



Enhancing the Livelihood and Food Security of Syrian Refugees in Lebanon

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 $\ensuremath{\mathbb{C}}$ Saja Taha Al Zubi (photos taken during filed visit 2016-2017)

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Key messages

Summary

This study uses information and survey data collected from refugee households, refugee workers' bosses, camp leaders and local and international humanitarian organizations. The sustainable livelihoods framework is applied to understanding the livelihoods of refugee families and the challenges they face. This is done by analyzing the refugee household's access to physical, natural, human, social and financial assets, their income and livelihood sources; and the livelihood outcomes on food security, shelter, education and health.

Syrian refugees in the Bekaa Valley, Lebanon, have found security from the ravaging conflict in Syria. However, in spite of the commendable efforts from the host country and the UN, as well as other international and local humanitarian organizations, the support provided has failed to meet the humanitarian standards set by those organizations. Nevertheless, the support varies greatly in terms of the coverage provided in response to actual needs (14 to 100 percent), proportion of beneficiaries (16 to 80 percent) in relation to the total refugee population and duration provided (much support is only provided for a few months). However, the most important refugee income source is the seasonal credit from local businesses, which 95 percent rely on. Agriculture is a main source of income for about 90 percent of refugee households, providing 22 percent of total income. Non-agricultural employment provides 21 percent of total income, albeit fewer households have access to the latter. The majority of all workers (61 percent) were male, while females were 39 percent. Nonagricultural work is male-dominated (96 percent male), while agricultural work is more of a female-led activity (53 percent female vs 47 percent male). Humanitarian aid-which is both in-kind supplies and in cash for a great majority of refugee households (89 percent)-is the most important income source (49 percent).

Only 4 percent of people in the sample had legal documentation, which affects the work conditions for work permits, lack of contracts, lack of workers' rights and inability to complain, bad treatment by employers in the work place, fluctuation and seasonality of work, lack of safety practices, short duration of work, low wages compared to work and delayed payments. There is also a clear gender gap in wages among the Syrian refugees; overall, women make up the majority of low wage earners. In this survey, 22 percent of workers were children, 59 percent of them were female and 41 percent were male.

Sixty-nine percent of the refugees are severely food insecure, while 9 percent are extremely food insecure and need emergency intervention. Refugee shelter comprises mainly of tents built on private land, where landlords are paid monthly rent. There is a general lack of healthcare in the refugee camps. In this study, 74 percent of school age children were not attending school, while 26 percent were attending informal school. Only 4 percent were attending formal school.

Key words

Syrian refugees, legal status, food security, education, agricultural and non-agricultural work, child labor, aid, health, Lebanon.

Highlights

Syrian refugees in Lebanon are not recognized in Lebanese law as refugees but they are considered as guests. This means that the refugees do not have legal residence in Lebanon and the process of getting legal temporary residence is very difficult. The lack of legal residence, or internationally accepted refugee status, puts the refugees in a legal limbo, which means they are open to all kinds of safety



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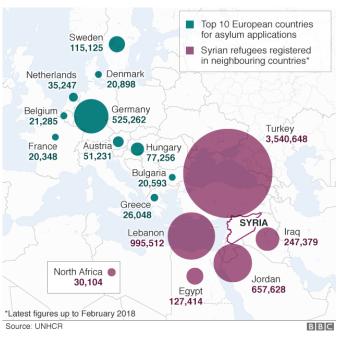
risks and in constant fear for their security; they do not feel safe, and they are in constant fear of being forced to leave the camps or leave Lebanon at any time. This situation also constrains the refugees from participating in the formal labor market. The informal labor market is susceptible to different kinds of abuses. Since 2015, Syrians are required to sign a pledge not to work, which has recently changed to a pledge to abide by the Lebanese law, which practically means the same since the Law does not provide work permits for Syrian refugees. Employment of Syrians is now mostly restricted to construction, agriculture and cleaning services but getting a work permit is difficult. Women have no access to non-farm work due to local cultural reasons.

- The refugees' livelihoods is heavily dependent on humanitarian aid, as well as earnings from seasonal employment in the farm sector and, to a lesser extent, the non-farm sector. The access to the nonfarm sector was, however, limited by the lack of legal residence. Agricultural work is not regulated and has problems with respect to long hours, low wages and irregular payment schedules. The power imbalance between farm workers (mostly women and children) and labor bosses or landowners leads to potential denial of farm workers' rights.
- Child labor, particularly in the agricultural sector, is rampant; nearly one third of the agricultural labor in Bekaa valley comprises of school age children between 8 and 14 years, with the majority of these being girls. Among school age children between 6–14 years old, only one-third attended school and the rest were out of school, with the main reasons being to work in order to support their family, lack of facilities, and difference in curricula.
- Overall, the refugee households in Bekaa valley live below the poverty line. About 93 percent of households live below the poverty line of US\$4 a day per person. The food security situation is subject to seasonality. In the summer, food security is not as much of a problem as in winter, which is mainly due to the greater availability of agricultural and nonagricultural income sources in the summer. Refugees also suffer from a lack of sanitation and access to health.

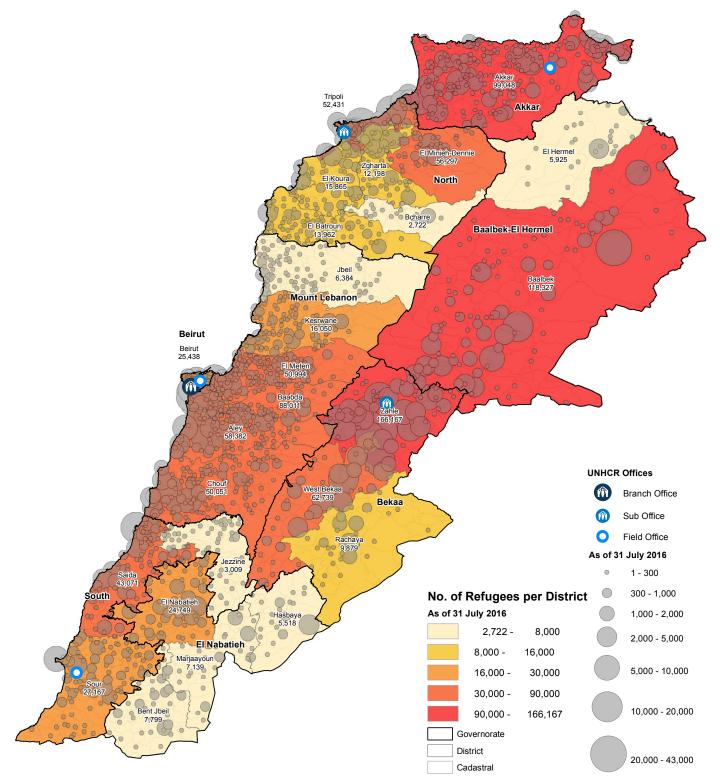
1. Introduction

The UN High Commissioner for Refugees, Filippo Grandi, considered that Syria's conflict has produced, "The biggest humanitarian and refugee crisis of our time, a continuing cause of suffering for millions which should be garnering a groundswell of support around the world." (UNHCR 2017). Since the outbreak of violent conflict in March 2011 in Syria, millions of Syrians have escaped across borders, fleeing from the bombs and bullets that have devastated their lives, livelihoods and homes. It is estimated that more than 13 million Syrians (6 out of every 10 Syrians), have fled their homes. In 2011, before conflict started, the population in Syria was estimated at 20.5 million. In 2018, with the conflict is in its seventh year, 6.15 million people were internally displaced and a total of 13.5 million people in Syria were in need of humanitarian assistance (Connor and Krogstad 2016; UNHCR 2017; World Bank 2017; Connor 2018).

The majority of those escaping the conflict have sought refuge in neighboring countries or within Syria itself (Syrian Refugees 2016). The refugees have relied on family or other networks, coming and going across borders depending on the intensity of fighting back home. Despite terrible hardship, relatively few have registered with the UN as refugees (Chatty 2018). Of the millions of Syrian refugees, only some 5.5 million are registered and hosted in Egypt, Iraq, Jordan, Lebanon



Map 1. Syrian refugees' distribution (UNHCR 2018).



Map 2. Syrian refugees' distribution in Lebanon (UNHCR 2018).

and Turkey (UNHCR 2018). Meanwhile about one million have requested asylum to Europe. Germany, with more than 500,000 accumulated applications, and Sweden with more than 100,000 accumulated applications, are the EU's top receiving countries (Syrian Refugees 2016; UNHCR 2018). After 7 years of persistent efforts from all humanitarian agencies, the situation of these refugees is getting worse over time in many life aspects (UNHCR, UNICEF, and WFP 2016; 2017). Refugees continue to face severe challenges due to protracted displacement, reduced levels of assistance and access to services, continued lack of access to sustainable livelihoods, and complicated registration procedures. It has become clear that the situation is deteriorating (CARE 2015). In 2018, UNHCR estimated that Lebanon and Jordan were hosting the largest number of registered Syrian refugees relative to their respective populations (17.6 percent, 11.7 percent, respectively). In Lebanon, 1 in 5 people is a refugee, and in Jordan 1 in 15 is a refugee. Turkey hosts the largest number of refugees in the world—63.4 percent of registered Syrian refugees (UNHCR 2018).

Many studies, analyses, media coverage and political speeches have declared that the influx of Syrian refugees to Lebanon, has negatively impacted life in Lebanon at different levels including: increasing demographic imbalances; increasing poverty and vulnerability; regressing economy; exhausting social services; complicating politics; and decreasing security, as well as worsening the life of displaced Syrians themselves (ILO 2013; Cherri, González, and Delgado 2016; FAO 2016; Government of Lebanon and the United Nations 2017; Tinas 2017). The presence of nearly 1.5 million refugees in a country of 4 million Lebanese is, without a doubt, a burden for the society as well as the economy (El Khoury 2017). Some 60 percent of registered Syrian refugees are in the North and Bekaa Valley regions that are also the poorest regions in Lebanon (Dahi 2014).

On the other hand, some studies show in spite of the poor conditions that Syrian refugees endure in Lebanon, the refugees have benefited the Lebanese economy in a considerable way. Several hundred thousand Syrian workers provide the supply of cheap labor that has allowed a large number of Lebanese companies to reduce their payroll and overall costs in a particularly difficult context and to survive the successive crises that the country has witnessed since 2011. According to ILO, 88 percent of refugees are paid 40 percent less than the minimum wage in Lebanon-an amount equivalent to roughly US\$280/month (ILO 2014), while children, some as young as six, are paid US\$4 a day in some areas in North Lebanon (ILO 2016). In addition to the multiple gaps in the application of internationally-recognized labor rights, these employees do not have any medical coverage or insurance, which results in more savings in employment costs. Syrian workers are often present in markets where local labor supply is already very low (construction, agriculture, domestic work, supermarkets and others). Syrian workers are competing with other foreign unskilled workers and not with the Lebanese,

which also pushes down wages in these market segments. This too benefits the Lebanese employer with regard to production costs. In addition, 92 percent of the active population work illicitly (ILO 2013).

In addition to the job market, the rental market alone has a turnover of almost US\$50 million, not to mention the rent paid to tent owners in informal camps varying, on average, between US\$100 and 160 per household/year. The cost of residence permits that have been imposed since the beginning of 2015 for a fee of US\$200 per year for each Syrian citizen aged 15 and above, does not allow the majority of refugees to legalize their situation (Chaaban 2017). At the same time, if only 20 percent of refugees renew their documents, this would allow the State to increase its revenues from residence fees (all categories of foreigners combined) from US\$35 million to 50 million between 2011 and 2015 (Ministry of Finance 2015). The Foreign Aid and Investments in Lebanon also receives roughly US\$1.5 billion (Government of Lebanon and UN 2017) in humanitarian aid each year from various regional and international organizations to provide relief to refugees.

This study aims to assess the situation for Syrian refugees in Bekaa Valley with the overall goal of informing policymakers and humanitarian organizations (local and international) and to show that the situation calls for actions to address the challenges that the refugees face in Bekaa Valley, Lebanon. Specific objectives of the study are given below.

2. Study objective

The main objectives of this study are to diagnose the livelihood situation of the Syrian refugees in Beqaa valley, determine the main factors affecting their livelihoods and propose appropriate interventions to address the livelihood challenges that they face. The ultimate goal of the study is to contribute to the efforts aimed at enhancing Syrian refugees' livelihoods in Lebanon.

3. Methodological framework

This study applied the sustainable livelihoods framework to understanding the livelihoods of the refugee families and the challenges they face. The framework analyses refugee household's access to physical, natural, human, social and financial assets, and sources of income and livelihoods. The study used literature review on the Syrian refugee (DFID 2000; UNDP 2017).

This was followed by a rapid appraisal conducted in Bekaa valley using focus group discussions (FGDs) with men and women refugees. FGD is part of the participatory family of methods that are used to generate in-depth qualitative information and data (MacIntosh 1981; Kitzinger 1994, 1995; Goss and Leinbach 1996). The FGDs took around 2 hours and the workshop around 4 hours of deliberating the refugees' livelihood situation and the challenges they face in sustaining their livelihoods. Overall, 20 FGDs have been conducted in the camps for women, men and mixedgender groups, and two workshops of exclusively male and female groups were conducted at the ICARDA premises. In addition, 17 key informant interviews were conducted with government ministries (Agriculture), farmer cooperatives and syndicates, national NGOs (such as Arcenciel and Beyond) and international development and humanitarian organizations (such as FAO) have been interviewed. These FGDs and key informant interviews provided general as well as specific basic information about refugees' livelihoods and challenges they face.

A formal survey was conducted to gather quantitative data from the refugee families. The survey covered 13 camps for Syrian refugees in Bekaa, Lebanon. The face-toface interviews covered 75 households in 10 camps from different villages (Terbol, Dalhamieh, Bar Elias, Al Faour, Kafer Zabad, Tamnin). The surveyed households consisted of 550 family members.

The camps were chosen due to their cooperativeness and willingness to participate in the survey, particularly the willingness of the camp leader (*al shawish*) and safety and security considerations. The surveyed households were selected based on their willingness, thus the purpose of the survey is not to generalize the findings to all refugees in Lebanon but rather to get a rapid understanding of the current issues that Syrian refugees in Bekaa are facing and their livelihood situations. The survey took around 3 months (December, January, February), and lasted 60–90 minutes for each individual household interview. The survey was followed by scattered filed visits until the end of the cropping season to keep the information updated. A designed questionnaire was used for the formal survey. The questionnaire covered household characteristics, legal status, sources of income and livelihoods including provision of aid and employment, housing, health, education, food security status, and coping mechanisms in times of food insecurity.

Data were analyzed with descriptive statistics, graphic illustrations and econometric tools. One important issue for the refugees was the access to non-farm work. Using 181 workers in the survey data, the determinants of the access to non-farm employment were analyzed using a logistic regression model (Rice 1994; Hosmer and Lemeshow 2000). The explanatory variables considered were sex, age, education, health, registration with UNHCR, means of searching jobs, and duration of stay in Lebanon.

The refugees' food security is another important area. The household food security situation was classified into 4 categories (UNHCR, UNICEF, and WFP 2016): food secure; mildly food insecure; moderately food insecure; and severely food insecure. These food security categories were measured by the diversity of food consumption (diet diversity), days of getting insufficient food, food expenditure share of income, and number of food security coping strategies. A food security (FS) index was computed by using two different approaches. The first was computed by combining all indicators for each household after assigning values of 0 to 3 to different levels of food security indicators and then adding up to arrive at a single FS index for each household. The FS index has a value ranging from 0 (worse and most severe food insecure situation) to 12 (fully food secure situation). With this index, households were classified into 5 categories: (1) extremely severe food insecurity with food security index score of 0-2; (2) severe food insecurity with FS index of 3-5; (3) moderate food insecurity with FS index of 6-8; (4) mild food insecurity with FS index of 9-11; and, (5) fully food secure with FS index of 12.

