3.4%	
	family aboard	11	1.0%	9	1.6%	2	0.3%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		
Incurred any debts in the last 24 months	Yes	189	46.6%	74	67.4%	30	44.0%	135	43.5%	36	85.8%	5	41.5%	27	72.4%	116	79.3%	0.000*
	No	216	53.4%	36	32.6%	38	56.0%	176	56.5%	6	14.2%	7	58.5%	10	27.6%	30	20.7%	
Amount of dept the participant currently has	more than or equal 10,000\$	6	1.5%	11	10.3%	8	12.1%	1	0.3%	0	0.7%	0	3.9%	0	0.0%	18	12.5%	0.000*
	less than 10,000\$	76	18.6%	13	12.0%	1	1.4%	46	15.0%	17	40.8%	2	15.4%	1	3.2%	0	0.2%	
	no debt	237	58.4%	64	58.2%	48	70.4%	219	70.6%	6	15.3%	8	65.3%	27	70.1%	56	38.5%	
	less than 15 million LBP	73	18.0%	11	9.6%	10	14.4%	34	11.0%	9	22.1%	1	9.6%	9	24.3%	62	42.6%	
	more than or equal 15 million LBP	14	3.5%	11	9.9%	1	1.7%	10	3.2%	9	21.1%	1	5.8%	1	2.4%	9	6.3%	
When the participant took the dept	Missing	216	53.4%	36	32.6%	38	56.0%	176	56.5%	6	14.2%	7	58.5%	10	27.6%	30	20.7%	0.000*
	one month ago	10	2.5%	1	0.8%	0	0.0%	1	0.2%	0	0.0%	0	1.9%	0	0.6%	9	6.1%	
	during the last 6 months	37	9.2%	1	1.3%	9	13.5%	42	13.4%	18	43.2%	2	17.9%	17	44.3%	27	18.4%	
	during the last 12 months	51	12.6%	20	17.8%	9	13.8%	28	9.0%	0	0.6%	0	3.9%	9	23.1%	35	24.3%	
	during the last 24 months or more	90	22.3%	52	47.4%	11	16.7%	65	20.8%	18	42.1%	2	17.9%	2	4.4%	45	30.5%	
Way of dept payment	Missing	216	53.4%	36	32.6%	38	56.0%	176	56.5%	6	14.2%	7	58.5%	10	27.6%	30	20.7%	0.000*
	total payments	1	0.3%	0	0.2%	1	1.1%	9	3.0%	0	0.0%	0	0.0%	0	0.0%	9	6.3%	
	monthly payments	188	46.3%	74	67.1%	29	42.9%	126	40.4%	36	85.8%	5	41.5%	27	72.4%	107	73.0%	
Receiving assistance in the last 12 months	Yes	80	19.7%	24	21.8%	10	14.9%	92	29.5%	18	42.1%	1	9.6%	10	25.0%	10	6.6%	0.000*
	No	325	80.3%	86	78.2%	58	85.1%	219	70.5%	24	57.9%	11	90.4%	28	75.0%	136	93.4%	
Type of assistance the participant gets	Missing	325	80.3%	86	78.2%	58	85.1%	219	70.5%	24	57.9%	11	90.4%	28	75.0%	136	93.4%	0.000*
	Food	60	14.7%	23	20.5%	1	1.9%	47	15.0%	17	39.9%	1	5.8%	9	24.4%	9	6.3%	
	Cash	12	2.9%	1	0.9%	9	12.6%	35	11.4%	1	2.2%	0	1.9%	0	0.6%	0	0.0%	
	Non-food items	0	0.0%	0	0.0%	0	0.0%	0	0.1%	0	0.0%	0	1.9%	0	0.0%	0	0.0%	
	Education	8	2.0%	1	0.5%	0	0.3%	9	2.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
	Health	1	0.1%	0	0.0%	0	0.0%	0	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.2%	
	Protection	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
	Shelter	0	0.0%	0	0.0%	0	0.0%	0	0.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
	WASH	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.2%	
Source of assistance	Missing	326	80.3%	86	78.2%	58	85.1%	219	70.5%	24	57.9%	11	90.4%	28	75.0%	136	93.4%	0.000*
	Government	11	2.7%	1	1.3%	8	12.2%	27	8.7%	0	1.1%	0	1.9%	0	0.6%	0	0.2%	
	NGO	20	4.9%	0	0.4%	1	0.8%	18	5.9%	0	0.7%	0	0.0%	0	0.6%	0	0.0%	
	Charity	28	7.0%	12	10.6%	0	0.4%	9	2.9%	16	38.6%	0	1.9%	0	1.2%	0	0.0%	
	UN agency	8	2.0%	0	0.0%	0	0.3%	17	5.5%	0	0.0%	0	1.9%	0	0.0%	9	6.1%	

religious organization	1	0.2%	10	8.6%	0	0.4%	1	0.2%	0	0.0%	0	3.9%	0	0.6%	0	0.0%
local people	10	2.5%	1	0.6%	0	0.3%	11	3.4%	0	1.1%	0	0.0%	8	22.0%	0	0.2%
family aboard	1	0.3%	0	0.3%	0	0.4%	9	2.9%	0	0.6%	0	0.0%	0	0.0%	0	0.2%

Appendix V: Food groups consumption per week, Food based coping strategies in the previous 30 days and Livelihood-based coping strategies in the previous 7 days for respondents according to gender and their place of living.

		Gender						Sig.
		Overall		Female		Male		
		N	(%)	N	(%)	N	(%)	
Number of meals per day one day before	2 meals and less	633	55.9%	344	57.9%	289	53.6%	0.146
	3 meals and more	500	44.1%	250	42.1%	250	46.4%	
Being as usual, less, or more	as usual	813	71.8%	450	75.8%	363	67.3%	0.003
	less than usual	24	2.1%	13	2.3%	10	1.9%	
	more than usual	296	26.1%	130	21.9%	166	30.7%	
Cereal consumption per week	less than 3 days	789	69.6%	409	69.0%	379	70.4%	0.623
	4 days and more	344	30.4%	184	31.0%	160	29.6%	
White tubers consumption per week	less than 3 days	832	73.5%	418	70.4%	414	76.9%	0.014
	4 days and more	300	26.5%	176	29.6%	125	23.1%	
Vegetable consumption per week	less than 3 days	807	71.2%	407	68.7%	399	74.1%	0.045
	4 days and more	326	28.8%	186	31.3%	140	25.9%	
Fruit consumption per week	less than 3 days	806	71.1%	401	67.6%	405	75.0%	0.006
	4 days and more	327	28.9%	192	32.4%	135	25.0%	
Eggs consumption per week	less than 3 days	942	83.2%	499	84.1%	443	82.2%	0.378
	4 days and more	190	16.8%	94	15.9%	96	17.8%	
Pulse and nuts consumption per week	less than 3 days	1000	88.3%	528	89.0%	472	87.5%	0.394
	4 days and more	133	11.7%	65	11.0%	68	12.5%	
Dairy products consumption per week	less than 3 days	873	77.1%	436	73.4%	437	81.1%	0.002
	4 days and more	260	22.9%	158	26.6%	102	18.9%	
Fat and oils consumption per week	less than 3 days	819	72.4%	408	68.7%	412	76.4%	0.004
	4 days and more	313	27.6%	186	31.3%	127	23.6%	
Sweets consumption per week	less than 3 days	871	76.9%	435	73.3%	436	80.9%	0.002
	4 days and more	262	23.1%	159	26.7%	103	19.1%	
Spices and condiments consumption per week	less than 3 days	872	77.0%	401	67.6%	470	87.3%	0.000*
	4 days and more	261	23.0%	192	32.4%	69	12.7%	
Meat consumption per week	less than 3 days	907	80.1%	476	80.2%	432	80.0%	0.955
	4 days and more	225	19.9%	118	19.8%	108	20.0%	
Fish consumption per week	less than 3 days	1070	94.4%	560	94.3%	510	94.6%	0.801
	4 days and more	63	5.6%	34	5.7%	29	5.4%	