In the second approach, principle component analysis was applied to the original data of the food security indicators. The first principle component was then used to classify households into four food insecurity quartiles.

4. Empirical results and discussion

4.1. Demographic indicators

Data from this survey show that the average refugee household is 8 members, 18.7 percent of the households being headed by women. The total population in the sample was almost equally split between male (50.5 percent) and female (49.5 percent). Household heads had an average age of 41 years. Around half of the sampled population (49 percent) was below 15 years of age, distributed between the age categories below 6 years (45 percent) and 6-14 year (55 percent). Almost two thirds (63 percent) of all households reported having at least one member with special needs. The figure shows that highest category is 6-14 years old followed by children less than 5 years old, which reflects that the camps are young populations. Older refugees, who are from 41-70 years old, form 11 percent of the population. The household data from Begaa valley in this survey are somewhat different form the UN countrywide estimates. The UN reported that the average refugee household comprised of 5.1 members: 2.2 adults (18-59), 1.5 children aged 6 to 17 years, 1.1 children aged five years and below, and 0.1 older people (60 and above). Of these, 17 percent of households were headed by females, the average age of the head of household was 38, 2 percent of girls aged 13 to 14 were married, but the share of married minors quickly rose as girls get older: 6 percent of 15-year-olds, 17 percent of

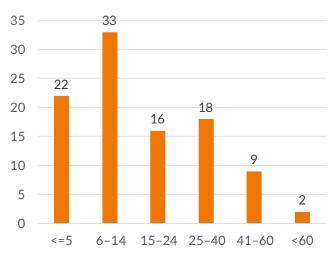


Figure 1. Age distribution of the sample's family members (%).

Source: Field survey 2016-2017.

16-year old and 30 percent of 17-year old were married (UNHCR, UNICEF, and WFP 2016). In this survey, the child marriage for girls aged 9–15 was recorded at 16 percent. This practice is more prevalent in the refugees from Deir El Zoor (North Eastern Syrian province), who have a more conservative culture.

4.2. Legal status and protection

By far, the legal framework that protects refugees' rights, is the most important issue for the refugees. This legal framework has a grave consequence for many other social and livelihood outcomes. According to the UNHCR, the Government of Lebanon (GOL) does not recognize displaced Syrians, who crossed to Lebanon as refugees but as displaced populations. As a result, obtaining legal documentation has become difficult and costly for many Syrians, who are facing precarious legal situations. Issues related to legal status are a major factor, which compounds the vulnerability of Syrians in Lebanon. The UN survey of 7,225 households conducted in August 2016 indicates that 60 percent of individuals over 15 years old are without legal residency, compared to 47 percent reported in January 2016 (GOL and UN 2017), which means the situation is getting worse. The obstacles in obtaining legal residency affect Syrians' mobility, and thus limits their access to livelihood opportunities and essential services. The UN calls for a review of the policies implemented so far in order to address this problem.

According to the UN, under current GOL regulations, the entry of Syrian nationals is admitted under clearly identified visa categories including, among others, sponsorship, tourism, business and transit, with necessary supportive documentation. Syrians fleeing the conflict and violence fall under the exceptional humanitarian criteria, developed by the Ministry of Social Affairs (MoSA). This rule excludes some people that fall in the category of humanitarian exceptions which include: unaccompanied and separated children (under 16 years of age) whose parents and legal guardians are confirmed to be displaced in Lebanon; persons with disabilities and dependent on family and relatives confirmed to be displaced in Lebanon; persons in need of life-saving medical treatment not usually available in Syria, or not available in a timely manner; and individuals pursuing resettlement or transitioning through Lebanon to a third country with proof of onward travel outside Lebanon. Since May 2015, the UNHCR registration

of Syrians remains unclear since the GOL notified its suspension. Obtaining and maintaining a valid legal residency remains a challenge for persons displaced from Syria. Syrians can obtain residency in two primary ways: sponsorship by a Lebanese citizen or reliance on UNHCR registration certificate. Only 4 percent of the surveyed refugee household members have legal residency. The challenges of obtaining Syrian residency in Lebanon (GOL and UN 2017) are as follows:

- displaced Syrians that are registered with UNHCR have to renew their residency on the basis of a sponsor in which case they do not need to sign the pledge of not going to work;
- the notarized pledge not to work has been replaced by the pledge to abide by Lebanese law, renewable once every 12 months;
- renewal of residency permit requires a payment of US\$200 for each person aged 15 years and above;
- additional costs related to the residency permit process include transportation to reach the local General Security Office, which is difficult for displaced persons to meet;
- displaced persons who have obtained their residency through sponsorship are currently unable to apply for residency permits on the basis of their UNHCR registration certificate;
- displaced persons face difficulties identifying sponsors and are unable to pay the informal 'fees' that are sometimes requested by potential sponsors;
- the sponsorship system also creates a power differential that increases the risk of exploitation and abuse;
- and also, those who want or are compelled to change the sponsor cannot do so from within Lebanon.

Most of the surveyed refugee households (86 percent) left Syria legally through the regular exit process, and only 20 percent entered Lebanon in an illegal way. The irregular entry is the result of a recent instruction for Syrian entrance to Lebanon in 2015, as described above. The illegal means of entry is not safe and involves

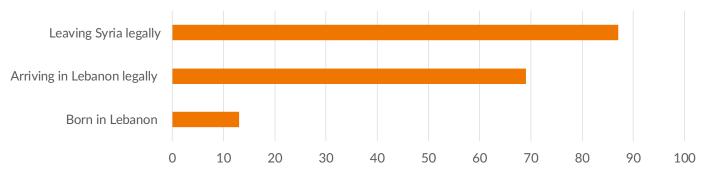


Figure 2. The mobility of Syrian refugees from Syria to Lebanon (%).

Source: Field survey 2016-2017.

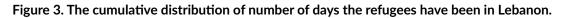
long and treacherous routes run by smugglers. These smugglers are unreliable people who charge high costs of US\$100 per adult and US\$60 per child. However, these refugees have very limited options when they are fleeing form insecurity at home. Another problem is the difficulty of finding a guarantor. A lack of guarantor was considered as the most important legal problem by the majority of surveyed refugee households (86 percent). Refugees are also frightened of rejection to entry in Lebanon even if they have hotel reservations. As a result, some find illegal entry as the better solution. The majority of the survey households (77 percent) came before the 2015 instructions.

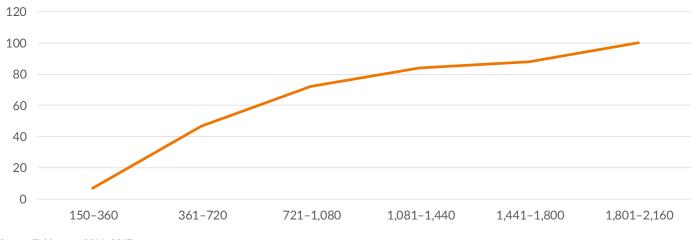
Figure 2 shows that 12.3 percent of children are born in Lebanon and 68.2 percent entered Lebanon legally.

4.3. Characteristics of the surveyed refugees

In spite of these legal ambiguities most surveyed Syrian refugees (88 percent) are registered with the UN. The remaining refugees, especially working men, do not want to register with the UN because they have work and a condition of UN registration included the pledge not to work as required by the Lebanese government. Although, as noted above, this condition has been replaced by a pledge to abide by Lebanese law, renewable once every 12 months. The consequence of this law is that about 96 percent of the sample do not have legally recognized status in Lebanon (or 89% of laborers). Only 20 percent of refugees try to get legally recognized status. However, refugees face obstacles in renewing their residency or legitimizing their residency as they need a sponsor or guarantor, who charges US\$200 per year as sponsorship fees.

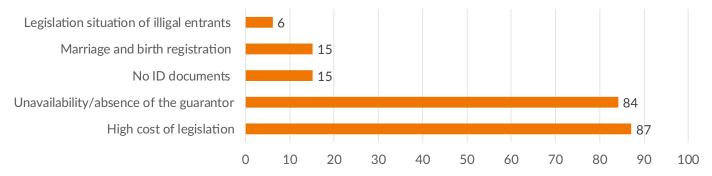
Once refugees enter Lebanon, they are assigned to different camps or work places based on their guarantor. However, the survey revealed that only 40 percent of surveyed refugees live in the assigned camps; 53 percent live in other camps; only 4 percent live at work places, and about 1 percent each live in either hostels or with friends. The refugees living in other camps have been forced to change their place for different reasons,





Source: Field survey 2016-2017.

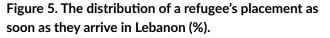
Figure 4. The legal problems faced by refugees in Lebanon (%).

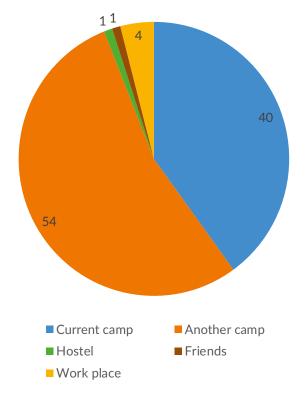


Source: Field survey 2016-2017.

and sometimes the whole camp was transferred to another place. Those refugees who started living in hostels or with friends and work places initially found that it was costlier than living in the camp, so they moved to a camp, while some workers move to camps after their work ends. Figure 5 shows the distribution of the refugee's placement as soon as they arrive in Lebanon.

The precarious legal situation has many consequences for the refugees. About 51 percent of refugees reported that they do not feel safe, and they are in constant fear





Source: Field survey 2016-2017.

Box 1

Muhammad 15 years old said: "I was walking to my work when an unknown car attacked me and asked me for my documents; they ripped it, took my wallet and my mobile and threatened me with a gun. The police couldn't register my case because I had no ID documentation."

of being forced to leave the camp or leave Lebanon any time, especially for those who are considered with illegal entry following the 2015 guidelines. Some (45 percent) also reported that they have experienced problems because of their nationality or ethnic background. These refugees report that they face discriminatory comments (81 percent), physical or psychological harassment, including sexual harassment (41 percent), and theft or robbery (15 percent).

The refugees blamed local civilians (75 percent), official authorities (43 percent) and landlord or work place bosses (23 percent) for these undesirable experiences. It is recognized that the majority of Lebanese people are not mistreating Syrians; however, it is understandable that a proportion of the population feel threatened by the presence of a large population of refugees, particularly those who feel that the large supply of Syrian workers is either taking their jobs away or driving the wages down and negatively affecting their livelihoods. Another consequence of the legal challenge is that (99 percent) of refugees do not report their problems to the authorities because, if they report any case to the authorities, they fear that their legal status will be investigated, and a lack of legal residence means they will lose any rights in the case. They also avoid having

Existing relationship	Same or improved (%)	Worse (%)	Notes
Husband-wife	36.0	41.3	14.7% widowed/divorced, 8% got married in the camp
Mother-children	49.3	38.7	9.3% born in the camp, 2.7% have no children
Father-children	37.4	36	9.3% born in the camp, 14.7% widowed/divorced, 2.7% have no children
Children-children	53.3	33.3	9.3% born in the camp, 2.7% have no children, less than 2% indicated no communication
Relation resulting from immigration	Good or normal	Bad	Notes
Family-camp leader	88.7	5.8	Less than 2% indicated no communication, 4% of the sample were the leader's families
Family-neighbors	98.7	1.3	
Family-relatives in Syria	52.0	41.3	About 7% indicated no communication
Family-relatives in camp	80.0	5.3	13.3% have no relatives and less than 2% indicated no communication
Male worker-boss	85.3	4	9.3% have no male workers, less than 2% indicated no communication
Female worker-boss	56.0	2.7	40% have no female workers; less than 2% indicated no communication
Worker-workers	96.0	1.3	About 3% indicated no communication
Family-host community	18.6	1.3	About 80% indicated no communication
Family–Lebanese authority	25.4	74.7	

Table 1. Advantages and limitations of different methods for defining livelihood typology.

Source: Field survey 2016-2017.

problems with the defendant of the case because of religious, social and political considerations.

A very important outcome of the legal situation is its effect on social relations of the refugee community such as registration of marriage and births. Almost half of interviewed families (45 percent) have had new babies in the camp with a total of 75 new births in the studied camps. The majority of births of these children (83 percent) are not registered in Syria and 90 percent of them are not registered in Lebanon, so they have no identification papers. Similarly, the majority of marriages among refugees in the camps are also not registered. About a third (33 percent) of the interviewed families have unregistered marriage cases, and 87 percent of refugees reported that they cannot register the marriage or the children in Lebanon or children in the Syrian Embassy because they have illegal status in Lebanon. Only 17 percent of births of refugee children in Lebanon were registered in Syria by relatives. There is also a lack of awareness among refugees of the institutions that provide registration services, which shows that refugees do not have access to the institutions responsible for these social services. Notably, refugees are not interested in permanent settlement in Lebanon, the majority (98 percent) confirmed that they will go back to Syria as soon as it becomes safe.

4.4. Social relationships assessment

As shown in Table 1, the social relations within families has worsened among refugee families in Lebanon. The legal and livelihood challenges of refugees in Lebanon badly affect family relations. Immigration imposes new relations with new migrant communities and with the host community. The relations with host communities differ from one village to another, but the majority

Table 2. The humanitarian aid that Syrian refugees receive from aid agencies.

Item	Specification	Beneficiaries (%)	Agency	Agency participation (%)	Coverage (%)
Cash aid	LBP260,000/ HH	58.2	UNHCR	100	40
Food voucher	LBP40,500/ person	70.6	WFP	100	39.6
Heating	LBP110,000- 220,000/HH	80.9	UNHCR	100	25.5
School kits	Bags, stationary; kit/ child	16.2	UNICEF	100	98
School bus	Bus	7.4	INTERSOS; Caritas	40; 60	80
Shelter	Wood, cover, insulator per HH	61.8	UNHCR; INTERSOS; MEDAIR; SAWA	71.4; 9.5; 2.4; 16.7	14.3
Food kits	Box per HH	7.4	Albna alebnan	100	40
Clothes	LBP40,000/ child	57.4	UNICEF	100	25.6
Health	75–90% the bill value	4.4	UNHCR	100	100
Hygiene	WC, garbage container, water tank	42.6	UNHCR; ACF; INTERSOS; MEDAIR; SAWA; World Vision	41.4; 17.2; 24.1; 3.4; 6.9; 6.9	65.5

Source: Field survey 2016-2017.

(80 percent) have no close interaction with the host community. Refugee families also try to avoid interacting with Lebanese authorities because of their lack of legal residence or legally protected refugee status.

4.5. Sources of livelihood and income

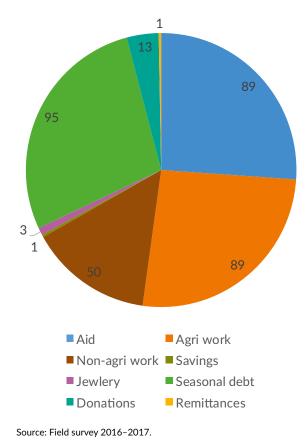
4.5.1. Provision of aid

The great majority of Syrian refugees (88 percent of all individuals in surveyed households) are registered at UNHCR as members, and 77 percent have registered household heads. Some refugee household heads prefer not to register their families at the UNHCR because of the no work pledge. This pledge has now been changed to a pledge to abide by the Lebanese laws, but with the same effect as the former pledge given that refugees do not have work permits. Other reasons for nonregistering with UNHCR is the delay in the registration process; for example, UNHCR only giving appointments after two years. A large majority of refugees reported that they receive aid from different international agencies; however, about 9 percent reported that they do not receive any aid. They are concerned about a lack of clarity in the criteria of aid distribution, as aid was stopped for some families and other families are rejected for aid by UNHCR. The authors were not able to substantiate these concerns either way; however, given that the large majority confirmed they receive aid, the digressing views could be very specific cases. Table 2 provides the extensive and diverse aid programs provided by humanitarian agencies to Syrian refugees in Begaa valley.

Different agencies contribute to different aid assistance packages. Heating was exclusively provided by UNHCR (covering 81 percent of households), while food vouchers were exclusively provided by WFP (71 percent of households). Shelter is provided mainly by UNHCR and, also to a smaller extent, by INTERSOS, MEDAIR and SAWA (62 percent of households). These three items form the most common aid that the majority of households have received. Other important assistance includes distribution of cash aid, exclusively by UNHCR (covering 58 percent of households), cloths (57 percent) and hygiene materials (43 percent). This support is extremely important in sustaining Syrian refugees in Lebanon. However, the level of coverage in relation to needs varies. For instance, the provision of school buses and school kits covered almost all needs (80-90 percent). However, only a few households with school

age children need that service. Healthcare is another service, which responds to almost 100 percent of the needs for the individuals who benefited. Nonetheless, this service is now reduced due to shortage of donor funding. Refugees claim that food vouchers cover about 40 percent of their needs. The refugees' biggest complaint is about shelter and its inadequacy in the harsh cold winter conditions of Begaa valley. Interviewed households consider that adequate shelter covers only 14 percent of their needs. This is further discussed in the section on shelter. The food kits were provided by local NGOs but stopped after 5-6 months. The healthcare aid is implemented as a contract between UNHCR and local hospitals with UNHCR covering 75 percent of the bill (and in some cases, it reached 90 percent). However, recently, refugees confirmed that this support has become limited and many cases were rejected because of limited resources and, as a result, hospitals will not receive unsupported patients. The hygiene aid is much more appreciated by the refugees, particularly water tanks, latrines, and garbage containers, which most refugees use as water tanks specially to collect rain water as a coping strategy for overcoming water shortages and high water prices.

Figure 6. The distribution of the refugee's income sources (%).



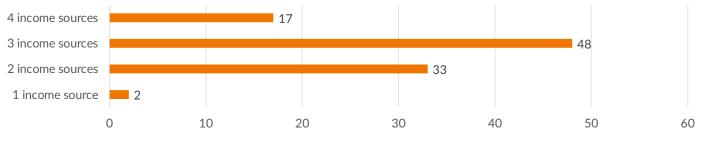


Figure 7. Distribution of households by number of income sources (%).

Source: Field survey 2016-2017.

The survey also asked about the coverage of humanitarian aid over the whole year in the 12 months prior to the survey. The refugees indicated that cash payment was provided largely (92 percent) for the whole year (12 months), a few (3 percent) cases were provided assistance for a period of 10 months and a small share (5 percent) were provided assistance for 6 months. In the case of food vouchers, coverage was largely (90 percent of cases) for the whole year (12 months), small shares were provided for 10 months (5 percent) and 6 months (5 percent).

4.5.2. Sources of income

In addition to the food and cash aid that the UN and other humanitarian agencies provide, refugees also earn income from employment in different sectors, in spite of the work permit challenges (Figure 6). The main income sources include aid (89 percent of households) and work in agriculture (89 percent) and non-agricultural sectors (50 percent). Seasonal loans provided by employers and local grocery stores was a major source of income which almost all households (95 percent) rely on to secure desired consumption levels.

Seasonal loans have become common practice for refugees as one of their most important coping strategies. They receive loans from local shops, family members or friends, especially in winter when work opportunities are the lowest. These loans are important to help refugees to cover their purchases of food and non-food items. However, some households are unable to pay off these seasonal loans and so debt accumulates. A third of the surveyed households (33 percent) have a cumulative debt for more than a year, at an estimated average cumulative debt of about US\$226 per household (the cumulative debt is not included in the income, but the seasonal loans for consumption is included). The humanitarian aid was discussed above, and it is the main livelihood supporting factor as shown below. Sales of jewellery also played a small role (3 percent). Savings, remittances and other donations were not important income sources for refugee families. Jewellery and savings played a minor role because refugees do not have enough assets, however, they rely on these sources at the beginning of their migration. Donations are also limited, because camps are usually far from the villages of host communities and some local associations have stopped their aid. The cases of donations reported were special cases for women-headed households.

The survey questioned respondents about the income sources for the last 12 months before the survey. Although income sources for Syrian refugees are not stable, they do rely on some kind of work in addition to aid from humanitarian agencies (Figure 7). Very few households rely on only one income source. About half of households have access to three sources of income, one third have two sources and 17 percent have four sources of income.

Drawing on the survey results, 2 percent of households rely on one income source, 33 percent rely on two income sources, 48 percent rely on three income sources, and 17 percent rely on four income sources. The number of income sources is related to the income category. The higher income categories have fewer income sources.

The average income by source was estimated from family expenses for the last 12 months (Table 3) which were collected in the survey. The average total monthly income, including food aid (changed to monetary value), is US\$531 per household. Overall, aid is the main income source contributing to half of refugee income (this is all food and cash aid changed to monetary value). The second main source of income is work (43 percent), which is split into agriculture (22 percent) and nonagriculture (21 percent) employment. Refugees' heavy

	Income per month	Income per month			
Income sources	LBP	\$	Income share (%)	HHs receiving (%)	
1 Aid (both food and cash)	385,620.0	257	49	89	
2 Farm work	170,867.0	114	22	89	
3 Non-farm work	169,410.0	113	21	50	
4 Seasonal loans	58,333.0	39	7	95	
5 Donations	10,778.0	7	1	13	
6 Jewelry sales	889.0	0.59	0.1	3	
7 Remittances	342.0	0.23	0.04	1	
8 Savings	111.0	0.07	0.01	1	
Total	796,350.0	531			

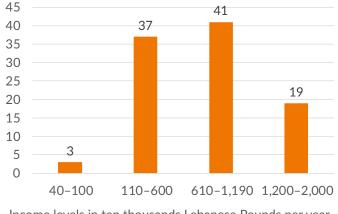
Table 3. Average household income for 12 months by source.

Source: Field survey 2016-2017.

reliance on humanitarian aid means that the households who do not get that aid for some reason are the worse off among the refugee population. This group is estimated at about 11 percent of surveyed families.

The surveyed households are divided into four income categories (Figure 8). Only about one-fifth (19 percent) of refugee households earn over LBP1.20 million

Figure 8. The distribution of households by income levels (% households).



Income levels in ten thousands Lebanese Pounds per year

Source: Field survey 2016-2017.

or about US\$793 per year. The largest category (41 percent) is earning over LBP620K-1,190K a year (US\$410-786 a year), and another 37 percent earns LBP110K-600K or US\$73-396 a year. Only 3 percent of households are earning below LBP100,000 (US\$66) a year. Among income level 1, 0 percent of the households rely on one income source, and 100 percent rely on four income sources. Meanwhile among the income level 4, 0 percent of households rely on one income source and 7 percent rely on four income sources.

These income levels, particularly those at the middleand low-income categories, do not cover the needs of families with an average of 8 members, and the situation could even be worse for the families with 20 members. About 93 percent of households were considered to be living below the poverty line of US\$4 and 9 percent of them live less than US\$1 per day.

4.5.3. Employment

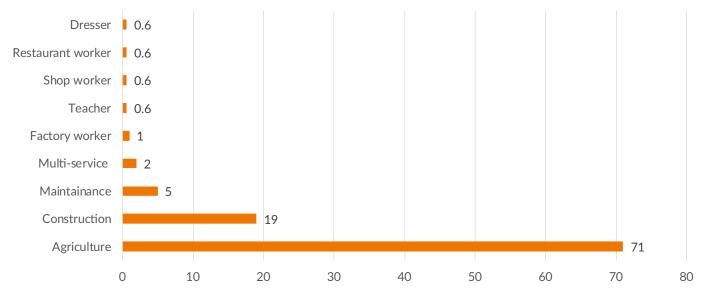
Registered Syrian refugees were allowed to work in Lebanon until early 2015, when national authorities, following mounting social unrest and problems with public service provision, suspended this right. Syrians are now required to sign a pledge not to work and can only sustain their livelihoods through humanitarian assistance provided by the national and international community. The pledge not to work has been changed to a pledge to follow the Lebanese law (which practically means the same, since the Law does not provide work permits for Syrian refugees). In case Syrian refugees are able to obtain sponsorship and a work permit, their legal status is changed to 'migrant workers', despite the fact that UNHCR still counts them as refugees.

Employment of Syrians is now mostly restricted to construction, agriculture and cleaning services, where there is a labor shortage as the occupations do not match the income expectations and skills of much of the native Lebanese labor force. The International Red Crescent (IRC) and Save the Children's qualitative assessment used focus groups from several areas of Lebanon and explained how Syrian men could access only sporadic construction work, earning around US\$10-13 per day. Some women are able to access limited agricultural labor opportunities paid at US\$7-10 per day, however, there is little work in winter. It is normally expected that agricultural labor opportunities increase from April when warmer weather conditions increase farming activities. The number of refugees have also increased, and that created stiff competition for local agricultural work, thus driving wages downwards. On the other hand, expenses for rent, electricity, water, and transport has increased up to US\$300-350 per month on average (WFP 2013).

The work permits in the above sectors require a reduced fee of LBP120,000 (around US\$80 on the basis of market exchange rates) and their ability to do so is constrained by the high level of informality characterizing these activities. In order to obtain a work permit in any other sector, bureaucratic and financial hurdles are even higher: a permit costs LBP480,000, and an employer must first prove his inability to find an adequately skilled Lebanese worker for a given job before he can request a permit for a qualified Syrian worker (Errighi and Griesse 2016). The true cost for migrant employees with work permits is also underlined by the fact that they must pay full contributions to the National Social Security Fund, while receiving only limited social security coverage. ILO (2015) suggests that restrictions to legal access for work by the Syrian refugees in Lebanon, as discussed above, means that refugees are often unable to meet their basic livelihood needs; and this has contributed to expansion of unregulated activities.

On their side, the refugees use different channels to find work, which include Syrian social connections, camp leaders and searching by visiting sites for work. Camp leaders are the main source (60 percent) of getting agricultural jobs, while the rest (40 percent) relies on connections through friends and other contacts. It takes about 60 days for refugees to get work. However, this is much harder in getting work in the non-farm sector and also in the winter season. ILO estimates that, in 2013, refugees spent, on average, 74 days in searching for a job.





Source: Field survey 2016-2017.

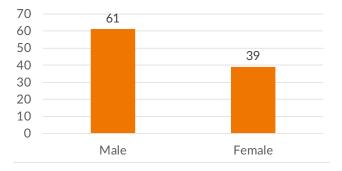


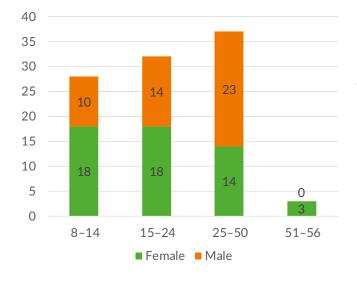
Figure 10. The distribution of Syrian workers by sex (%).

Source: Field survey 2016-2017.

4.5.3.1. Refugee employment in Beqaa valley

Focus group discussions conducted in the Syrian refugee camps revealed that sources of employment include agriculture, construction (which includes builder, plaster, steel works, stonemason, concrete, carpenter, painter, plumber, electrician, paver), artisan (including blacksmith, carpenter, cabinetmaker, sculpture), and services (including hairdresser, greengrocer, shop assistant, tailor, maintenance). The survey captured 181 workers in surveyed households, who are working in different sectors (Figure 9), which shows the overwhelming importance of agriculture as source of employment in Central Beqaa valley. Over two-thirds (71 percent) of workers were in the agriculture sector. Construction is in second place providing jobs to about one-fifth (19 percent) of workers. Other sectors play a very limited role for employment. The livelihood situation forces all family members to work whenever available. This means both

Figure 11a. The distribution of agricultural workers by sex and age (%).



Source: Field survey 2016-2017.

male and female members, as well as children, have to work. However, as shown in Figure 10, in terms of gender balance of employment, the data show that, for all types of work combined, males take a greater share of all jobs (61 percent) than females (39 percent). Examining the workers data by age and sex and by sector reveals that school age children aged 8-14 years form almost one third of the working refugees (28 percent) in the agriculture sector and 8 percent in the non-farm sector (Figure 11 (a and b)). Boys exclusively work in the non-agricultural sector, while both boys and girls work in the agricultural sector. However, more girls are working in the agriculture sector. This clearly shows that these children are not attending school with greater consequences for their future, the future of their communities and for the global community at large. Access to education will be discussed separately below. More discussions on child labor is presented later.

The analysis of the workers data also show that nonagricultural work is almost exclusively men's domain, while the agricultural sector provides employment opportunities for male and female refugees.

4.5.3.2. Employment in agriculture sector

Many Syrian refugees who came to the Beqaa valley had worked as seasonal agricultural labor in Lebanon before the Syrian civil war and some had connections with the Lebanese community. The agricultural seasonal labor was prevalent in the summer. In general, the

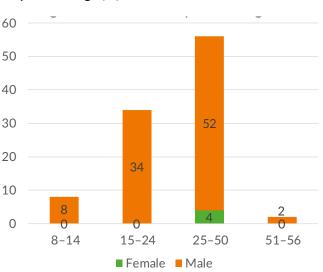


Figure 11b. The distribution of non-agricultural workers by sex and age (%).

Table 4. Distribution of work days by farming activities.

	Vegetables ¹	Vegetables ¹ Main tasks (% of the work)				
Category of workers	Number of work days	Production ³	Harvest	Processing⁵	Porterage	
1 Total days worked per person per year	177	28.8	36	18.4	16.8	
2 Female	93	55	65	67	0	
3 Male	85	45	35	33	100	
4 Average daily wage for men	LBP16,731 (US\$11.15) ²					
5 Average daily wage for women	LBP7,117 (US\$4.74) ⁴					

¹ Vegetables include potato, cucumber, tomato, squash and lettuce.

² Almost the same in all activities except transportation (porterage) LBP17,750 or US\$11.83.

³ Production includes crop husbandry like planting, weeding, fertilization, irrigation, spraying pesticides.

⁴ Almost the same in all activities.

⁵ Cutting, sorting and packaging.

Source: Field survey 2016-2017.