		Gender						Sig.
		Overall		Female		Male		
		N	(%)	N	(%)	N	(%)	
In the past 30 days, spending saving to meet basic food needs	Yes	314	27.7%	175	29.4%	139	25.8%	0.359
	No	616	54.4%	318	53.5%	299	55.4%	
	Done before	202	17.9%	101	17.0%	101	18.8%	
In the past 30 days, borrowing money to meet basic food needs	Yes	152	13.5%	43	7.3%	109	20.3%	0.000*
	No	887	78.3%	476	80.1%	412	76.3%	
	Done before	93	8.2%	75	12.6%	18	3.4%	
In the past 30 days, asking for remittances to meet basic food needs	Yes	111	9.8%	57	9.6%	54	10.1%	0.219
	No	960	84.7%	511	86.1%	449	83.3%	
	Done before	62	5.5%	26	4.3%	36	6.7%	
In the past 30 days, spending less money on other needs to meet basic food needs	Yes	432	38.1%	226	38.1%	206	38.1%	0.707
	No	611	54.0%	324	54.6%	287	53.3%	
	Done before	89	7.9%	43	7.3%	46	8.6%	
In the past 30 days, selling household assets to meet basic food needs	Yes	432	38.1%	226	38.1%	206	38.1%	0.707
	No	611	54.0%	324	54.6%	287	53.3%	
	Done before	89	7.9%	43	7.3%	46	8.6%	
In the past 30 days, selling productive assets to meet basic food needs	Yes	273	24.1%	100	16.8%	173	32.0%	0.000*
	No	803	70.9%	473	79.7%	330	61.2%	
	Done before	57	5.1%	21	3.5%	37	6.8%	
In the past 30 days, taking high risk jobs to meet basic food needs	Yes	197	17.4%	51	8.7%	145	26.9%	0.000*
	No	909	80.2%	533	89.8%	376	69.7%	
	Done before	27	2.4%	9	1.6%	18	3.3%	
In the past 30 days, doing any type of labor to meet basic food needs	Yes	238	21.0%	73	12.3%	165	30.6%	0.000*
	No	858	75.7%	511	86.0%	347	64.4%	
	Done before	37	3.3%	10	1.7%	27	5.1%	
In the past 30 days, sending adult household members to beg to meet basic food needs	Yes	29	2.6%	2	0.3%	27	5.1%	0.000*
	No	1077	95.1%	574	96.7%	503	93.3%	
	Done before	26	2.3%	18	3.0%	9	1.7%	
In the past 30 days, sending children household members to beg to meet basic food needs	Yes	53	4.7%	10	1.6%	44	8.1%	0.000*
	No	1052	92.9%	566	95.4%	486	90.1%	
	Done before	27	2.4%	18	3.0%	10	1.8%	
In the past 30 days, asking charity for food to meet basic food needs	Yes	127	11.2%	81	13.7%	46	8.5%	0.012
	No	961	84.8%	494	83.2%	467	86.6%	
	Done before	45	4.0%	19	3.1%	26	4.9%	
In the past 30 days, receiving E-cards from UN to meet basic food needs	Yes	73	6.4%	20	3.3%	53	9.8%	0.000*
	No	1015	89.7%	548	92.3%	468	86.8%	
	Done before	44	3.9%	26	4.4%	18	3.4%	