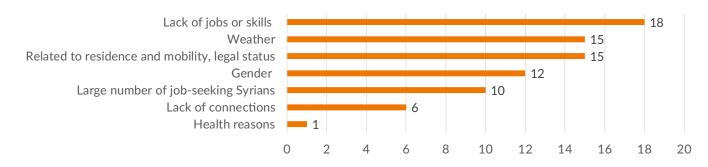
Lebanese farming sector is short of labor because the Lebanese labor market is more competitive with higher pay for manufacturing, services and construction. The reliance on Syrian laborers was a common practice for the last few decades. The daily wage rate of US\$20 that the Syrians take is not accepted by the Lebanese labor who are seeking non-agricultural jobs (Halawi 2015). Most Syrian refugees who provide agricultural labor in Lebanon fled from Der el Zour, Ragga, Idleb, Homs and Aleppo with their families after the war started in Syria. The arrival of these refugees (more than a million) in Lebanon has driven down agricultural wages. The overall effect of the overwhelming numbers of Syrian refugees led the Lebanese authority, in December 2014, to restrict Syrians entry into the country. However, Lebanese farmers have worried about these restrictions due to their dependence on Syrian labor. But the deteriorating situation in Syria pushed people to take risks and escape to Lebanon, even though that means it would be illegal work for them, and that escaping to Lebanon is neither a cheap nor safe solution. In spite of the difficulties, the influx of Syrian refugees to Lebanon is still going on. This huge influx of people looking for work to sustain their livelihoods has created a surplus of agricultural labor and decreased wages.

Most workers in the sample work in vegetables, especially potato, because vegetables are more labor intensive than field crops. The average work days for surveyed households was 177 days/year for vegetables, 67 days/year for fruits, 15 days/year for wheat (Table 4).

Table 4 show that the harvest is the most labor demanding activity, followed by production and processing, most of which are women's domain, but porterage is exclusively men's domain. The survey data show, as noted in Figure 11a, that women provide slightly higher (53 percent) agricultural labor than men (47 percent). Both males and females perform all farming activities including production practices, harvesting, postharvest and processing. Major exceptions are porterage and irrigation, which are men's domain.

The refugee's access to work faces many constraints, which differ between the farm and non-farm sectors. In the farming sector, the constraints are fewer as it is much easier to get agricultural work. Constraints to getting work in the farming sector include lack of sufficient jobs in the face of a large number of Syrian refugees looking for work or lack of skills that are needed for work, harsh winter weather, and issues related to legal residence which affects mobility, rights to work

Figure 12. Constraints to accessing farm work (%).



Source: Field survey 2016-2017.

(work permit) and protection of refugees from different kinds of unregulated conduct (Figure 12).

4.5.3.3. Employment in non-agriculture sector

Construction is the main non-farm sector for employment that provides about one-fifth (19 percent) of the labor work for Syrian refugees. The low-level labor work that Syrians take is not competing with Lebanese workers, who seek work with higher skill demands. However, concerns are raised, in general in Lebanon, that this flood of cheap unskilled labor is competing with and driving wages down for the unskilled Lebanese. Few Syrian workers (9 percent) work with skilled construction work. Survey participants and FGDs requested training in construction work to gain higher skills, particularly working as a carpenter, floor paver (tiles), painter, plumber, sculptor, stonemason, and others.

However, finding construction jobs is not easy for Syrian refugees in Beqaa. Finding non-farm work is much harder for the Syrian refugees. The main way of accessing non-farm jobs is through social connections, especially other Syrians; 72 percent of construction workers in the survey get jobs in this way. The rest (28 percent) got work through visiting different sites and offering their



© Saja Taha Al Zubi (photos taken during filed visit 2016-2017)

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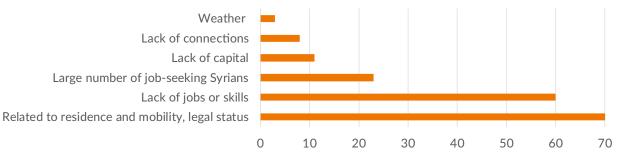


Figure 13. Constraints to accessing construction work (%).

Source: Field survey 2016-2017.

Table 5. Compare means of non-agricultural and agricultural labor.

			Sum of squares	df	Mean square	F	Sig.
Wage per day x work sector	Between groups	(Combined)	3962464459.800	1	3962464459.800	45.938	.000

Table 6. Logistic regression analysis.

	Definition of the variable	В	S.E.	Wald	df	Sig.	Exp(B)
Sex	Male=1, female=0	2.349	.714	10.817	1	.001	10.478
Age	Years	.071	.024	8.731	1	.003	1.074
Education	Illiterate=0, literate=1	1.054	.579	3.313	1	.069	2.870
Health	Not healthy=0, healthy=1	1.352	.608	4.946	1	.026	3.867
Registered	Registered with UNHCR=1, otherwise=0	527	.618	.727	1	.394	.590
Finding work channel	The way of finding work (through acquaintances)=1, others=0	2.943	.555	28.102	1	.000	18.963
Period in Lebanon	Number of days the refu- gees have been in Lebanon	205	.186	1.209	1	.272	.815
Constant		-6.513	1.531	18.091	1	.000	.001

Source: Own elaboration from field survey data.

services. However, the legal situation dictates that many Syrian refugees avoid checkpoints and work in the same village where they reside, or villages close to their camps, whilst some of them take the risk and go for work in different villages, towns and cities.

Access to connections decreases the period for job search time by about 77 days, on average. However, the majority of refugees in Beqaa live in rural areas with limited construction work; they have to move to big cities like Beirut for such opportunity. About 70 percent of the workers in the sample move to Beirut or other villages or cities to get construction work. In this way, the refugees face the risk of being caught as illegal and arrested by security forces. This explains why refugees consider legal status as the most important factor constraining them to seek and get construction jobs (Figure 13). Other factors include a lack of jobs, and competition among the large number of job-seeking Syrians.

During the job search, authorities do not take actions against women and children, however, many women do not have the flexibility of being mobile to seek work, which is related to gender and traditional attitudes. The most important work obstacles are the lack of skills for different sectors and the legal issues. Less than 18 percent of the workers in this survey are considered skilled. Other limitations are related to the lack of connections, the season, the competition between large numbers of Syrian workers, the lack of capital, and the gender, which is related to refugees' cultural traditions. 4.5.4. Determinants of the type of jobs refugee get The previous discussion highlights that agriculture and construction are the most common work among refugees in Lebanon. A logistic model was applied to the labor data, with the sector of work (non-agricultural sector = 1, agricultural sector = 0) as the dependent variable. The explanatory variables considered included sex, age, education level, health situation, UNHCR registration, channels used to get work, and duration of stay in Lebanon. Results are presented in Table 6. The main factors that have significantly explained the chances of getting non-farm work were sex, age, education level, health status, finding work channels. These factors had positive effects on the chances of getting non-farm work in Bekaa. Most men are much more interested in getting non-farm work as agriculture is seasonal and cannot provide employment all-year round.

4.6. Work conditions

The work conditions for Syrian refugee is less than ideal as the refugees have contested. Overall, the majority of workers (67 percent) consider the work conditions acceptable in general, but (28 percent) consider that conditions are bad. Work conditions are affected by many factors including legal problems for work permits, lack of contracts, lack of rights to complain, bad treatment by employers at the work place, fluctuation and seasonality of work, lack of safety practices, short duration of work, low wages compared to work, delayed payments, and lack of safety practices. Some (46 percent) complain about health problems and suffer different diseases related to their work especially. Those who mainly work in construction and porterage complain of a lack of enough breaks to rest. Workers usually get a 60-minute break during the day, but many refugees reported working in conditions that lack safety and security measures, for example, 88 percent of these workers have no protective equipment. The

Box 2

Abo Tamam who is a construction worker said, "Although I have legal residence in Lebanon and I am not registered at UNHCR, the boss doesn't accept to sign a contract for me and I have no way of asking him my rights. I couldn't even complain when my wage has been denied."

Box 3

Abo Ahmad is a construction worker who fell at work and broke his arms. Although thankful to his boss, he says: "My boss takes charge of the medical care in the hospital, but he didn't give me any compensation, although I stopped working and have no other income source. Now I need a surgery, but I do not have money for that."

Abo Ahmad is thankful to his employer as he is aware other cases that got nothing. He reported "Om Abdo who is widow, her husband fell while he was working in construction, and died, the boss gave her nothing at the beginning, then he gave her 3000\$ as compensation and asked (threatened) her not to complain at UN."

Box 4

Abo Rakan who is the leader of this new camp said: "We cannot be slaves, we are herders and deal directly with the owners. It is true sometimes they exploit us but its better from dealing with the al shawish."

relation with the farmers is argued to be 'disrespectful', particularly with women due to different kind of alleged abuses. Women asked for training in non-farm activities like sewing, dress-making, knitting, embroidery and teaching, to supplement their farm work or reduce their dependence on farm work.

The most important issue related to work conditions that most Syrian workers are concerned about is the legal issue. They have no legal residence and work permits in Lebanon. For that, they do not have any guarantee for their rights, Syrian refugees' workers in the sample and FGDs characterize this as a situation with "no rights for Syrian refugees, no guarantees, and no respect."

The pledge for no work condition imposed by the Lebanese Government on the refugees under the UNHCR framework, increases the emergence of a labor

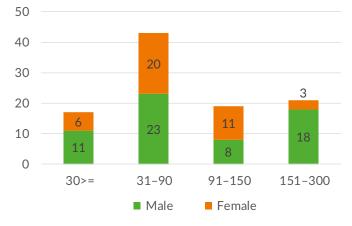


Figure 14. Work period distribution by gender (%).

Source: Field survey 2016-2017.

black market and increases the chances of exploitation and abuse. Refugees consider that contracts and work permits can guarantee workers' rights. The workers reported that only large companies provide health insurance, but do not provide it for all Syrian workers.

The legal issue also constrains the mobility of workers to get to work and to search for work. Usually workers find agricultural work opportunities through camp leaders and labor bosses (*al shawish*) who work with landowners and farmers and who know where work is needed. These labor bosses charge commission to workers for connecting them to the work. Some workers do not like paying commission to *al shawish* so it takes a longer time to get work (around 30 days) and they prefer to work through their Syrian or Lebanese connections or search for work themselves by visiting different sites. Agricultural workers have much more flexibility for mobility to work, in spite of the illegal residence situation, because the majority are women

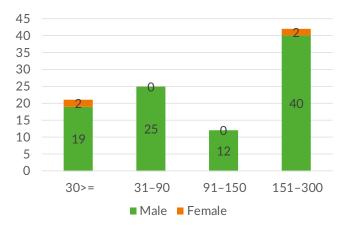
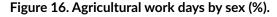
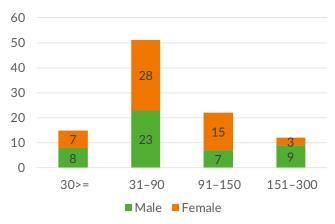


Figure 15. Non-agricultural work days by sex (%).

and children. Authorities are less inclined to take action against women and children and more likely to sympathize with them. However, all women do not have mobility in flexibility to work due to gender constraints related to traditions and customs. The al shawish have an advantage with greater ability in moving workers by using the name of the landowner who can easily cross checkpoints with workers. However, there are reported cases of conflict between the al shawish and local customs and preferences. One reported case is that 25 households gathered and established a new camp after the al shawish evicted them because their traditions do not allow women to work and they have no children to work with *al shawish*. The men of these families are herders with conservative traditions and no experience in farming and they refused to work with al shawish, hence they were forced to leave the camp after many warnings to provide labor by the al shawish.

Another problem with work, in general, is its short duration and seasonality which creates unstable income. The survey included duration of work for the 12 months before the survey to assess stability of work. Figure 14 shows that 60 percent of the workers surveyed worked only 3 months (90 days) or less, only 21 percent had work over 5 months. The average working days for the sample was 123 days. Some (17 percent) of the workers had jobs less than 30 days and some worked only 10 days during the whole year. The duration of work over the year is an indicator of household income stability. The survey findings also indicate that male workers had greater chances than females to hold longer-duration jobs. Overall, agricultural work is concentrated in the shorter period up to 3 months, while all non-farm work, when combined, has a longer occupational period





Source: Field survey 2016-2017.

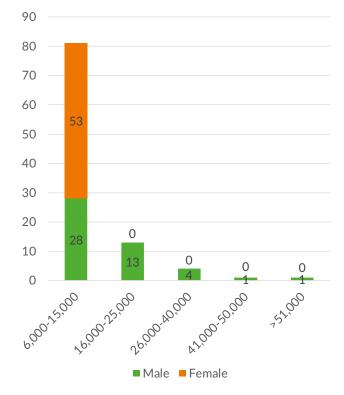


Figure 18a. Distribution of farm workers' wages by sex (%).

Source: Field survey 2016-2017.

with 42 percent having work for over 5 months as shown in Figure 15. The non-farm work, such as nonseasonal work as a teacher, worker at (restaurants, shop, dressmaker) and maintenance are rare to find but provide longer periods of work. Work in food-processing factories (pickles and tomato paste) is also highly seasonal as it is connected to agriculture.

Agricultural work is seasonal mainly in summer, so not much work is available in winter except in greenhouses. As shown in Figure 16, half of agricultural workers (51 percent) work between 90 and 30 days which means they have no work for 9 months of the year.

4.7. Wages

The daily wage of the Syrian refugee labor ranges from LBP3,000 to LBP60,000 (or US\$2 to US\$40). The average wage in the non-farm sector was computed at LBP21,212/US\$14, and that of the farm sector was at LBP10,824/US\$7. The majority of surveyed workers (68 percent) reported the lower end of daily wages ranging from LBP3,000 to LBP15,000. Only 1 percent of workers reported wages at the higher end of over LBP51,000 (Figure 17).

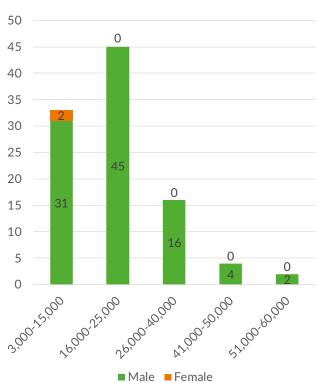
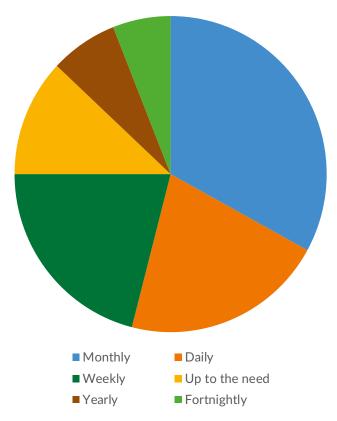


Figure 18b. Distribution of non-farm workers' wages by sex (%).

There is a clear gender gap in wages among Syrian refugees. Overall, women make up the majority of low wage earners. Figure 17 shows that all women workers (100 percent) earn wages at the lowest end of the wages' spectrum. While 47 percent of males fall in the low wage category and the rest earn higher wages. In the agriculture sector, 53 percent are female, and all are in the lower wages earners, whereas only 60 percent of males fall in that category (see Figure 18a). Figure 18b shows the non-farm sector, however, only 2 percent are women and they are low wage earners, in addition to 31 percent of the men. In the agro-food sector, men earn LBP15,000 per day and women earn LBP10,000 per day for the same type of activity, which is 33 percent lower.

ILO (2013) reports that working Syrian refugees have an average monthly income of LBP418,000. This average income is significantly lower than the minimum wage in Lebanon which is LBP28,675,000 and less than the poverty line of US\$4.00 (LBP6,000) per person per day assuming 5 people per household.

Analysis of the survey data show that men's average monthly wages is at LBP547,402 per month, and that of women's is at LBP211,304 per month. This Figure 19. The regularity of agricultural wage payments.