		Gender						
		Overall		Female		Male		
		N (%)		N (%)		N (%)		Sig.
Eating cheaper foods	less than 3 days	480	76.5%	210	76.4%	270	76.7%	0.920
	4 days and more	147	23.5%	65	23.6%	82	23.3%	
Borrowing food	less than 3 days	249	82.7%	96	79.0%	153	85.2%	0.157
	4 days and more	52	17.3%	26	21.0%	27	14.8%	
Eating less meals to spare food for children	less than 3 days	408	74.1%	169	73.2%	239	74.7%	0.687
	4 days and more	143	25.9%	62	26.8%	81	25.3%	
Eating small amounts	less than 3 days	380	75.1%	158	71.9%	222	77.6%	0.134
	4 days and more	126	24.9%	62	28.1%	64	22.4%	
Adults eat less to spare food for children	less than 3 days	337	68.9%	128	64.1%	209	72.3%	0.051
	4 days and more	152	31.1%	72	35.9%	80	27.7%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		
Number of meals per day one day before	2 meals and less	247	61.1%	50	45.5%	22	31.5%	195	62.7%	20	48.8%	7	59.9%	19	49.9%	72	49.3%	0.000*
	3 meals and more	158	38.9%	60	54.5%	47	68.5%	116	37.3%	21	51.2%	5	40.1%	19	50.1%	74	50.7%	
being as usual, less, or more	as usual	305	75.2%	96	87.0%	67	97.2%	218	70.2%	24	57.2%	9	75.3%	28	75.0%	66	45.2%	0.000*
	less than usual	11	2.8%	1	0.9%	0	0.4%	10	3.2%	0	0.0%	1	8.2%	0	0.0%	0	0.2%	
	more than usual	89	22.0%	13	12.1%	2	2.4%	83	26.6%	18	42.8%	2	16.4%	10	25.0%	80	54.6%	
Cereal consumption per week	less than 3 days	282	69.6%	68	61.6%	60	88.1%	176	56.5%	37	87.6%	4	34.3%	36	95.6%	126	86.0%	0.000*
	4 days and more	123	30.4%	42	38.4%	8	11.9%	135	43.5%	5	12.4%	8	65.7%	2	4.4%	20	14.0%	
White tubers consumption per week	less than 3 days	296	73.1%	84	76.5%	48	70.5%	183	58.8%	31	75.2%	8	64.3%	37	98.2%	144	98.6%	0.000*
	4 days and more	109	26.9%	26	23.5%	20	29.5%	128	41.2%	10	24.8%	4	35.7%	1	1.8%	2	1.4%	
Vegetable consumption per week	less than 3 days	269	66.3%	68	61.8%	62	90.8%	211	67.9%	29	68.4%	6	54.1%	37	96.2%	125	85.5%	0.000*
	4 days and more	136	33.7%	42	38.2%	6	9.2%	100	32.1%	13	31.6%	5	45.9%	1	3.8%	21	14.5%	
Fruit consumption per week	less than 3 days	273	67.3%	84	76.0%	44	64.9%	219	70.3%	28	66.6%	5	42.5%	28	74.4%	125	85.5%	0.000*
	4 days and more	133	32.7%	26	24.0%	24	35.1%	92	29.7%	14	33.4%	7	57.5%	10	25.6%	21	14.5%	
Eggs consumption per week	less than 3 days	312	77.1%	98	88.8%	49	71.8%	263	84.5%	40	95.0%	8	66.2%	37	98.0%	135	92.7%	0.000*
	4 days and more	93	22.9%	12	11.2%	19	28.2%	48	15.5%	2	5.0%	4	33.8%	1	2.0%	11	7.3%	
Pulse and nuts consumption per week	less than 3 days	359	88.6%	106	96.2%	65	94.7%	263	84.6%	33	77.9%	9	73.4%	29	76.8%	136	93.2%	0.000*
	4 days and more	46	11.4%	4	3.8%	4	5.3%	48	15.4%	9	22.1%	3	26.6%	9	23.2%	10	6.8%	
Dairy products consumption per week	less than 3 days	316	78.0%	82	74.1%	45	65.8%	220	70.9%	37	89.8%	7	61.8%	29	76.9%	135	92.7%	0.000*
	4 days and more	89	22.0%	29	25.9%	23	34.2%	91	29.1%	4	10.2%	5	38.2%	9	23.1%	11	7.3%	
Fat and oils consumption per week	less than 3 days	307	75.9%	80	72.8%	46	67.5%	186	59.7%	38	90.9%	7	54.6%	29	75.6%	127	86.7%	0.000*
	4 days and more	98	24.1%	30	27.2%	22	32.5%	125	40.3%	4	9.1%	5	45.4%	9	24.4%	19	13.3%	
Sweets consumption per week	less than 3 days	320	78.9%	97	88.2%	46	66.8%	210	67.5%	37	89.7%	7	56.5%	28	74.4%	126	86.3%	0.000*
	4 days and more	86	21.1%	13	11.8%	23	33.2%	101	32.5%	4	10.3%	5	43.5%	10	25.6%	20	13.7%	
Spices and condiments consumption per week	less than 3 days	310	76.6%	70	63.7%	45	66.4%	246	79.3%	29	68.8%	7	59.9%	28	74.2%	135	92.3%	0.000*
	4 days and more	95	23.4%	40	36.3%	23	33.6%	65	20.7%	13	31.2%	5	40.1%	10	25.8%	11	7.7%	
Meat consumption per week	less than 3 days	305	75.2%	93	84.0%	63	91.9%	233	75.0%	39	94.2%	9	72.5%	21	54.6%	145	99.4%	0.000*
	4 days and more	100	24.8%	18	16.0%	6	8.1%	78	25.0%	2	5.8%	3	27.5%	17	45.4%	1	0.6%	
Fish consumption per week	less than 3 days	391	96.5%	101	91.5%	67	98.1%	292	94.0%	41	98.3%	11	88.4%	30	78.8%	137	93.7%	0.001
	4 days and more	14	3.5%	9	8.5%	1	1.9%	19	6.0%	1	1.7%	1	11.6%	8	21.2%	9	6.3%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		
In the past 30 days, spending saving to meet basic food needs	Yes	114	28.2%	22	19.8%	30	44.4%	67	21.7%	11	25.7%	4	37.2%	27	72.2%	38	25.7%	0.000*
	No	267	65.9%	53	47.7%	21	30.7%	156	50.2%	14	32.8%	6	48.3%	11	27.8%	89	61.3%	
	Done before	24	5.9%	36	32.5%	17	24.9%	87	28.1%	17	41.5%	2	14.5%	0	0.0%	19	13.0%	
In the past 30 days, borrowing money to meet basic food needs	Yes	38	9.4%	3	3.0%	27	39.6%	55	17.6%	0	1.1%	1	4.9%	0	0.6%	28	18.9%	0.000*
	No	349	86.2%	98	89.2%	41	60.1%	222	71.5%	25	59.6%	11	95.1%	22	56.9%	118	80.9%	
	Done before	18	4.4%	9	7.7%	0	0.3%	34	10.9%	16	39.3%	0	0.0%	16	42.5%	0	0.2%	
In the past 30 days, asking for remittances to meet basic food needs	Yes	54	13.3%	2	1.5%	10	14.5%	28	8.9%	0	0.6%	0	2.4%	8	21.8%	9	6.2%	0.000*
	No	343	84.5%	100	90.5%	58	85.1%	257	82.6%	42	99.4%	12	97.6%	22	56.9%	128	87.3%	
	Done before	9	2.2%	9	7.9%	0	0.4%	26	8.5%	0	0.0%	0	0.0%	8	21.2%	10	6.5%	
In the past 30 days, spending less money on other needs to meet basic food needs	Yes	124	30.7%	20	18.5%	46	67.5%	130	41.6%	35	83.2%	2	20.3%	10	27.3%	64	43.9%	0.000*
	No	254	62.6%	72	65.3%	22	32.1%	171	55.1%	7	16.8%	10	79.7%	11	29.6%	64	44.0%	
	Done before	27	6.7%	18	16.2%	0	0.4%	10	3.2%	0	0.0%	0	0.0%	16	43.1%	18	12.1%	
In the past 30 days, selling household assets to meet basic food needs	Yes	124	30.7%	20	18.5%	46	67.5%	130	41.6%	35	83.2%	2	20.3%	10	27.3%	64	43.9%	0.000*
	No	254	62.6%	72	65.3%	22	32.1%	171	55.1%	7	16.8%	10	79.7%	11	29.6%	64	44.0%	
	Done before	27	6.7%	18	16.2%	0	0.4%	10	3.2%	0	0.0%	0	0.0%	16	43.1%	18	12.1%	
In the past 30 days, selling productive assets to meet basic food needs	Yes	71	17.4%	13	11.8%	19	27.9%	37	11.9%	9	20.6%	2	13.5%	18	47.5%	105	71.7%	0.000*
	No	314	77.6%	88	79.7%	49	72.1%	264	84.9%	33	79.4%	10	86.5%	12	30.6%	32	21.9%	
	Done before	20	5.0%	9	8.5%	0	0.0%	10	3.2%	0	0.0%	0	0.0%	8	21.8%	9	6.4%	
In the past 30 days, taking high risk jobs to meet basic food needs	Yes	41	10.2%	12	10.7%	11	15.4%	29	9.3%	9	20.6%	0	0.0%	10	25.5%	86	58.9%	0.000*
	No	363	89.7%	98	89.1%	58	84.6%	273	87.7%	33	79.4%	12	100.0%	20	53.3%	51	35.0%	
	Done before	1	0.2%	0	0.2%	0	0.0%	9	3.0%	0	0.0%	0	0.0%	8	21.2%	9	6.1%	
In the past 30 days, doing any type of labor to meet basic food needs	Yes	52	13.0%	28	25.1%	10	14.9%	76	24.5%	17	41.1%	1	5.8%	1	2.6%	52	35.9%	0.000*
	No	351	86.6%	73	66.6%	58	85.1%	226	72.6%	25	58.9%	11	94.2%	29	76.2%	85	58.0%	
	Done before	2	0.4%	9	8.3%	0	0.0%	9	3.0%	0	0.0%	0	0.0%	8	21.2%	9	6.1%	
In the past 30 days, sending adult household members	Yes	10	2.6%	0	0.2%	0	0.7%	9	2.9%	0	0.0%	0	0.0%	0	0.0%	9	6.1%	0.000*
	No	386	95.2%	110	99.6%	68	99.3%	293	94.2%	42	100.0%	12	100.0%	30	78.8%	137	93.7%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		
to beg to meet basic food needs	Done before	9	2.2%	0	0.2%	0	0.0%	9	2.9%	0	0.0%	0	0.0%	8	21.2%	0	0.2%	
In the past 30 days, sending children household members to beg to meet basic food needs	Yes	27	6.6%	8	7.3%	0	0.7%	9	2.9%	0	0.0%	0	0.0%	0	0.0%	9	6.1%	0.000*
	No	369	91.2%	102	92.5%	59	86.6%	302	97.0%	42	100.0%	12	100.0%	30	78.8%	136	93.3%	
	Done before	9	2.2%	0	0.2%	9	12.7%	0	0.1%	0	0.0%	0	0.0%	8	21.2%	1	0.6%	
In the past 30 days, asking charity for food to meet basic food needs	Yes	55	13.5%	18	16.4%	1	2.1%	18	5.8%	0	0.0%	0	0.0%	0	0.0%	35	23.7%	0.000*
	No	341	84.2%	92	83.4%	58	85.2%	275	88.4%	42	100.0%	12	100.0%	30	78.2%	111	76.0%	
	Done before	9	2.3%	0	0.2%	9	12.7%	18	5.8%	0	0.0%	0	0.0%	8	21.8%	0	0.3%	
In the past 30 days, receiving E-cards from UN to meet basic food needs	Yes	19	4.7%	9	7.7%	1	1.0%	10	3.2%	0	0.0%	0	0.0%	0	0.0%	35	23.9%	0.000*
	No	369	91.1%	101	91.6%	59	86.3%	292	93.9%	42	100.0%	12	100.0%	30	78.8%	110	75.6%	
	Done before	17	4.2%	1	0.6%	9	12.7%	9	2.9%	0	0.0%	0	0.0%	8	21.2%	1	0.6%	

		Place of living																Sig.
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel		Akkar		
		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		N (%)		
Eating cheaper foods	less than 3 days	157	86.2%	38	75.4%	32	97.1%	90	50.6%	27	99.1%	4	71.3%	26	98.3%	106	84.9%	0.000*
	4 days and more	25	13.8%	12	24.6%	1	2.9%	88	49.4%	0	0.9%	1	28.7%	0	1.7%	19	15.1%	
Borrowing food	less than 3 days	76	74.5%	20	98.8%	10	100.0%	81	75.8%	0	100.0%	1	75.0%	8	100.0%	54	100.0%	0.000*
	4 days and more	26	25.5%	0	1.2%	0	0.0%	26	24.2%	0	0.0%	0	25.0%	0	0.0%	0	0.0%	
Eating less meals to spare food for children	less than 3 days	92	71.7%	41	80.6%	21	97.9%	83	51.8%	26	98.0%	3	92.2%	18	67.5%	124	93.2%	0.000*
	4 days and more	36	28.3%	10	19.4%	0	2.1%	77	48.2%	1	2.0%	0	7.8%	9	32.5%	9	6.8%	
Eating small amounts	less than 3 days	101	83.6%	26	74.0%	14	96.8%	84	52.0%	26	98.1%	4	95.0%	9	52.1%	115	92.6%	0.000*
	4 days and more	20	16.4%	9	26.0%	0	3.2%	78	48.0%	1	1.9%	0	5.0%	9	47.9%	9	7.4%	
Adults eat less to spare food for children	less than 3 days	104	79.3%	32	74.8%	20	98.8%	58	42.8%	25	98.0%	1	100.0%	0	4.6%	97	78.4%	0.000*
	4 days and more	27	20.7%	11	25.2%	0	1.2%	77	57.2%	1	2.0%	0	0.0%	10	95.4%	27	21.6%	

Appendix VI: Primary source of water

		Gender						Sig.
		Overall		Female		Male		
		N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
primary source of drinking water	Store/Market-bought water	460	40.6%	291	49.0%	168	31.3%	0.000*
	private vendor	406	35.9%	176	29.7%	230	42.7%	
	treated or filtered	135	11.9%	69	11.6%	66	12.3%	
	Other	132	11.6%	57	9.7%	74	13.8%	

		Place of living														P value		
		Beirut		Mount Lebanon		North		South		Beqaa		Nabatieh		Baalbek-El Hermel			Akkar	
		N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)		N (%)	N (%)
primary source of drinking water	Store/Market-bought water	242	59.8%	53	48.2%	33	48.4%	83	26.8%	13	30.4%	5	42.0%	10	25.2%	20	14.0%	< 0.001
	private vendor	139	34.4%	35	31.9%	15	21.5%	151	48.4%	17	41.4%	5	45.4%	0	0.6%	44	30.0%	
	treated or filtered	21	5.2%	12	11.1%	12	17.3%	59	18.9%	10	23.2%	1	10.2%	2	4.2%	18	12.6%	
	Other	3	0.6%	10	8.8%	9	12.8%	18	5.9%	2	5.1%	0	2.4%	27	70.0%	63	43.4%	

Appendix VII: Socio-demographic characteristics of population studies

		Number of respondents	Percentage
Gender	Female	729	52.5%
	Male	659	47.5%
Education	Elementary	445	32.1%
	High school	224	16.1%
	Illiterate	143	10.3%
	Primary	310	22.3%
	University	266	19.2%
Marital status	Divorced	74	5.3%
	Married	1009	72.7%
	Single	239	17.2%
	Widowed	66	4.8%
Family members	3 and less	332	23.9%
	4 or more	1056	76.1%
Number of children	3 or less	1030	74.6%
	4 and more	350	25.4%
Number of rooms	3 and less	1152	83.0%
	4 and more	236	17.0%
Occupation	Fired	437	31.5%
	House-wife/men	607	43.7%
	Student	65	4.7%
	Working	279	20.1%
Health field	No	1281	92.3%
	Yes	107	7.7%

		Number of respondents	Percentage
Medical insurance	No health insurance	987	71.1%
	Other public insurance	34	2.4%
	Private insurance	41	3.0%
	Social security	326	23.5%
Alcohol	0 cups per day	1361	98.1%
	less than 2 cups per d	24	1.7%
	more than 2 cups per d	3	0.2%
Cigarette	Non smoker	0	0.0%
	1-10	946	68.2%
	10-30	311	22.4%
	more than 30	131	9.4%
Blast	No	155	11.2%
	Yes	1233	88.8%

Appendix VIII: Food insecurity status based on gender, family members and number of children, occupation, and education.