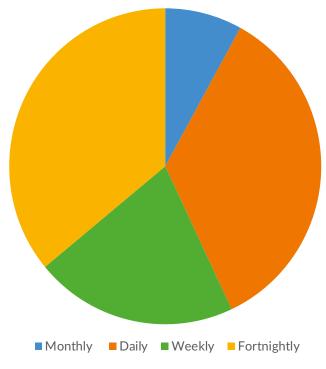
means that men earn 61 percent higher wages that

Source: Field survey 2016-2017.

women. ILO (2013) estimates average income of LBP248,000 per month for females, and LBP432,000 per month for males; this shows a lower wage gender gap (43 percent) than estimated in this survey.

One factor attributed to women's lower wages is the argument that women are willing to accept lower wages compared to men, and that is one reason that labor bosses (al shawish) prefer women or children (child labor is discussed in detail below) and is the driving factor for higher demand for female labor, particularly in agriculture. Agriculture is also considered as the traditional work for women and hence there is a tendency to seek women labor for that sector. Women and children also prefer to work closer to their camp, where agriculture is the only work opportunity available and with shorter working hours (5 hours) per day. However, many workers (30 percent) do not prefer agricultural work but have no other opportunities. In spite of low wages, there are other difficulties, (24 percent) of the interviewees consider conditions of agricultural work to be bad, because of long working hours (especially in irrigation from 8:00 am-11:00 pm)

Figure 20. The regularity of non-agricultural wage payments.



Source: Field survey 2016-2017.

in severe weather conditions, maltreatment (especially for children and women), and activities that need heavy physical effort, which affects their health; (33 percent) reported that they suffer from disc problems, nerve problems and arthritis. This is in addition to the allergy from chemical spraying without safety equipment, only (11 percent) has safety equipment for chemical spraying.

Another important issue on working conditions is the regularity of payments. The payment schedule varies including daily, weekly, monthly, fortnightly and seasonally (Figure 19). These payment schedules are sometimes not respected, especially for seasonal workers, and sometimes payments are delayed. Some workers (40 percent) reported delayed payments with even higher delays reported in the construction sector.

Figure 19 shows that the majority of the farm work payment schedules (33 percent) are monthly, 21 percent get paid weekly and (12 percent) get their wages up to their need by taking multiple payments without fixing a specific time, although this is exclusively for women. Cash availability with the business owners (farmers or contractors) is the main reason for the payment delays. Figure 20 shows that the popular payment of non-farm work is daily (35 percent), fortnightly (36 percent), weekly (21 percent), and monthly (8 percent). 30.8 percent of the workers reported that their payments are not regularly paid, and they attribute this to their irregular work and the employer's cashflow availability.

Fifty-one percent of refugees confirmed that work payments are delayed and, in some cases, are withheld. On average, the cumulative wages for 4 months which were withheld is in the range of LBP50,000–3,000,000 or US\$33–2000.

Construction labor is for males only because it needs strength, skills and because local attitudes regard construction as a male's job. Construction labor in general was confirmed by 51.3 percent of workers to have some advantages as: 1) high wages for skilled workers; 2) fitting the labor demand, although no guarantee for Syrians to be able to stay at the work and may be evicted at any time and it was less available in winter.

4.8. Child labor

Child labor deprives children of their right to go to school, exposes them to violence, and reinforces intergenerational cycles of poverty. Child labor is a serious violation of human rights. But it is preventable through integrated approaches that simultaneously address poverty and inequity, improve access to and quality of education and mobilize public support for respecting children's rights (UNICEF 2014). Overall, 22 percent of workers reported in the survey were children, 59 percent of them were female and 41 percent were male. This shows that young girls have slightly higher chances of working.

ILO explains that not all work done by children should be classified as child labor which should eliminated.



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Children's or adolescents' participation in work that does not affect their health and personal development or interfere with their schooling is generally regarded as being something positive (children working). This includes activities such as helping their parents around the home, assisting in a family business or earning pocket money outside school hours and during school holidays. These types of activities contribute to children's development and to the welfare of their families; provide children with skills and experience and help them to become productive members of society during their adult life. The term 'child labor' is often defined as work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development. In its most extreme forms, child labor involves children being enslaved, separated from their families, exposed to serious hazards

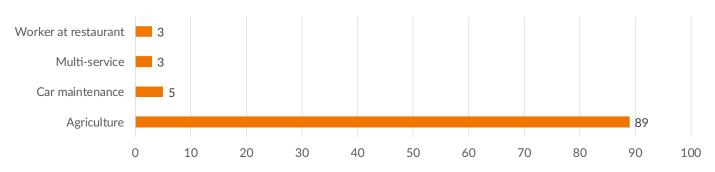


Figure 21. Sectors of child labor (%).

Source: Field survey 2016-2017.

and illnesses and/or left to fend for themselves on the streets of large cities—often at a very early age. Whether or not particular forms of 'work' can be called 'child labor' depends on the child's age, the type and hours of work performed, the conditions under which it is performed, and the objectives pursued by individual countries. The answer varies from country to country, as well as among sectors within countries (ILO 2004).

In this study, child labor is considered in the case where children are below 15 years old, they work and do not go to school. Most Syrian refugee children do not attend schools for many reasons which will be explained later, but one of the most important reasons is child labor to help their families sustain their livelihoods. The survey data show that 28 percent of all agricultural workers in the sample are children aged between 8 and 14 years. Almost 2 in every 3 working child (64 percent) are girls.

Figure 21 shows that agriculture is the main employer of children, where about 90 percent of children work, while only 10 percent work in the non-agricultural sectors including car maintenance workshops, multiple unspecified activities, and restaurants. Child labor is an important point in Syrian refugees' livelihoods. Children in the camps are 'forced' to work to help their families to survive, and they do not attend school and, if they do, they drop out. The impact of child labor and failure to attend school and lack of education will have long-term social, psychological, economic and political impacts on refugee families and on the future of Syria.

The refugee families do not want their children to work and would rather have them educated. However, these families have difficulty in sustaining their livelihoods and, as a result, they resort to using their children for labor as a way of maintaining their livelihoods. Even letting women work without their male kin is considered socially unacceptable, but families are forced to choose to do so. The labor bosses (al shawish) are also pushing for child labor. They often ask families to provide women and children for work and, if they do not provide, they ask the families to leave the camp or pay higher rent. The motivation of the al shawish is clearly to ensure their commission on labor. Another motivation is to make sure that refugees earn wages to pay off all the expenses including rent, electricity and water in the camp. The labor bosses have loyalty to the landlords and aim to ensure that these payments are made.

Children's wages are the lowest starting from LBP3,000/ day (or US\$2) up to LBP12,000 (about US\$8) a day. But the overwhelming majority of children earn a wage of LBP6,000 (US\$4) a day. Families prefer their children to become trained in specific skills like car maintenance rather than agricultural labor. The seasonal work in agriculture is not preferred but no other choices are available. Children sometimes face guite harmful working conditions as reported in the case of 13-year old girl: Ahlam. Ahlam used to spread seeds from a tractor. Once Ahlam fell and the tractor run over her legs, which were so badly damaged that the doctor considered amputation. Ahlam said "I am afraid to work again but I asked the boss if I can work in harvesting and he refused; I can't walk fast now especially on wet land." Other children who work in the cold harsh winter suffer from different ailments.

4.9. Livelihood outcomes

4.9.1. Food security

Many reports assess the food security and nutritional situation of refugees residing inside and outside camps in Lebanon (FAO 2014; UNHCR, WFP, and UNICEF 2014; 2015; 2016; 2017; Government of Lebanon and the United Nations 2017). According to the UNICEF and WFP (2014) Joint Nutrition Assessment of Syrian children aged 6 to 59 months and pregnant and lactating women, the nutritional status of Syrian refugees in Lebanon was deemed acceptable, with the prevalence of global acute malnutrition (GAM) at less than 5 percent. Severe acute malnutrition (SAM) was recorded at less than 1 percent and a percentile of 6.8 percent of Syrian refugees were deemed at risk of malnutrition. Data regarding stunting and underweight for Syrian refugee children under-five in Lebanon proved to be lower than previously reported. However, the presence of aggravating factors, such as the increased number of new arrivals, the high disease burden and cold climate, was considered a source of high risk for rapidly deteriorating the situation (WFP, UNHCR, and UNICEF 2014).

The refugee's food security situation is also subject to seasonality. In the summer, it is considered acceptable while less so in the winter, mainly because of greater availability of agricultural and non-agricultural income sources in the summer. There is also greater availability of crop residues that is collected from fields after harvest (potato, lettuce, turnip and others) which enhance



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refugees' household food security. The results of the survey in this study highlight several points about food security of the refugee families in Beqaa as follows:

4.9.1.1. Number of meals

In the summer, most families have three meals, but in winter two meals are more common. This is related to better income-generating opportunities, longer days and working hours, and the chances for postharvest collection of crops from fields without charge. The survey data how, in winter, 63 percent of households eat 3 meals per day and that, even if they do not have income, they cannot reduce the number of meals because they have young children. This means they have to take loans to cover their food consumption. On average, the number of meals consumed by refugees is 2.6 meals per day, while UN statistics show that the number of meals consumed by adults is 1.8 meals per day, and children under five consumed an average of 2.3 meals per day in 2016. The UN report confirmed the number of meals consumed each day is falling for both adults and children since 2014, which is a sign that food insecurity remains a burden among the Syrian refugee population (UNHCR, UNICEF, and WFP 2016). The pressure for providing food is much greater on large families with more children because they are more vulnerable to food insecurity, and they are the ones most likely to borrow for food expenditures, and hence, most likely to face problems of debt. The refugee Abo Badr, who came from Al-Raqqah, with his family of 28 members said that, "I have many grandchildren in the tent eating at different times; nothing can control them to eat at the same time-whenever you come you will see some of the children are eating."

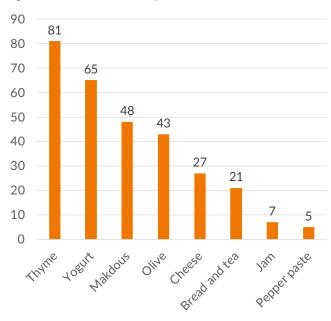


Figure 22. Breakfast components (%).

Source: Field survey 2016-2017.

Box 5

Om Mohammad, an old widow female living with her son's family said, "I am a sick woman and my son doesn't work. When I feel hungry, I eat onion and tea as it's better than I ask people for charity." Note: at the time of the interview, this family had nothing to eat in their kitchen.

4.9.1.2. Dietary diversity

Food security is not only the number of meals and quantity of food available, but it is also about the diversity of diet and nutritional quality of that food. In the survey, we found that breakfast usually includes 3 main components, on average, and the most popular one is thyme (81 percent) with maize oil, yogurt (65 percent), and homemade makdous (vegetable dish) (48 percent). The consumption frequencies of different products are shown in Figure 22. Jam, olive, and pepper paste are also homemade and depends on family employment in crop harvesting. The refugee families mainly depend on bread. Some families consume up to 9 bread packages per day (package: 7 loaves=1 kg); the average in this study is 4 packages per day. A question about diet diversity for a 7-day recall period reveals that potatoes (96 percent) were the main food item, which is consumed in many different ways including fried, boiled, with eggs, with

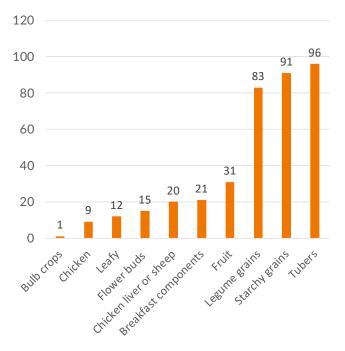


Figure 23. The main components of the main meal (%).

Source: Field survey 2016-2017.

onion and with lemon. Some families eat potato for 5 days during the week, and (36 percent) eat potato more than 3 times in a week. Starchy grains, wheat and wheat products (*bourghul*, spaghetti) and rice were in second place (91 percent). *Bourghul*, alone, occupied (75 percent) of starchy grains and (10 percent) of the refugees eat it more than 3 days during the week.

Legume grains were in third place (83 percent), which include faba bean, chickpea, beans, pea, lentil; lentil soup is popular in winter, hence lentils occupied first place (74 percent) out of the legume grains. Other components are explained in Figure 23.

Refugee families reported fresh vegetables consumed included tomato, eggplant, okra, zucchini, cabbage, spinach, and cauliflower. Some of the most vulnerable refugee families reported that, at times, they are not able to cook, and they eat what remains from breakfast or bulb crops (onion, garlic) and bread with tea.

Almost all refugee households (97 percent), on average, consume a secondary component with the mean meal 3 days per week on average. The most common items are legumes (lentil, peas) with rice and or bourghul (64 percent). Fruits and vegetables are consumed by about a third of the households (Figure 24).

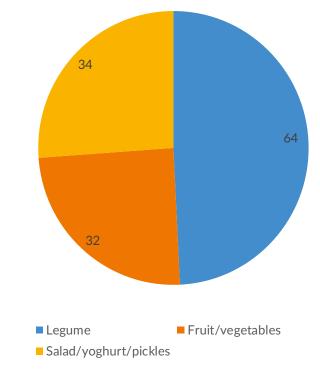


Figure 24. Secondary components of the main meal (%).

Source: Field survey 2016-2017.

Meat consumption: Some (44 percent) of refugee households do not consume veal or mutton at all. However, they rely on chicken for protein intake, which is consumed on average once a month; most times they will consume lower-grade meat, including sheep heads, sheep or cow offal. The UN reports that consumption of animal protein and vitamin A-rich fruit and vegetables are limited among refugees, with the majority (more than 70 percent) of households not including these foods in their weekly diet (UNHCR, UNICEF, and WFP 2016). Chicken is the most common because it is cheaper, with an average consumption of twice per month. Some families depend on low-grade chicken meat such as necks or liver. Om Ahmad, a widow with 4 physically and psychologically-affected children by the war in Syria, said "Sometimes I do not have enough bread, but my children need protein, so I bring them chicken necks."

Fruit consumption: Refugee households only occasionally buy fruits at about 3 times per month, on average, mainly by families with children, and mostly it is the cheapest type which is not marketable.

Lack of food: The majority (84 percent) of families are suffering from qualitative lack of food, and (43 percent) of them are suffering from quantitative lack of food,

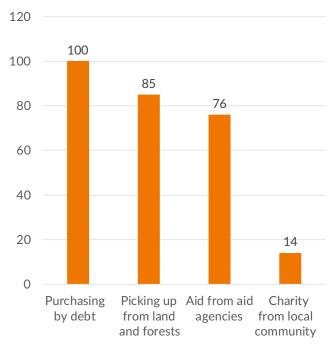


Figure 25. Food sources (%).

Source: Field survey 2016-2017.

and this is also confirmed by the UN report in 2015, which reports that most households (89 percent) reported having experienced lack of food or money to buy food (UNHCR, UNICEF, and WFP 2015). In this survey, only 3 percent of families reported that they do not suffer from lack of food; 15 percent reported that they experienced temporary lack of food mainly in the

Figure 26. Coping food strategies (%).

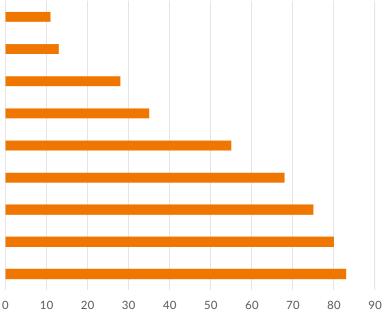


winter; and 72 percent of refugees face permanent lack of food, especially, in terms of sufficient quality. About 87 percent of families reported lack of food during the last week before the interview, for about 3 days a week on average, and they confirmed that a lack of food is common for the whole of the last year, but this obviously is a seasonal issue.

4.9.1.3. Sources of food

Debt is the most important source of financing access to food. All refugee families reported that they purchase their food mainly by credit, but at different levels. Although 76 percent of refugee families get food vouchers as aid provided by humanitarian agencies, food vouchers do not cover all household needs and they do not have enough income to supplement food aid. Figure 25 shows different ways that refugee households access food.

Picking up crop leftovers in fields after harvest and wild herbs are the second most important source of food as reported by 85 percent of the households, and charity from host communities (NGOs, local people) is the lowest. The vouchers received by Syrian refugees registered with UNHCR to exchange for food are in third place after debt and picking up crop leftovers. UN reports confirm that food assistance represents a crucial source of refugees' consumption even though refugee families complement meals with fresh foods, which they buy on their own. About half (51 percent) of



Source: Field survey 2016-2017.

food voucher beneficiaries use this strategy (UNHCR, UNICEF, and WFP 2016). According to the UN and the Government of Lebanon report, only 25 percent of households rely on food assistance as their main source of food (Government of Lebanon and UN 2016), and 30 percent of Syrian refugees mainly purchase their food using their own funds and 18 percent using creditor borrowing (UNHCR, UNICEF, and WFP 2015).

4.9.2. Food insecurity coping strategies

In response to protracted poverty among refugees, leading to rising food insecurity, most households (97 percent) are adopting negative coping strategies. The most common strategy is decreasing health expenditures (83 percent). Refugees also try to add value to the crops they pick up through different home food processing (55 percent). These include making pickles—an important secondary component in dinner—and preparing jam, pepper or tomato paste, and also, they make cheese and yogurt, and make their own bread. These coping strategies are shown in Figure 26.

The figure shows other strategies including: selection of cheaper foods, such as low grade vegetables and fruits which are not marketable; and sending children to places where they can get food, such as wedding parties in the camp or in the surrounding Lebanese community. Other strategies include: reducing food spending and essential expenses such as education; selling assets such as houses or agricultural lands in Syria, and taking children out of school. These findings are similar to those found in the UN statistics which highlighted that the strategies most used in 2016 were reducing food expenditures (85 percent), buying food on credit (77 percent) and reducing essential non-food expenditures (67 percent) (UNHCR, UNICEF, and WFP 2016). Food sources such as purchasing by debts and picking up crop leftovers (Figure 25), in addition to child labor, are not considered coping strategies as they are common habits or behavior among the vast majority of refugee households.

Food security indicators: There are four important indicators of food security: food consumption (diet diversity); the number of days lacking sufficient food; share of food expenditures on income; and food insecurity coping strategies. Following the UN food security classifications, four food security classifications were identified: food secure; mild food insecurity; moderate food insecurity; and severe food insecurity. The descriptions of these categories are provided in Table 7.



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A food secure situation is defined as when households are able to meet essential food and non-food needs without engaging in atypical coping strategies. Mildly food insecure is defined as having minimal adequate food consumption without engaging in irreversible coping strategies but households are unable to afford some essential non-food expenditures. Moderately food insecure are those with significant food consumption gaps or those who are just able to meet minimum food needs only with irreversible coping strategies. Finally, severely food insecure refers to households with extreme food consumption gaps or households with extreme loss of productive assets, which will lead to food consumption gaps or worse (UNICEF, UNHCR, and WFP 2016).

Most refugee households are concerned about securing starchy foods, such as bread, and less so about maintaining dietary diversity. The more vulnerable households with fewer resources or capacities to generate income are much more likely to suffer more from a lack of dietary diversity. They cannot afford to have meat, chicken, fish or fresh fruits. The Government of Lebanon and UN reported that the percentage of households experiencing low dietary diversity increased from 4 percent in 2015 to 14 percent in 2016 (15 percent for female-headed households), while the percentage of households with a high dietary diversity dropped from 46 percent in 2015 to 23 percent in 2016. Consumption of nutrient-rich healthy food groups, including vegetables, dairy products and eggs, remained low in 2016 (Government of Lebanon and UN 2016). In this study, we found that all women-headed households (100 percent) suffer from poor diet diversity, while men-headed households suffer only marginally lower (93 percent) dietary diversity.

		Food securit	ty categories ¹	
Indicators	Food secure (acceptable)	Mild food insecurity (acceptable with food-related coping strategies)	Moderate food insecurity (borderline)	Severe food insecurity (poor)
Day/month meat, vegetables and fruits and dairy are consumed	21 days or more	18-21 days	11–17 days	Less or equal to 10 days
Households (%)	3	3	none	95
Day/week family lacks enough food	0 days	1–2 days	3-4 days	5-7 days
Households (%)	21	44	23	12
Income share of food expenditures	<25% (<50%)	25-50% (50-65%)	51-75% (65-75%)	>75%
Households (%)	3	73	24	None
Number of food insecurity coping strategies	No coping strategies	1–3 strategies (stress coping strategies)	4–7 strategies (crisis coping strategies)	8–12 strategies
Households (%)	3	13	53	31

 Table 7. Food security classifications of the Syrian refugees in Bekaa, Lebanon.

The categories in italics and in parenthesis are the food security categories used by the UN, the values of these categories are shown in parenthesis where they differ from value estimates in this study.

Source: Field survey 2016-2017.

In the survey, households were asked about the incidence in lack of food and they reported the number of days they suffer from lack of food for the last week before the survey. Some 44 percent of respondents have experienced 1-2 days per week from a lack of food, most of the refugee households consume low nutrition foods, mainly starchy products and crop residuals that they pick up from fields after harvest. The poorest households (12 percent) reported lack of food for 5 days or more per week; these families cannot get crop residues or vegetables from fields because they do not work in agriculture, or they have large families. They are facing lack of enough food. People who are rejected from UN refugee status or those who do not receive food vouchers, who make about 30 percent of the sample, suffer more food insecurity. For those who

receive food vouchers, these cover only 2 weeks per month and they must find other sources to buy food until they receive vouchers in the following month.

Income share of food expenditures. Another important food security indicator is the income share of food expenditure as the household allocates income to cover food and non-food needs. The more vulnerable families reduce their non-food expenditure, like health and education, to increase their expenditures on food. In this survey, only 76 percent of households were characterized as having an acceptable level of food security, but with the overwhelming majority (73 percent) adopting food-related coping strategies. The rest (24 percent) are on the borderline of food insecurity. The refugee households were asked about their expenditures for the last 12 months prior to the survey. The results are shown in Table 8 and summarized by expenditure group in Figure 27. This figure shows that the highest category of expenditures (47 percent) is on food. Utilities, health and housing expenditures follow far behind at 13 percent, 10 percent and 9 percent, respectively. Housing costs are high because of the continuous maintenance required by the tent with structures and sheets (shelter is discussed in detail below).

Although, share of food expenditure falls within the limits (25 percent) of the food secure category, the reason for the relatively lower food expenditure share is that many of these expenses like housing and utilities have to be paid, as otherwise, households can be evicted from the camp, and they may rather go without food rather than risk being evicted. Another reason is that food collected from the fields is not included in this calculation.

Communications, such as the mobile and internet, is very important for refugees to receive UNHCR messages, and to contact their relatives in Syria and abroad. Education expenditures, which is in fifth place at 7 percent is highly inadequate for supporting school children, which will have grave consequences for the future of this young generation.

Table 8 shows the gap between the refugees' household income and expenditures, which is estimated to be LBP295,963.28 per month (US\$197.31), this amount will continue to build up as debt owed to landlords and local enterprises and is the main reason, in many instances, that obliges refugees to tolerate poor working conditions. About 70 households, which is 94 percent of the surveyed refugee households, live below the Lebanese poverty line of US\$4 a day.

Food coping strategies. Only 3 percent of the surveyed households have acceptable food security situation with no food-related coping strategies. These are mostly camp leaders or *al shawish*. At the other extreme are those classified as having poor food security, 31 percent, who have 8–12 coping strategies. However, over half of households (53 percent) use 4–7 coping strategies, and these are classified as being borderline for food insecurity. The remaining 13 percent of households are moderately food secure households, adopting 3 or fewer coping strategies. The UN classified the strategies according to their severity or irreversibility into four categories—no

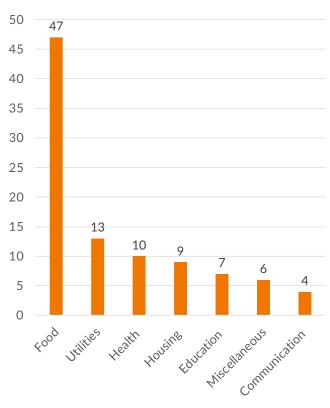


Figure 27. The distribution of Syrian refugee expenditures (%).

Source: Field survey 2016-2017.

strategy, stress, crisis and emergency strategies. Stress coping strategies, such as borrowing money or spending savings, are those which indicate a reduced ability to deal with future shocks due to a current reduction in resources or increase in debts. Such coping strategies, which 50 percent of the households used, are the least severe category. Emergency coping strategies, such as selling one's land, affect future productivity but are more difficult to reverse or are more dramatic in nature. Such strategies adopted by 12 percent the households are the most severe. The crisis strategies, such as selling productive assets, directly reduce future productivity, including human capital (UNHCR, UNICEF, and WFP 2014).

Food security index. Food security is defined as the state in which people at all times have physical, social and economic access to sufficient and nutritious food that meets their dietary needs for a healthy and active life. Using this definition adapted from the 1996 World Food Summit (FAO 1996) the framework for the food security index was developed the Global Food Security (GFS) Index, which considers the core issues of affordability, availability, and quality, can be computed. The GFS index Table 8. Average Syrian refugee expenditures per month.

Item expenditures	US\$ per month	LBP per month
House (tent)		
Rent	31.67	47,500.00
Maintenance	27.38	41,072.22
Home furnishings	9.39	14,088.89
Living expenses		
Food	302.84	454,260.00
Children milk and needs	37.13	55,686.67
Cleaning materials/detergent	35.37	53,053.33
Health		
Regular medicine	31.84	47,760.00
Emergency medicine	0.97	1,456.57
Visit doctor	0.58	871.67
Entry hospital	2.12	3,171.25
Education		
School fees	0.38	570.44
Stationary	0.24	356.57
Transportation	24.36	36,538.46
Cash money for children	25.86	38,788.46
Communications		
Mobile	23.64	35,453.33
Internet	7.38	11,066.67
Service		
Drinking water	14.28	21,413.33
Wash water	7.28	10,906.67
Governmental electricity	15.21	22,813.33
Generator electricity	15.52	23,273.33

Item expenditures	US\$ per month	LBP per month	
Transportation	39.12	58,666.66	
Get rid of the refuse	5.49	8,233.33	
Energy (fuel and firewood)			
Fuel warming	1.31	1,960.65	
Firewood heating	1.37	2,050.93	
Firewood cooking	0.27	400.00	
Gas cooking	25.25	37,866.67	
Miscellaneous expense			
Clothes	2.07	3,101.85	
Smoking	39.92	59,873.33	
Charity	0.04	58.67	
Total expenditure	728.2089	1,092,313.3	
Income (from Table 3)	796,350.0	530.50	

Source: Field survey 2016-2017.

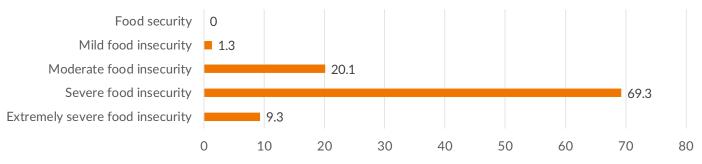
provides a single scoring model combining different indicators that measure drivers of food security and can be used to assess which categories of households are most and least vulnerable to food insecurity (Napoli 2011; The Economist Intelligence Unit 2017).

The computation of the food security index was previously described in the methodology section. With this approach, five categories were identified: (1) extremely severe food insecurity with food security index score of 0-2; (2) severe food insecurity with FS index of 3-5; (3) moderate food insecurity with FS index of 6-8; (4) mild food insecurity with FS index of 9-11; and, (5) fully food secure with FS index of 12. Figure 28 shows that most refugees (69 percent) are severely food insecure, while 9 percent are extremely food insecure and need an emergency intervention. Notably, none of the refugees achieved the satisfactory level of food security.

In another approach, principle component analysis method was applied to the original data of the food security indicators in Table 7. The first principle component was then used to classify households into four food insecurity quartiles. Table 9 presents the descriptive statistics of the four food security indicators (diversity of food consumption, number of food coping strategies, income share of food expenditures, and days lacking food) in the four food insecurity quartiles. In this analysis, the fourth quartile is the most food insecure with very low dietary diversity of consumed food, adopting over 8 food security coping strategies, suffering from a lack of sufficient food for more than 4 days per week, and with 47 percent of expenditure (income) on food.

Furthermore, ANOVA was applied in the second food security index, with the aim of identifying the most effective indicator of household food security. The ANOVA results in Table 10 show that days in lack of food and number of food coping strategies have high significance in identifying household food security. The ANOVA Table 10 shows that the most significant food security indicators that distinguish different food security quartiles are days that households lack sufficient

Figure 28. Distribution of households by food security index (%).



Source: Field survey 2016-2017.

Table 9. The food security index.

Percentile group of First Principal Component		dietary diversity food coping e		Food expenditure share (%)	Days lacking food	REGR factor score 1 for analysis 1*
4	Mean	0.1531	8.3333	46.5331	4.4444	1.1508019
3	Mean	0.1132	7.6316	43.4427	2.5789	.3973651
2	Mean	0.1107	6.5789	42.5885	885 1.526314	
1	Mean	0.1059	3.5789	40.0641 .2632		-1.3383751
Total	Mean	0.1208	6.5067	43.1533	2.1733	.0000000

* REGR factor score1 for analysis 1 is a term used in principle component analysis showing how well each variable predicts the score.

Source: Own elaboration from field survey data (2018).

food and number of copying strategies, whereas income share of food expenditure and dietary diversity were less important. This can be explained by the fact that all these families are poor and there is not much variation in these later indicators.

The Table also shows that the most vulnerable people who suffer from lack of food more frequently and apply more coping strategies, but the food consumption (diet) is limited for all refugees.

4.9.3. Food security and gender

Refugee households were headed by women. However, there are some gender-based differences in the food security situation of refugee households. For nearly every indicator of food security, women-headed households fared worse than their male counterparts. For dietary diversity, 100 percent of the women-headed households were in the poor food security category, while male-headed households were slightly better at 95 percent. These results are similar to those reported by the UN, where women-headed households were found to be more food insecure than men-headed households (96 percent vs 92 percent), and households headed by women had a worse diet with (15 percent) having low dietary diversity (UNHCR, UNICEF, and WFP 2016). For coping strategies, 57 percent of womenheaded households were borderline, and 43 percent were in poor food security categories, respectively, while male-headed households in those same categories were 5 percent and 30 percent, respectively. Similarly, 71 percent of female-headed households were in the borderline category with regards to food expenditure, whereas 25 percent of male-headed households were in that category. Finally, for the number of days lacking food indicator, 35 percent of female-headed households were in the borderline category and 57 percent were in the poor category, whereas 26 percent and 8 percent

		Sum of squares	df	Mean square	F	Sig.
Days lacking food	Between groups	173.250	3	57.750		
	Within groups	63.497	71	.894	64.574	.000
	Total	236.747	74			
Inverse of	Between groups	.027	3	.009		
food dietary diversity	Within groups	.821	71	.012	.776	.511
	Total	.848	74			
Food coping strategies	Between groups	247.062	3	82.354		
	Within groups	135.684	71	1.911	43.094	.000
	Total	382.747	74			
Food	Between groups	405.919	3	135.306		
expenditures	Within groups	8000.899	71	112.689	1.201	.316
share	Total	8406.818	74			

Table 10. ANOVA analysis of the food security indicators.