		Gender				P value
		F		M		
		N (%)		N (%)		
Which of these sentences applies the most to the food eaten by your household during the past 6 months?	We had enough to eat of the kinds of food we wanted (quantity & quality)	78	10.7%	50	7.6%	0.024
	We had enough to eat but not always the kinds of food we wanted (only quantity)	236	32.4%	199	30.2%	
	Sometimes we did not have enough to eat (quantity)	236	32.4%	210	31.9%	
	Often, we did not have enough to eat	163	22.4%	171	25.9%	
	Don't Know/Refuse to answer	16	2.2%	29	4.4%	
In the last 6 months, was there a time when you were concerned that you would run out of food for your household for the next month?	Don't Know/Refuse to answer	21	2.9%	19	2.9%	0.007
	No	90	12.3%	48	7.3%	
	Yes	618	84.8%	592	89.8%	
Did the following statement apply to your household in the last 6 months? "The food that we bought was not enough and we didn't have money to get more."	Don't Know/Refuse to answer	28	3.8%	23	3.5%	0.041
	No	115	15.8%	74	11.2%	
	Yes	586	80.4%	562	85.3%	
Are there any foods you feel your family does not eat enough of?	Don't Know/Refuse to answer	24	3.3%	23	3.5%	0.31
	No	93	12.8%	67	10.2%	
	Yes	612	84.0%	569	86.3%	
In the past 6 months, did you or any other adult in your household ever cut the size of your meal because there was not enough food?	Don't Know/Refuse to answer	37	5.1%	26	3.9%	0.001
	No	155	21.3%	93	14.1%	
	Yes	537	73.7%	540	81.9%	
In the past 6 months, did you or any other adult ever skip a meal because there was not enough food?	Don't Know/Refuse to answer	31	4.3%	33	5.0%	0.007
	No	230	31.6%	158	24.0%	
	Yes	468	64.2%	468	71.0%	
In the past 6 months did you or any adult in your household not eat for a whole day or go to bed hungry because there was not enough food?	Don't Know/Refuse to answer	34	4.7%	30	4.6%	0.25
	No	459	63.0%	388	58.9%	
	Yes	236	32.4%	241	36.6%	
During the last 6 months, was there a time when you or any adult in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?	Don't Know/Refuse to answer	25	3.4%	20	3.0%	0.001
	No	154	21.1%	91	13.8%	
	Yes	550	75.4%	548	83.2%	
During the last 6 months, was there a time when you or any adult in your household were hungry but did not eat because there was not enough money or other resources for food?	Don't Know/Refuse to answer	40	5.5%	49	7.4%	0.001
	No	370	50.8%	271	41.1%	
	Yes	319	43.8%	339	51.4%	
During the last 6 months, was there a time when you or any adult in your household went without eating for a whole day because of a lack of money or other resources?	Don't Know/Refuse to answer	5	0.7%	5	0.8%	0.099
	No	455	62.4%	374	56.8%	
	Yes	269	36.9%	280	42.5%	

		Family members				Number of children			
		3 and less		4 or more		N		4 and more	
		N	%	N	%	N	%	N	%
HF001	We had enough to eat of the kinds of food we wanted (quantity & quality)	37	11.1%	91	8.6%	103	10.0%	23	6.6%
	We had enough to eat but not always the kinds of food we wanted (only quantity)	104	31.3%	331	31.3%	333	32.3%	101	28.9%
	Sometimes we did not have enough to eat (quantity)	94	28.3%	352	33.3%	325	31.6%	117	33.4%
	Often we did not have enough to eat	79	23.8%	255	24.1%	241	23.4%	92	26.3%
	Don't Know/Refuse to answer	18	5.4%	27	2.6%	28	2.7%	17	4.9%
HF002	Don't Know/Refuse to answer	9	2.7%	31	2.9%	34	3.3%	6	1.7%
	No	44	13.3%	94	8.9%	119	11.6%	19	5.4%
	Yes	279	84.0%	931	88.2%	877	85.1%	325	92.9%
HF003	Don't Know/Refuse to answer	17	5.1%	34	3.2%	37	3.6%	14	4.0%
	No	52	15.7%	137	13.0%	154	15.0%	35	10.0%
	Yes	263	79.2%	885	83.8%	839	81.5%	301	86.0%
HF004	Don't Know/Refuse to answer	15	4.5%	32	3.0%	37	3.6%	10	2.9%
	No	46	13.9%	114	10.8%	133	12.9%	27	7.7%
	Yes	271	81.6%	910	86.2%	860	83.5%	313	89.4%
HF005	Don't Know/Refuse to answer	17	5.1%	46	4.4%	51	5.0%	12	3.4%
	No	67	20.2%	181	17.1%	195	18.9%	53	15.1%
	Yes	248	74.7%	829	78.5%	784	76.1%	285	81.4%
HF006	Don't Know/Refuse to answer	18	5.4%	46	4.4%	53	5.1%	11	3.1%
	No	106	31.9%	282	26.7%	308	29.9%	80	22.9%
	Yes	208	62.7%	728	68.9%	669	65.0%	259	74.0%
HF007	Don't Know/Refuse to answer	10	3.0%	54	5.1%	49	4.8%	14	4.0%
	No	207	62.3%	640	60.6%	657	63.8%	189	54.0%
	Yes	115	34.6%	362	34.3%	324	31.5%	147	42.0%
HF008	Don't Know/Refuse to answer	12	3.6%	33	3.1%	32	3.1%	13	3.7%
	No	62	18.7%	183	17.3%	192	18.6%	53	15.1%
	Yes	258	77.7%	840	79.5%	806	78.3%	284	81.1%
HF009	Don't Know/Refuse to answer	27	8.1%	62	5.9%	67	6.5%	22	6.3%
	No	160	48.2%	481	45.5%	508	49.3%	132	37.7%
	Yes	145	43.7%	513	48.6%	455	44.2%	196	56.0%
HF010	Don't Know/Refuse to answer	2	0.6%	8	0.8%	6	0.6%	4	1.1%
	No	210	63.3%	619	58.6%	640	62.1%	189	54.0%
	Yes	120	36.1%	429	40.6%	384	37.3%	157	44.9%

		Occupation							
		Fired		House-wife/men		Student		Working	
		N	%	N	%	N	%	N	%
HF001	We had enough to eat of the kinds of food we wanted (quantity & quality)	26	5.9%	35	5.8%	30	46.2%	37	13.3%
	We had enough to eat but not always the kinds of food we wanted (only quantity)	120	27.5%	164	27.0%	24	36.9%	127	45.5%
	Sometimes we did not have enough to eat (quantity)	155	35.5%	219	36.1%	7	10.8%	65	23.3%
	Often, we did not have enough to eat	118	27.0%	177	29.2%	1	1.5%	38	13.6%
	Don't Know/Refuse to answer	18	4.1%	12	2.0%	3	4.6%	12	4.3%
HF002	Don't Know/Refuse to answer	10	2.3%	15	2.5%	6	9.2%	9	3.2%
	No	27	6.2%	39	6.4%	29	44.6%	43	15.4%
	Yes	400	91.5%	553	91.1%	30	46.2%	227	81.4%
HF003	Don't Know/Refuse to answer	24	5.5%	17	2.8%	4	6.2%	6	2.2%
	No	25	5.7%	60	9.9%	34	52.3%	70	25.1%
	Yes	388	88.8%	530	87.3%	27	41.5%	203	72.8%
HF004	Don't Know/Refuse to answer	16	3.7%	18	3.0%	5	7.7%	8	2.9%
	No	31	7.1%	43	7.1%	33	50.8%	53	19.0%
	Yes	390	89.2%	546	90.0%	27	41.5%	218	78.1%
HF005	Don't Know/Refuse to answer	16	3.7%	25	4.1%	5	7.7%	17	6.1%
	No	52	11.9%	84	13.8%	37	56.9%	75	26.9%
	Yes	369	84.4%	498	82.0%	23	35.4%	187	67.0%
HF006	Don't Know/Refuse to answer	25	5.7%	24	4.0%	3	4.6%	12	4.3%
	No	95	21.7%	136	22.4%	41	63.1%	116	41.6%
	Yes	317	72.5%	447	73.6%	21	32.3%	151	54.1%
HF007	Don't Know/Refuse to answer	26	5.9%	21	3.5%	1	1.5%	16	5.7%
	No	242	55.4%	345	56.8%	55	84.6%	205	73.5%
	Yes	169	38.7%	241	39.7%	9	13.8%	58	20.8%
HF008	Don't Know/Refuse to answer	14	3.2%	15	2.5%	3	4.6%	13	4.7%
	No	48	11.0%	78	12.9%	43	66.2%	76	27.2%
	Yes	375	85.8%	514	84.7%	19	29.2%	190	68.1%
HF009	Don't Know/Refuse to answer	31	7.1%	38	6.3%	3	4.6%	17	6.1%
	No	171	39.1%	241	39.7%	53	81.5%	176	63.1%
	Yes	235	53.8%	328	54.0%	9	13.8%	86	30.8%
HF010	Don't Know/Refuse to answer	3	0.7%	4	0.7%	1	1.5%	2	0.7%
	No	239	54.7%	325	53.5%	57	87.7%	208	74.6%
	Yes	195	44.6%	278	45.8%	7	10.8%	69	24.7%

		Education									
		Elementary		High school		illiterate		Primary		University	
		N	%	N	%	N	%	N	%	N	%
HF001	We had enough to eat of the kinds of food we wanted (quantity & quality)	27	6.1%	23	10.3%	8	5.6%	9	2.9%	61	22.9%
	We had enough to eat but not always the kinds of food we wanted (only quantity)	140	31.5%	91	40.6%	30	21.0%	66	21.3%	108	40.6%
	Sometimes we did not have enough to eat (quantity)	162	36.4%	62	27.7%	45	31.5%	116	37.4%	61	22.9%
	Often we did not have enough to eat	106	23.8%	45	20.1%	44	30.8%	111	35.8%	28	10.5%
	Don't Know/Refuse to answer	10	2.2%	3	1.3%	16	11.2%	8	2.6%	8	3.0%
HF002	Don't Know/Refuse to answer	12	2.7%	6	2.7%	6	4.2%	8	2.6%	8	3.0%
	No	23	5.2%	25	11.2%	10	7.0%	18	5.8%	62	23.3%
	Yes	410	92.1%	193	86.2%	127	88.8%	284	91.6%	196	73.7%
HF003	Don't Know/Refuse to answer	18	4.0%	8	3.6%	3	2.1%	8	2.6%	14	5.3%
	No	36	8.1%	28	12.5%	19	13.3%	26	8.4%	80	30.1%
	Yes	391	87.9%	188	83.9%	121	84.6%	276	89.0%	172	64.7%
HF004	Don't Know/Refuse to answer	13	2.9%	8	3.6%	3	2.1%	8	2.6%	15	5.6%
	No	31	7.0%	27	12.1%	15	10.5%	22	7.1%	65	24.4%
	Yes	401	90.1%	189	84.4%	125	87.4%	280	90.3%	186	69.9%
HF005	Don't Know/Refuse to answer	14	3.1%	16	7.1%	4	2.8%	12	3.9%	17	6.4%
	No	59	13.3%	53	23.7%	17	11.9%	30	9.7%	89	33.5%
	Yes	372	83.6%	155	69.2%	122	85.3%	268	86.5%	160	60.2%
HF006	Don't Know/Refuse to answer	21	4.7%	16	7.1%	5	3.5%	10	3.2%	12	4.5%
	No	100	22.5%	77	34.4%	23	16.1%	62	20.0%	126	47.4%
	Yes	324	72.8%	131	58.5%	115	80.4%	238	76.8%	128	48.1%
HF007	Don't Know/Refuse to answer	23	5.2%	9	4.0%	7	4.9%	14	4.5%	11	4.1%
	No	251	56.4%	159	71.0%	67	46.9%	155	50.0%	215	80.8%
	Yes	171	38.4%	56	25.0%	69	48.3%	141	45.5%	40	15.0%
HF008	Don't Know/Refuse to answer	17	3.8%	8	3.6%	9	6.3%	4	1.3%	7	2.6%
	No	58	13.0%	43	19.2%	13	9.1%	35	11.3%	96	36.1%
	Yes	370	83.1%	173	77.2%	121	84.6%	271	87.4%	163	61.3%
HF009	Don't Know/Refuse to answer	30	6.7%	14	6.3%	6	4.2%	21	6.8%	18	6.8%
	No	185	41.6%	132	58.9%	46	32.2%	96	31.0%	182	68.4%
	Yes	230	51.7%	78	34.8%	91	63.6%	193	62.3%	66	24.8%
HF010	Don't Know/Refuse to answer	3	0.7%	2	0.9%	2	1.4%	1	0.3%	2	0.8%
	No	254	57.1%	152	67.9%	61	42.7%	146	47.1%	216	81.2%
	Yes	188	42.2%	70	31.3%	80	55.9%	163	52.6%	48	18.0%

Pearson Chi-Square Tests					
		Family members	Number of children	Education	Occupation
Which of these sentences applies the most to the food eaten by your household during the past 6 months?					
	Sig.	.038*	.056	.000*	.000*
In the last 6 months, was there a time when you were concerned that you would run out of food for your household for the next month?					
	Sig.	.069	.001*	.000*	.000*
Did the following statement apply to your household in the last 6 months? "The food that we bought was not enough and we didn't have money to get more."					
	Sig.	.107	.066	.000*	.000*
Are there any foods you feel your family does not eat enough of?					
	Sig.	.116	.023*	.000*	.000*
In the past 6 months, did you or any other adult in your household ever cut the size of your meal because there was not enough food?					
	Sig.	.349	.113	.000*	.000*
In the past 6 months, did you or any other adult ever skip a meal because there was not enough food?					
	Sig.	.102	.007*	.000*	.000*
In the past 6 months did you or any adult in your household not eat for a whole day or go to bed hungry because there was not enough food?					
	Sig.	.279	.002*	.000*	.000*
During the last 6 months, was there a time when you or any adult in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?					
	Sig.	.758	.305	.000*	.000*
During the last 6 months, was there a time when you or any adult in your household were hungry					
	Sig.	.159	.000*	.000*	.000*

but did not eat because there was not enough money or other resources for food?					
During the last 6 months, was there a time when you or any adult in your household went without eating for a whole day because of a lack of money or other resources?					
	Sig.	.321	.020*	.000*	.000*

Appendix IX: Household Survey questionnaire

Dear Mr/ Mrs.

Your cooperation is very important for the success of this study. Please answer the following questions accurately and in explicitly. Information contained in it will remain secret and will be used only for scientific purposes. Thank you in advance, and we wish you health and wellness. Yours sincerely.

The time for filling out this form is approximately 30 minutes.

The purpose of this study is to assess and monitor nutritional status and public health during emergency situations for the purpose of collecting accurate and high-quality data on the nutritional status of the people under quarantine due to the COVID-19 pandemic.

We want to assess your nutritional status by asking questions about your eating habits, physical activity patterns and food security in your home and your condition before and during the time of the injury due to the COVID-19 pandemic.