Source: Own elaboration from field survey data (2018).

of male-headed households were in these categories, respectively.

4.10. Homestead micro-food production

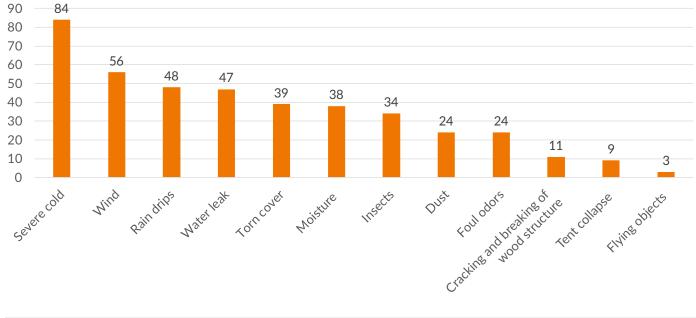
One way that households cope with food insecurity is through home-based food production. In this study, only 26 percent of interviewed families had homebased livestock production with a few animals in the order of 3 chickens, 5 lambs/sheep and 2 goats, on average. These micro-enterprises generate consumed food at the value of about LBP90,000 per season from chicken, LBP205,000 from sheep, and LBP22,6875 from goats. These are mainly used for household consumption. Sheep and goat milk are used for feeding babies and used to make cheese and yogurt. Um Adnan, an old lady, said "I cannot live without sheep or goats. I wish I can get a loan to purchase more sheep and goats, then I will sell dairy products and improve my tent." Clearly this lady sees the livelihood opportunity of these enterprises beyond household consumption. Chicken is available in most camps, but sheep and goats are more prevalent in camps where people have background and expertise on livestock before the Syrian crisis. Often this group of people settle in the same camps.

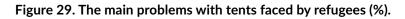
However, animals are kept within the same tents where people live and there are health concerns about the close interaction between animals and people in the same living space. Animals do not have specific barns, they eat whatever leftover foods are available and have limited access to fodder due to limited grazing areas, which constrains productivity.

Home gardens were not found among the interviewed households in this study and their explanation was lack of sufficient space and water. There were some cases of pot plantings. Halimah, a refugee lady, planted onion and mint in pots and said, "*I wish I can plant more but there is no space*." Um Hussain said: "*I planted onion, but it was damaged by children; our homes are not protected and there is no enough space to have a garden*."

4.11. Shelter

After security and food, shelter is the most important need for refugees. In particular, Beqaa has very cold winters and, without proper shelter, it can be deadly especially for children and the elderly. The UN reported that (71 percent) of refugee households in Lebanon live in residential buildings, in regular apartments or houses (often sharing with other families) or in the micro-apartments designed for the building doorman. Of the remainder, 12 percent live in non-residential structures, such as worksites, garages and shops, and 17 percent live in informal tented settlements (UNHCR, UNICEF, and WFP 2016). This survey targeted refugee households living in tents located on farmland rented from landowners. These tents are poor dwellings. They are mainly made up of plastic sheets, which get damaged every year due to fluctuating high and cold temperatures in summer and winter, in addition to other uncontrolled factors. For the households





Source: Field survey 2016-2017.

Table 11. Problems caused by the weather and the coping strategies.

Coping strategies
Frequent baths, wetting the ground around the tent, visiting another good tent at the peak of the heat, using an electric fan, searching for shade out of the tent, putting cardboard on the ceiling, hanging wet fabric inside the tent, lifting the groundsides of the tent cover.
Using a stove in every room, relying on firewood stove, adding cork insulator/door installations, continuous heating by the stove, collecting firewood in summer, early sleeping and waking up late, using blankets continuously, wearing extra clothes, gathering in the stove room, staying inside the tent.
Putting bucket under the leaking place, adding transparent nylon sheet or a large new cover for the whole tent or adding more cover layers.
Using wooden board and soil mound/screen or small cement roadblock, building block and stone, digging small ground channels to drain rainwater, increasing the height/thickness of tent ground, putting nylon on the ground, nothing.
Binding and fastening the tent by ropes, placing stones or bags full of stones and soil around the tent, increasing the poles number, supporting the tent cover by wheels.
Non-stop snow removing especially at night, extra heating to melt snow, woody support on roof.
-

Source: Field survey 2016-2017.



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who can afford them, the plastic sheets cost around LBP200,000-300,000 (US\$133-200). Some households put more than one layer of sheet (58.7 percent), but that still does not provide adequate shelter. The yearly replacement of the sheets is also costly, as one refugee lady, Um Msarah, stated: "The cover can't prevent the rain and I have no ability to buy a new one. I got a small one from UN, it's not enough to cover the whole tent." Another refugee complained, "Fragments falling from bird-hunting shots affect our tents badly, Lebanese hunt close to our tents and it makes holes in the covers." Only about 19 percent of tents are supported by insulation, which are provided by aid agencies; 39 percent use cartons or straw bags for insulation, wood board and occasionally cork as insulators; (43 percent) do not have any kind of insulation. The number of rooms in the tents are different, the majority (63 percent) has 2 rooms, (24 percent) have 1 room, and (13 percent) have 3 rooms. However, in the cold winter conditions, the whole family stays in the only room which is heated. This gets quite crowded for an average family size of 8 people. About a third (28 percent) of the tents are occupied by more than one family, in some cases up to six families share the same tent; on average, there are 1.5 families sharing a single tent. About 92 percent of tents have separate toilets provided by aid agencies. Few families made toilets themselves without assistance and these are in poor conditions. All families use the kitchen to heat water as well as to take a bath. Almost half (49 percent) of surveyed households lack enough mattresses and blankets. The main problems of tents faced by refugees in Beqaa are presented in Figure 29. The main problems reported include heat, cold, wind, rain and snow.

4.12. Water supply

On access to water, for the refugees at large, the two most common sources of drinking water are bottled



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mineral water (42 percent) and household tap water (27 percent) (UNHCR, UNICEF, and WFP 2016). In Beqaa, this survey revealed that 89 percent of interviewees bought water for drinking, especially in summer. Some camps get water from aid agencies but that is not stable, and they complain that some of that water is not good for drinking. Over half (55 percent) get water for washing from wells inside the camp, but sometimes the water of these sources gets polluted by drainage and sewage and cause diseases. One lady, Um Mouhamad, stated, "We used to use the well water for washing but many people got scabies, so we decide to buy water for washing, it is better to pay for water more than pay for doctors and medicines."

4.13. Health and sanitation

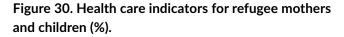
The majority of surveyed households (77 percent) reported that during the time of the survey at least someone was ill with different ailments and most of these got ill in Lebanon because of a lack of healthcare and detrimental living conditions. Primary health care services are the first level of preventive health measures and medical care, which includes childhood vaccination, reproductive healthcare (antenatal care, postnatal care and family planning), and curative consultations for common illnesses; while secondary care is the hospital level of care (UNHCR, UNICEF, and WFP 2016). The survey captured the primary health care services during the 12 months immediately before the survey, which is presented in Figure 30. The surveyed refugee households expressed lack of healthcare in multiple dimensions.

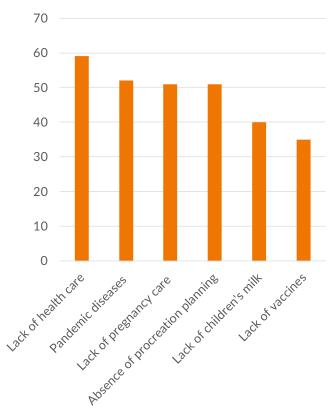
The main concerns, reported by about 40 percent of households, were lack of care for pregnant women, pandemic diseases, and absence of family planning services. Over one third (40 percent) of refugees complain about lack of milk for children (infants and toddlers), and they rely on the sheep and goat milk kept in the camp



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to cover children's needs. The most common reported pandemic diseases are chickenpox, and parasites like lice, scabies and leishmaniosis. Many women (over 50 percent) experienced sudden abortion without explanation of its direct causes. However, doctors suggest that the main reason could be polluted water. The refugees in Central Begaa are from districts where large families are considered as an asset, so they do not believe in family planning. In addition, about 35 percent of families missed their children's vaccination for different reasons (Figure 31). The main reason for 72 percent of households that did not vaccinate children is lack of awareness of the importance of vaccination and some families not believing in the importance of the vaccination. This is in spite of the fact that more than 8 percent of the sampled households have disabled children in the sample. The second main



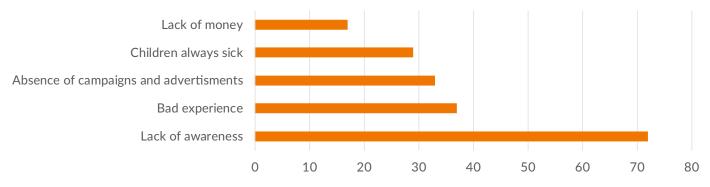


Source: Field survey 2016-2017.

reason is bad experience of vaccination, which caused child sickness (38 percent); one such families reported that the twins (boy and girl) passed away after they got vaccinated in the camp. So, these families do not trust the vaccination campaigns and they do not have money to go to the doctor or medical center.

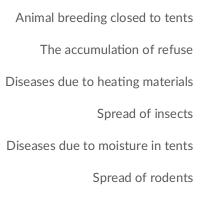
The refugees reported that the health situation was better in Syria due to the stress and detrimental conditions they live in Lebanon, more than 50 percent of interviewed households confirmed that they have become sick after their migration, especially heart diseases, diabetes, and blood pressure. In addition to the high prices of medicines, doctors and hospitals do not receive Syrian refugees without payment in advance, which makes access to healthcare very difficult for the refugees and it has worsened since the UN limited its medical support. The research team met one women who gave birth in front of a hospital, which refused to accept her. Another case, Om Ali, who said "When I got burned, the UN covered 75 percent of the hospital cost and we borrowed the rest, but now I need a surgery to treat the effects of the wrong treatment I got in the hospital, but we do not have the ability to do it."

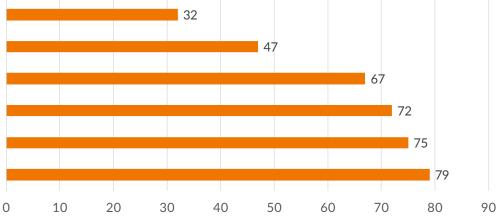
Figure 31. Reasons for missing children's vaccinations (%).



Source: Field survey 2016-2017.

Figure 32. Reasons affecting the health of Syrian refugees in the camps (%).





Source: Field survey 2016-2017.



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The refugees in camps rely on pharmacists to diagnose their disease, as a strategy to reduce medical costs and, sometimes, they bring the medicine from Syria. The interviewees confirmed that the conditions they live in affects their health negatively, especially life in the temporary camps. Figure 32 shows the reasons for the detrimental health conditions in the camps as reported by the refugees. A major complaint is about rodents, like mice and rats that appear to be spreading in all camps, followed by problems with insects such as bed bugs, mosquitoes and cockroaches. During the survey, it was noticed that many people were suffering from allergies and asthma due to the heating materials used and allergies, among other, from plastic boxes, shoes, clothes, baby diapers, wet wood and other materials. The refugees know the effects of these materials, but they have no alternative options. The harsh cold weather also affects them, in addition to the effects of work leading to complaints of vertebral pain by 51 percent of the surveyed refugees. These pains are caused by carrying heavy weights. Refugees are also complaining about neuritis (nerve inflammations), cold,

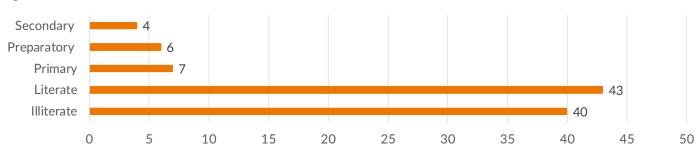
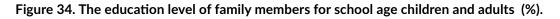
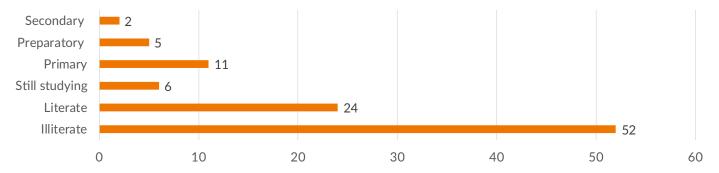


Figure 33. The education level of the household's head (%).

Source: Field survey 2016-2017.





Source: Field survey 2016-2017.

severe foot pain, work-related accidents, allergy, arthritis and knee pain.

Sanitation: About 39 percent of the sample had pit privy latrine (single septic) on soil by themselves and different agencies provide some camps with sanitation system with pit privy latrine for single septic on cement (5 percent), or with pit privy latrine for group septic (49 percent), or with pit privy latrine for single septic on plastic (7 percent).

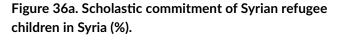
4.14. Education

The education levels for the refugee population is quite low. Around three-quarters of the interviewed heads of households had not exceeded primary education, with female heads of households consistently less educated than their male counterparts. UNHCR, UNICEF, and WFP (2016) reported that the level of illiteracy among female heads of households was more than double that of male heads of household (28 percent and 12 percent, respectively). Education levels of the heads of households from the current survey are shown in Figure 33. A large proportion of the household heads (40 percent) are illiterate. 73 percent of illiterate household heads are women. Only a small portion (4 percent) have secondary education and the rest have only primary education. Figure 33 shows that the highest education level of the households' heads is secondary schools, some of them have been forced to leave university before graduating due to the war. More than half of the sample are illiterate (Figure 34), and 61 percent of those who are illiterate are women.

Figure 34 shows that 6 percent of the sample are still in school, as will be explained later.

4.14.1. Children's education

The education of Syrian refugee children faces serious challenges. The UN reports that surveyed children of primary school age (6 to 14 years) have the highest rate (70 percent) of out-of-school in Beqaa valley, while the lowest was found in the south of Lebanon (32 percent). Over all regions, these rates are significantly higher among children of secondary school age (15 to 17 years) reaching 84 percent of children of this age group not attending school. School enrolment is, generally, affected by the demand for schooling of the population and the supply of schooling by the education sector. In general, the most reported demand-related barriers were the cost of education, child labor, child marriage, the need to stay at home, cultural reasons and transportation costs (UNHCR, UNICEF, and WFP 2016).



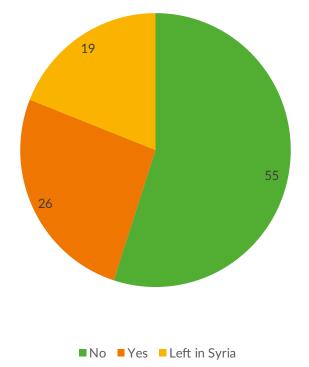
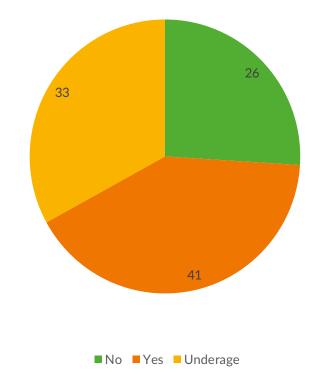


Figure 36b. Scholastic commitment of Syrians in Lebanon (%).