1. Date of birth: --/--/----
2. Gender: male female
3. Current weight: ----- kg
4. Current height: ----- cm
5. Level of education: Illiterate primary intermediate university
6. Where do you live most of the year? Beirut Beqaa South Lebanon North Lebanon Mount Lebanon Nabatiyeh Baalbek-El Hermel Akkar
7. Social status: single married divorced widower
8. The number of family members who live in your home: persons
9. Number of children that you have:
10. Number of children that you are responsible for:
11. How many rooms in your house (except bathrooms and kitchen):
12. Occupational status: I work / I have been fired / Never work (housewife ...) / student
13. Occupation: Are you a healthcare professional? Yes/no
14. Do you currently have health insurance? Social Security Private Insurance Other Public Institutions No Health Insurance
15. Have you been following the quarantine recommendations from the various ministries in Lebanon? Score from 0 to 10
16. Do you drink alcohol? 0 cups/day less than 2 cups/day more than 2 cups/day
17. Do you smoke cigarettes? previously yes sometimes no
Quantify the amount per day:
18. Do you smoke Hookahs? previously yes sometimes no
Quantify the amount per day:

Questions related to the current economic situation

1. What is the monthly household income?

>3000000 3000000-1500000 <1500000 no income

\$ 2000 \$ 2000-1000 <\$ 1000

2. was your income changed from USD to LBP? Yes / No

3. Are you still getting paid in full per month? Yes / half salary / less than half salary / without salary

4. If your income has decreased over the past 24 months, what are the top 3 reasons for this?

- Less job opportunities
- Salary decreased
- Cost of materials or items needed for livelihood increased
- The salaries of casual laborers or staff have increased
- My customer base has decreased so there are less opportunities for my livelihood
- The prices I used to sell at have decreased, so we do not earn as much money
- No decrease
- Other (specify):

5. Is there anyone helping you financially? yes/no

6. Is there someone outside the country sending you money to Lebanon? yes/ no

Is this money considered enough for you? yes/no/ i don't receive

7. Have you incurred any debts in the last 24 months? Yes/ No

8. If yes, then approximately how much debt does your household currently have?

Lebanese pounds

US dollars

9. If yes, how do you pay off the debt?

- Total payment / full monthly payments

10. If yes, when did you take on this debt?

- 1 month ago
- During the last six months
- During the last 12 months
- During the last 24 months or more

11. If yes, what are the main reasons you took this debt?

(tick UP to three reasons and note which is the main (1), second (2) and third (3)).

- To buy food
- Health expenses
- Education expenses
- To buy clothing
- To pay for housing/accommodation
- To buy tools/machinery for other livelihoods use (rent, mortgage, etc.)
- To pay household bills (gas, electricity, water, etc.)
- Travel expenses
- To rent or buy land
- Other (specify):
- None

- To buy agricultural inputs

12. How do you see your economic situation?

Before covid19	After covid19
below the poverty line	below the poverty line
Poor / poor	Poor / poor
Moderate condition	Moderate condition
Rich	Rich
No answer	No answer

13. Are you afraid of poverty due to the current situation? Answer on a scale from 1 to 10. (1 = I'm never afraid 10 = Very scared)

Needs and assistance:

1. During the past 12 months, did you receive any type of assistance?
Yes, no
2. What assistance did you get?
 - Food - for example: General Food distribution / food vouchers, School feeding program
 - Cash – for example: Government compensation(*cash*), Cash for work or Food for Work program, Government compensation(*cash*), Remittances
 - Non-food items – for example: General items for household, Hygiene items for adults or children, Clothes or blankets
 - Education – for example: free education provided by NGO or UN agency
 - Health – for example: Free health services provided by NGO or UN agency (Does not include social support from the government)
 - Protection – for example: refuge center for adults or children.
 - Shelter – for example: Cash specifically for rent provided accommodation by government, NGO or UN agency.
 - WASH – for example: Latrines or water Infrastructure provided to household or community by NGO, UN or municipality.
3. What is the source of this assistance ?
 - a. Gov.,
 - b. NGO,
 - c. charity,
 - d. UN agency,
 - e. religious organization,
 - f. local people,
 - g. *family abroad*
 - h. *other (specify)*
4. If yes, how would you rate this assistance in terms of helping your food security and livelihood? For each response options are:
 - a. A great help,
 - b. some help,
 - c. little help,
 - d. no help,

- e. made situation worse
5. If no help or made situation worse, why was this the case?
- Arrived too late
 - Was manipulated by others
 - Was not in sufficient quantity
 - Was the wrong type for my livelihood
 - Other (*specify*):
6. What are the household's top 3 main non-cash needs at this moment in order of importance? (tick and rank top 3 options; constraint on DUPLICATE responses. Select "None" if third option cannot be recorded or if no "need" is REQUIRED. If "None", skip to the next section).

----- ----- -----
 1st choice 2nd choice 3rd choice

No unmet need	Psychosocial support	More security
More food	Clothes/shoes	Drinking Water
Better food quality	Kitchen assets for cooking	Sanitation/ sewage
Support for rent/improved shelter	Other household assets	Baby food
Cooking fuel,gas, electricity	Agricultural inputs	Youth activities
Medicines/health	Transport	Other
Education/ books	Vocational training	

Questions related to health and covid-19

- Have you had COVID-19? Yes No
- Have you been in direct contact with someone with COVID-19? Yes, No, I don't know, I don't remember
- If yes, in what context? _____
- Do you know anyone who has or has been infected with COVID-19? Yes No
- Is there any form of violence in your home? No. Not applicable. Yes, verbal. Yes, physical. Yes, sexual. Yes, other: _____
- Do you visit or welcome any friends during the lockdown? Yes No
- Do you visit or welcome any family during the lockdown? Yes No
- Do you engage in any sports activity during the lockdown? Yes No
- How does the intensity of sporting activity compare with the pre-closing period?
 Similar More Less Not applicable
- Do you have or have had a chronic disease? Yes No

Type of disease	I currently have	I am getting my treatment	Family member	I was hospitalized last year
High blood pressure				
Cardiac attack				
Congestive heart failure				
Diabetes				
Poor blood circulation				
High cholesterol				
Cancer				
Cerebral stroke				
Lung disease (asthma / chronic obstructive pulmonary disease)				
Obesity				
Depression				
Anxiety				

11. Do you get your treatment regularly? Yes, I don't want, I can't find all of my medicines, Not applicable
12. Are you afraid of going out for treatment? Yes ,No ,not applicable
13. Are you afraid of not being able to get your treatment? Yes, No, not applicable
14. Does anyone in your house have a chronic illness? Yes, No, not applicable
15. Are you worried about this person getting COVID-19 or not being able to get his treatment? Yes, No, not applicable

Financial Distress / Financial Well-being Scale - IFDFW Scale for the past four weeks

	Answer on a scale from 1 to 10		number
How do you feel about your level of financial stress today?	1 = Overpressure	10 = No pressure at all	
How satisfied are you with your current financial position?	1 = dissatisfied at all	10 = satisfied	
How often do you worry about your ability to meet your regular monthly living expenses?	1 = Worried all the time	10 = Never worried	
How confident are you that you can find the money to pay for any financial emergency that may cost around 5 million LBP.	1 = No confidence	10 = High confidence	
How often does this happen to you: you want to go out to eat, go to the movies, or do some other activity and you don't go because you can't pay the price?	1 = All the Time	10 = Never	
How often do you find yourself trying to financially manage to live and wait for the next salary?	1 = All the Time	10 = Never	

Food Consumption

1. Yesterday, how many meals were eaten by this household? _____ meals
2. Is this number of meals:
 - Same as always

- Less than usual
- More than usual

3. Over the last 7 days, how many days did you consume the following foods? (no VALUE can be greater than 7, i.e. 7 = 7 days)

- Cereals (bread, pasta, wheat FLOUR, BURGHUL)
- White tubers and roots (potato, sweet potato)
- Vegetables, yellow tubers, leaves
- Fruits
- Eggs
- Pulses and nuts
- Dairy products
- Fats and oils
- Sweets
- Spices and condiments
- Meat
- Fish and other seafood

Interpretation of the Food consumption score: ≤ 28 : Poor FCS, 28-42: Moderate FCS, > 42 Acceptable FCS (14)

4. During the last 7 days, how many times (in days) did your household do any of the following in order to cope with lack of food? (no VALUE can be greater than 7, i.e. 7=7 days; 0 = None, 1 = 1 day, 2 = 2 days, 3 = 3 days, 4 = 4 days, 5 = 5 days, 6 = 6 days, 7 = Everyday)

- Eat cheaper food that is not as good as normal
- Borrowed food or received help from friends or relatives
- Eaten less meals a day than normal
- Eaten smaller amounts of food than normal at meals
- Adults eat less so younger children can eat

5. During the last 12 months, was there a time when, because of lack of money or other resources:

- You were worried you would not have enough food to eat?
- You were unable to eat healthy and nutritious food?
- You ate only a few kinds of foods?
- You had to skip a meal?
- You ate less than you thought you should?
- Your household ran out of food?
- You were hungry but did not eat?
- You went without eating for a whole day?

6. In the past 30 days, has your household done any of the following to meet basic food needs? 0 = No, 1 = Yes, 2 = No, because I have already used this up

- Spent savings
- Bought food on credit or borrowed money to buy food
- Asked for remittances
- Spent less money on other needs (e.g. EDUCATION/HEALTH)
- Sold household assets (jewelry, phone, FURNITURE, etc.)

- Sold productive goods/assets (*sewing machine, tools/machinery, car, livestock, etc.*)
- Taken jobs that are high risk, illegal and/or socially degrading
- Any type of labor for food
- Sent adult household members to beg
- Sent children household members to beg
- Asked charity (*local charity, RELIGIOUS INSTITUTIONS...*) for food
- Received E-cards from the UN

Interpretation of coping strategy index: ≤ 18.6 : Low CSI, 18.6-37.5 Moderate CSI, >37.5 High CSI (14).

Water and agriculture

1. What is your primary source of drinking water:
 - Store/Market-bought water
 - Private vendor (*water TRUCK*)
 - Treated/Filtered
 - Other (*please specify*) _____
2. What are the top 3 sources of water for your household & commercial use (*not anything else like irrigation*)? (*tick and rank top 3 options*)
 - Municipal connection
 - Private vendor (*water TRUCK*)
 - Certified/authorized borehole or spring
 - Store/Market-bought water
 - Well
 - Unauthorized/unprotected water source (*e.g. river*)
 - None (*only select if RESPONDENT/HOUSEHOLD does not have 3 SOURCES of water*)
3. Does your household face any constraints about accessing water?
 - Yes No
4. If yes, what were the obstacles you faced in terms of accessing water (tick all that apply).
 - Water not available to household as often as we need it
 - Water is too expensive
 - Do not have enough water storage facilities at the household
 - No obstacles
5. If water is not available often, how many days in the last 30 days did you not have any access to water? (Specify for summer and for winter season)
 - Number of days without water in summer (*in a month*) _____
 - Number of days without water in winter (*in a month*) _____
6. What kind of sewage system does your household use?
 - The household is connected to a sewage system (piped away from household)
 - Waste water from sewage is disposed of into a pit or holding tank (next to the household)
 - Waste water from sewage is disposed of into nature/open drainage

- I don't know
7. Does your household currently plant any fruits and/or vegetables / or other crops on this outdoor space? (Not large-scale AGRICULTURAL activities)
- Yes/ No
8. If yes, what do you plant?
- Bananas
 - Barley
 - Tomatoes
 - Oranges
 - Olive trees
 - Grapes
 - Wheat
 - Potatoes
 - Lemons
 - Apples
 - Maize
 - Cucumber
 - Tobacco
 - Other (specify)
9. If yes, what are the uses of these fruits and/or vegetables/ and or other crops? (Tick all which apply)
- Selling Approx. %
 - Consumption by household Approx. %
 - Freely give to other households as gifts or community support Approx. %
 - Other(specify) Approx. %
10. How much land do you cultivate (EXCLUDING land CULTIVATED/PLANTED by HOUSEHOLD in OUTDOOR space referred to in QUESTION 2 .3)? ----- (Dunums)
11. What is the type of tenure/ownership of the land that you cultivate, in % of total? (Notes for data collector: =Percentage MUST add UP to 100%)
- Legal ownership or similar
 - Rented land
 - Other types: as squatter basis, inheritance proceedings, etc...
 - Do not know
 - Other
12. Which one shares in % of total land is?
- Rain fed
 - Irrigated
13. If irrigated, then which source of irrigation water system do you use?
- River/spring/stream
 - Dams/Hill Lakes
 - Reservoirs/ponds
 - Wells (UNDERGROUND)
 - Municipal water supply
14. If irrigated, then which method of irrigation water system do you use?
- Surface irrigation (flooding)

- Sprinklers
- Localized irrigation (*drip, micro-sprinkler etc..*)

15. If no, would you be interested in planting fruits and/or vegetables/ and or other crops

if you were provided with the necessary inputs and any needed training

- Yes No

16. What type of training would you benefit from?

- Agricultural production
- Animal husbandry
- Agricultural practices and improved inputs
- Food Quality and Hygiene
- Agricultural processing
- Post-harvest practices
- Adoption of modern machinery and irrigation techniques
- How to work together in farmers' associations or within cooperatives to better ensure marketing of their products
- Other (*please specify*) _____

Market Access

1. Which market do you use most for purchasing food?

- Open air market
- Local shops
- Kiosks
- Rely solely on food aid
- Other (specify)

2. Which mode of transport do you use most often to reach the market?

- Bus
- Foot
- Car
- Motorbike
- Other (specify)

3. How long does it take you to reach the market?

- Less than 30 minutes
- 30 min to 1 hour
- Between 1 and 2 hours
- More than 2 hours

4. How much does it cost to go and return from the market?

- Less than 2000 LBP
- 2000 to 10000 LBP
- 10000 to 20000 LBP
- More than 20000 LBP

5. (For those who have agriculture as source of livelihoods ONLY) Where do you sell your local products?

- At farm gates
- At market places
- Through agricultural cooperatives

- Through contracts
- Other, please specify

Appendix X Arab Food Security Scales

Interpretation of the score: ≥ 2 indicates food insecurity (moderate or severe) and ≥ 6 indicates severe food insecurity (14)

HFOOD1	Which of these sentences applies the most to the food eaten by your household during the past 6 months?	We had enough to eat of the kinds of food we wanted (quantity & quality)	We had enough to eat but not always the kinds of food we wanted (only quantity)	Sometimes we did not have enough to eat (quantity)	Often we did not have enough to eat	Don't Know/Refuse to answer
		1	2	3	4	
		Yes	No	Don't Know/Refuse to answer		
HFOOD2	In the last 6 months, was there a time when you were concerned that you would run out of food for your household for the next month?	1	2	9		
HFOOD3	Did the following statement apply to your household in the last 6 months? "The food that we bought was not enough and we didn't have money to get more."	1	2	9		
HFOOD4	Are there any foods you feel your family does not eat enough of?	1	2	9		
HFOOD5	In the past 6 months, did you or any other adult in your household ever cut the size of your meal because there was not enough food?	1	2	9		
HFOOD6	In the past 6 months, did you or any other adult ever skip a meal because there was not enough food?	1	2	9		
HFOOD7	In the past 6 months did you or any adult in your household not eat for a whole day or go to bed hungry because there was not enough food?	1	2	9		
HFOOD8	During the last 6 months, was there a time when you or any adult in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?	1	2	9		
HFOOD9	During the last 6 months, was there a time when you or any adult in your household were hungry but did not eat because there was not enough money or other resources for food?	1	2	9		
HFOOD10	During the last 6 months, was there a time when you or any adult in your household went without eating for a whole day because of a lack of money or other resources?	1	2	9		