The ILO survey (2014) indicates that the main reasons behind the failure to enroll Syrian children in Lebanese schools are related to the excessive cost of school fees (47 percent), lack of schools in the proximity (27 percent) and failure to meet the deadline for school registration (25 percent). Only 7 percent of respondents indicated child work as a reason behind no enrolment. This suggests that these barriers are critical for children to access education. One out of 10 Syrian refugees aged 25–64 has achieved secondary education in Lebanon. This means that the majority of Syrians of working age has relatively low levels of educational attainment (European Commission 2016).

In this survey, data covering 177 children of school age show that among children between 6–14 years old only 26 percent of them were attending school (the majority of children attend afternoon shifts which is considered less effective and informal) and 74 percent were out of school. About two-thirds of those attending school were placed in classes lower than the levels they would have been in Syria. On average, these children lost 2.6 years of schooling due to the lower placement for 17 percent of the children. However, 37 percent of the children were already out of school before they left Syria, which is the effects of the conflict on the children's education inside Syria (Figure 35). Only 9 percent of all children in the surveyed households were able to maintain their corresponding classes as they would have been in Syria, and did not lose school years.

Figure 35 shows that 37 percent of children dropped out of school in Lebanon, which is not an uncommon phenomenon in a refugee community due to different reasons as will be explained later.

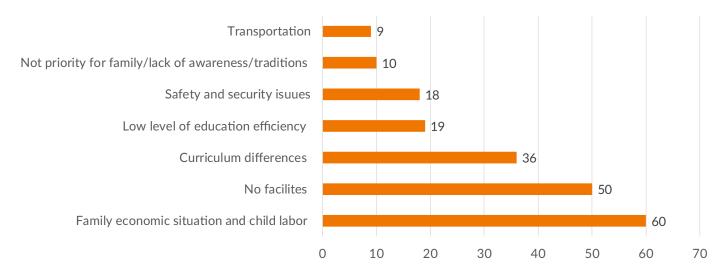
The survey data show that the scholastic commitment of Syrian refugee children was greater during the time they were in Syria than the time they have been in Lebanon. Figures 36a and 36b show that the majority (41 percent) of the surveyed school age children were in school in Syria before they moved to Lebanon. Taking into account only those who were at school age when they were in Syria, this ratio rises to 61 percent. Only 39 percent of children, who were at school age at the time they were in Syria, were out of school. This is a big contrast to the refugee situation in Lebanon where 74 percent of the school age children are out of school. However, some communities where the refugees came from in Syria did not prioritize education, close to 40 percent of children were not attending schools in Syria for many reasons. The most important reason being the effects of war and conservative traditions.

Source: Field survey 2016-2017.



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Figure 37. The main reasons for dropping out of school (%).



Source: Field survey 2016-2017.

The main reasons for refugee children in Beqaa to be out of school are presented in Figure 37. Unlike the ILO findings, mentioned above, the main reason given by parents was the family's economic situation which necessitated child work (60 percent), flowed by a lack of schools in the proximity of the camps (50 percent), which reflects the large number of Syrian refugee children and the inability or unwillingness of the Lebanese

Box 6

In one camp, refugees took up the children's education themselves. Mr. Abd el Kader, a teacher in the camp, takes fees to supplement his children's education and teaches his neighbors' children in the camp. The families were enthusiastic to have someone teach their children. One father, Abo Ammar, said "It is cheaper and safer than going to schools and Mr. Abd el Kader is committed to his work, my daughters learned more in one month with him more than they have learned for one year in Lebanese schools." Mr. Abd el Kader said: "It is of mutual benefit, I got stability in my income over the year and I provide education to these children to find a better future than us." One of Mr. Abd el Kader students said: "I like Mr. Abd el Kader and he taught me how to teach younger students."

government to accommodate refugee children's education. Other reasons include language problems due to differences in the curriculum of the two countries (schools are taught in French and English in Lebanon but only in Arabic in Syria). Other reasons include security and safety issues, parents' perceptions that education in the shifts for the Syrian children is of very poor quality, parents' low awareness of the value of education and conservative attitudes. About 10 percent of households declared that they do not consider education as a priority due to traditions and lack of awareness.

Other problems with regard to education include the long time it takes to get acceptance in the government schools and lack of resources to afford the high private school fees. Another obstacle is the fact that only primary schools are available for Syrians in the neighborhoods where they live. Some families complained that transportation is not free for all camps and the bus drivers do not show commitment. One of the reasons is safety as children finish their afternoon shifts in the evening and come back home too late, especially in winter which is extremely difficult. Another barrier to education is that the Syrian refugee children have no chance of attending secondary schools or universities in Lebanon.

5. Conclusion and recommendations

5.1. Concluding remarks

The Syrian conflict, according to UNHCR, has produced the biggest humanitarian and refugee crisis of our time. The conflict, in its eighth year, internally displaced some 6.15 million people and a produced a refugee population of at least 7.35 million people, who have fled for safety to the neighboring countries, particularly Lebanon, Jordan and Turkey. One million of these refugees have requested asylum in Europe, with Germany receiving the largest numbers followed by Sweden. Without doubt, the Syrian conflict has created a huge humanitarian challenge to the international community and refugees face enormous challenges in order to sustain their security and livelihoods. In spite of the efforts of the international community, and particularly the host countries, the situation for Syrian refugees remains unsatisfactory, with no sight in end to the conflict. In Lebanon, there are particularly serious concerns on legal protection, integration and participation in economic activities, equal pay, work conditions and workers' rights, gender wage gaps, child labor, and access to education and livelihood opportunities. For example, ILO estimates that almost 90 percent of refugees are paid 40 percent less than the minimum wage in Lebanon, or equivalent to roughly US\$280/month, while working children, some as young as six, are paid US\$4 a day in some areas. This study examines the humanitarian and livelihood situations of the Syrian refugees in Bekaa Valley, Lebanon. This study uses information and survey data collected from refugee households, refugee workers' bosses, camp leaders and local and international humanitarian organizations. The sustainable livelihoods framework is applied to understanding the livelihoods of the refugee families and the challenges they face. This is done by analyzing the refugee household's access to physical, natural, human, social and financial assets, their income and livelihood sources: and the livelihood outcomes on food security, shelter, education and health.

By far, the ambiguity of the legal framework that protects refugees' rights in Lebanon is the most important significant challenge facing Syrian refugees. According to the UNHCR, the Government of Lebanon does not recognize the displaced Syrians who crossed to Lebanon as refugees but as displaced populations. The results have been the lack of any documentation for the refugees, which makes them vulnerable to all kinds of unlawful practices and prohibits them from undertaking lawful work. The UN and Government of Lebanon report (2016) estimates that 60 percent of individuals over 15 years old are without legal residency. Those with some legal residence also face difficult procedures and high costs for renewal of residency. Without legal documents, refugees cannot work and their mobility to search for jobs is heavily restricted. In the Bekaa survey, only 4 percent of the people in the sample had legal documentation, which is renewable annually against a fee of US\$200. The legal residence also requires a guarantor, who demands payments or other favors.

Related to the legal status is the Lebanese Government's requirement for registered refugees to take a no-work pledge, which has been changed to pledge to abide by Lebanese laws. This restrictive pledge puts the refugee in a terrible dilemma and discourages them from registering with UNHCR or they will lose any prospect of working in Lebanon. In this study, 12 percent of the surveyed refugee household members were not registered with UNHCR. Since the refugee crises, various UN and non-UN local and international humanitarian organizations have provided support in many areas, including cash transfers, food voucher, heating, school kits, school bus service, shelter, food kits, clothes, health service and hygiene. However, this support greatly varies in terms of coverage of the needs (14-100 percent), proportion of beneficiaries (16-80 percent) and duration provided (many of them are only for few months).

The most important income source is seasonal debt on which 95 percent rely but is less important in terms of total income share (only 7 percent). The majority of household members work in agriculture which is a main source of income for about 90 percent of refugee households and which pays seasonal debts. The agricultural sector provides 22 percent of total income and non-agricultural employment provides 21 percent of the total income, albeit fewer households having access to the later. Equally important are the humanitarian provisions which form the third main source of income (in-kind and cash) for a great majority of refugee households (89 percent), but most important in terms of income equivalent (49 percent). For all workers, 71 percent had agricultural work and 19 percent had construction work at the time of the survey (2016–17), which shows the vital role of agricultural labor for Syrian refugees in Bekaa. The majority of all workers (61 percent) were male, while females were 39 percent. Restrictions on women's mobility and particularly women's restrictions to access non-farm work can explain the gender gap. Non-agricultural work is maledominated (96 percent male), while agricultural work is more of a female led activity (53 percent female vs 47 percent male). The main factors that have significantly explained the chances of getting non-farm work were sex, age, education level, health status, and finding work channels. These factors had a positive effect on the chances of getting non-farm work in Bekaa.

The work conditions are affected by many factors including legal problems for work permits, lack of contracts, lack of workers' rights and inability to complain, bad treatment by employers at work place, fluctuation and seasonality of work, lack of safety practices, short duration of work, low wages compared to work and delayed payments. These concerns are the consequence of the ambiguous legal situation that the refugees found themselves in as noted before. The daily wage of the Syrian refugee labor ranges from LBP3,000 to LBP60,000 (or US\$2 to US\$40). The average wage in the non-farm sector was estimated at LBP21,212/ US\$14, and that of the farm sector was at LBP10,824/ US\$7. There is a clear gender gap in wages among Syrian refugees. Overall, women are the majority of low wage earners. Survey show that all women workers (100 percent) earn wages at the lowest end of the wages' spectrum, while 47 percent of males fall in that low wage category and the rest earn higher wages. In the agriculture sector, all women are in the lower wage earners, whereas 60 percent of males fall in that category and the remaining 40 percent earn higher wages. One factor attributed to women's lower wages is the argument that women are willing to accept lower wages compared to men, and that is one reason that labor bosses (al shawish) prefer women or children and is the driving factor for higher demand for female labor, particularly in agriculture). Child labor, particularly in the agriculture sector, is rampant in the Bekaa Valley. Overall, 22 percent of workers reported in this survey were children, 59 percent of them were female and 41 percent were male. This shows that young girls have slightly higher chances of working. UNICEF calls child labor a serious violation of human rights, which is preventable through integrated approaches that

simultaneously address poverty and inequity, improve access to quality education and mobilize public support for respecting children's rights.

The food security outcome of refugees is mixed, with food insecure and mid food insecure as the prevailing outcome. A food security index was computed using two different approaches. The first was computed by combining all indicators including access-days lack of sufficient food, dietary diversity (consumption of meat, vegetable, fruits and dairy products), income share of food expenditures and number of food insecurity coping strategies deployed, after assigning values of 0 to 3 to different levels of food security indicators and then adding up to arrive at a single FS index for each household. This index shows that the majority of refugees (69 percent) are severely food insecure, while 9 percent are extremely food insecure and need an emergency intervention. In the second approach, principle component analysis was applied to the original data of the food security indicators. The first principle component was then used to classify households into four food insecurity quartiles. In this analysis, the fourth quartile is the most food insecure with very low dietary diversity of consumed food, with refugees adopting over 8 food security coping strategies, suffering from lack of sufficient food for more than 4 days per week, and with 47 percent of expenditure (income) on food. Women-headed households had greater prevalence of food insecurity than male-headed households, which may be explained by women's relatively lower access to work and associated lower female wages. Shelter is mainly made of tents with some provided by the UN and humanitarian organizations. The tents are built on private land where landlords are paid monthly rent. The tents are associated with many problems including inadequacy of space, proximity or sharing space with animals, lack of or poor heating in the harsh Bekaa Valley winter, and poor structures which may not stand against wind and rain. These poor shelter conditions cause many illnesses, particularly for children. There is a general lack of healthcare in the refugee camps. Medical services are private in Lebanon and those who cannot afford them can be excluded from this vital service.

In this study, many refugee household heads were found to be illiterate (40 percent). Among the literate, only 32 percent have any kind of formal schooling. By far, the most serious educational outcome is children's access to education. The UN (2016) reports that children of primary school age (6 to 14 years) have the highest rate (70 percent) of out-of-school incidence in Bekaa Valley. In this study, among 177 children of school age (6–14 years old), 74 percent were out of school, while 26 percent were attending informal school and only 4 percent were attending formal school.

In short, the Syrian refugees in the Bekaa Valley, Lebanon, have found security from the ravaging conflict in Syria, however, in spite of the commendable efforts from the host country and UN and other international and local humanitarian organizations, the support provided has failed to meet the humanitarian standards set by those organizations. This is a multi-dimensional complex problem with social and political undertones engulfing the whole region. Practical actions that increase the income-earning capacities of Syrian refugees in Bekaa is of the highest priority to improve the situation.

5.2. Recommendations

Syrian refugees in Lebanon are facing significant food insecurity and poverty. Their main income from agricultural labor is insufficient to alleviate their poverty. Non-agricultural jobs are very difficult and not attainable and are considered to be in competition with Lebanese workers. Syrian refugees are mainly involved in agricultural value chains as wage labor, but that is not sufficient to improve their food security or pull them out of poverty. The only remaining option is to find ways that enables them to access agricultural assets: land and livestock. The following interventions are proposed for Syrian refugees in Beqaa Valley:

Access to rental land: Access to land is the most important opportunity for refugees' food security. This can be achieved by renting land. However, they cannot do that without third party support. Renting land depends on trust and Syrians who have longterm connections with the Lebanese community are renting land. This practice can be extended to more refugee families through the support of civil society organizations. Civil society organizations can rent land on behalf of Syrian refugees and allocate that for food production by refugee families and for income generation. To ensure that the impact of the scheme is spread widely across refugees, a group of Syrian refugee families would be assigned to cultivate 1-5 dunums (1 dunum=0.10 hectare)

each, depending on the amount of land rented or initial funds available. These families will cultivate the land with short season vegetable crops of their choice and gain multiple harvests a year. The tenants will reimburse the rent over time as they harvest the crop. In the second year, a new group of refugee families will be given the chance to cultivate the land. The role of the civil society organization is crucial here to maintain commitments and payment of rent to the landowner and to make sure that the program runs smoothly. The effects of the program on the livelihoods of the refugee family can be easily monitored and measured.

Training in GAP: Training in good agricultural practices (GAP) is crucial for the refugees to maintain good production, reduce costs and attain good income from rented land. Hence, the land rental scheme should be supplemented with intensive training on vegetable production and agronomic management by other Syrians, who are already farming in Beqaa through share-cropping. This training shall be organized by research or development organizations with posts in Beqaa, like Lebanese Agricultural Research Institute (LARI), Arcenciel, and others.

Small ruminant enterprises: Syrian refugees have good experience in small ruminant rearing as many refugees had small ruminants before they came to Lebanon. Their knowledge on how to raise animals allows them to keep a few animals in the camp. However, this practice is currently informal and faces many problems. The proposed intervention would provide a few goats or ewes (the exact number to be determined based on minimum income to be generated) to each family. The refugee families that receive the animals shall be given training on animal husbandry, health and feed management. The families will have a shared shed, and joint herding and grazing to minimize the impact of the animals in the area.

Dairy processing: Syrian women have good skills in processing milk and making different products which can be sold locally. A small dairy processing unit with standard tools should be established in Terbol, or in other small towns that have high concentrations of refugees. The aim of this facility is firstly to provide a training facility to women, and secondly to allow women who are able and willing to bring their own milk and process it under hygienic and safe standards and sell it through their social networks within the refugee camps. If the Lebanese find these workshop products interesting, they can also become a market. The dairy training workshop shall be managed by an international or national organization with capacity and know-how.

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