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The Arsal Labour Market Assessment - ALMA

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This analysis of this report do not necessarily reflect the views of the United Nations Development Programme and the United Nations High Commissioner for Refugees.

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List of Abbreviations

ALMA	Arsal Labour Market Assessment
GCC	Gulf Cooperation Council
GT	Grounded Theory
IDK	I don't know
ILO	International Labour Organization
ISCO	International Standard Classification of Occupations
ITS	Informal Tented Settlement
LAF	Lebanese Armed Forces
LARI	Lebanese Agricultural Research Institute
LBP	Lebanese Pound
LMS	Labour Market Study
NGO	Non-governmental Organisation
NPTP	Emergency National Poverty Targeting Program
OECD	The Organisation for Economic Co-operation and Development
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
USD	United States Dollar
VCD	Value chain development

Note on Terminology

This report aims to allow readers from different technical backgrounds to comprehend its findings and recommendations. The terms and expressions used are intended to be both technically sound as well as widely comprehensible. Readers should be aware of how this report employs the following terms in order to deepen their understanding of its content:

Syrian refugee influx
This assessment considers the influx of Syrian refugees to have begun in 2011, but broadly considers that the bulk of Syrian refugees to have arrived from 2012 onwards.

Vertical markets
A vertical market describes a single value chain process connecting raw materials to final product. For example, in the quarrying/stonecutting sector, raw materials such as stones are removed from mountains, transported by trucks to the different stonecutting workshops, where they are cut into construction-grade materials and transported for sale to construction companies. Each link in this value chain is considered a vertical market.

Horizontal markets
In contrast to vertical markets, horizontal markets describe services or production processes that are not focused on a single value chain but provide the same services or production processes to different value chains. For example, the transport sector provides services to businesses in the quarrying/stonecutting sector, but also to the agricultural and retail sectors.

Population
Unless otherwise specified, this research considers the population to be the working age population, which is comprised of all inhabitants of Arsal between the ages of 15 to 65. The population covers both genders as well as residents (Lebanese) and refugees (Syrians).

Employment
Persons in employment belong to the population and have worked for at least one hour in employment (for a monetary or non-financial gain) or self-employment (for monetary or non-financial personal or family profit) during the past week.[1]

Unemployment
Persons experiencing unemployment are those which belong to the population, have not worked in employment or self-employment within the past week, are ready to start work within the upcoming two weeks, and have undertaken explicit steps to seek either employment or self-employment (e.g. applying to private or public entities).[2]

Active Labour Market Participants
The active labour market population describes all people who are currently employed or unemployed.

Inactive Population
The inactive labour market population describes all people who are neither employed nor actively looking for work.[3] For example, women who do not actively seek out employment, conduct household duties, or raise children are considered inactive.

Arsal

[1] OECD: Glossary of statistical terms: Employed Persons. Retrieved from: https://stats.oecd.org/glossary/detail.asp?ID=764
[2] OECD: Glossary of statistical terms: Unemployment - ILO. Retrieved from: https://stats.oecd.org/glossary/detail.asp?ID=2791
[3] OECD: Glossary of statistical terms: Inactive Persons (Labour Market). Retrieved from: https://stats.oecd.org/glossary/detail.asp?ID=6251

The town of Arsal is situated in north-eastern segment of the Baalbek district (Arabic: *qada*) of Lebanon's Baalbek-Hermel governorate.[4] For ease of reading, Arsal describes the administrative borders of the built-up area and its surrounding areas which covers around 317 square kilometres.

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[4] Localiban. Last updated 13 July 2016. Retrieved from: http://www.localiban.org/article3988.html

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Executive Summary

Arsal is a town of around 30,000 residents on the Lebanese-Syrian border, known for the fruits of its rock and soil, and its strategic position along smuggling routes between the two nations. In 2012, the town became one of the main way stations for Syrian refugees entering Lebanon and, by 2014, Arsal had become occupied by extremist militants engaged in the Syrian conflict. The occupation prompted the Lebanese Armed Forces to seal the border, cordon off the town, and expel the militants in the summer of 2017. Now that some form stability has returned to Arsal, the town is in need of sustainable economic development and reform to provide services for refugees, improve the livelihoods of Arsalis, and redevelop markets diminished by years of conflict and demographic upheaval. To further this process, this study assesses adaptations in the Arsali labour market during the aforementioned period and provides the first representative baseline of labour market characteristics as of the end of 2017. The study then maps and analyses economic activity, employment trends, and barriers to employment to inform future interventions by the state and development agencies.

This study's analysis demonstrates that traditional non-hazardous economic sectors in Arsal such as agriculture have been upended in favour of fast-growing informal sectors, the war economy and sectors dependent on humanitarian funding. In response, the study highlights opportunities to increase sustainable employment and foster new higher-value-added as well as provide recommendations for livelihood interventions targeting vulnerable Lebanese and Syrian communities in Arsal.

Decline of the Formal Economy: Prior to conflict, two sectors dominated the labour market: agriculture and quarrying. But since the onset of the refugee crisis in Arsal, humanitarian aid and education are the sectors that have garnered the most employment. And while quarrying and stone cutting remains the largest area of employment, jobs are hazardous and informal, devoid of occupational health and safety standards, and prone to child labour. The dominance of the quarrying and stone cutting sector over employment, the influx of Syrian labourers, and the new informal economy have also crowded out other more formal and sustainable sectors. Meanwhile, conflict, deforestation, and asset depreciation has devastated Arsali traditional agriculture, the lack of transportation all but cuts Arsal off from national and international markets, and the dearth of employment opportunities continues to increase tensions between Syrian refugees and Lebanese residents.

Need for Structural Reform: Today, the Arsali economy is reliant on injections of international aid and the haphazard fluctuation of the demand for stone products. Instead of allowing this uncertain economic reality to persist, a sustainable economic paradigm will need to be cultivated through the development of economic value chains in sectors that produce decent employment opportunities for Arsalis and Syrian refugees alike. The core of this transition would be the re-development of Arsal's agricultural and pastoral value chains that have long provided a source of decent employment for both Lebanese and Syrians in Arsal.

That said, a sudden retraction in necessary humanitarian and development aid would likely result in an economic downturn just as Arsal begins to recover. Such a scenario could well fray the social fabric of the the town due to existing tensions over employment opportunities. Thus, any such retreat of the humanitarian aid must be managed through both short-term interventions and long-term structural reforms in key sectors.

High-level Recommendations & Findings

- **Value Chain Development of Sustainable Growth Sectors**: Revive the agricultural sector and develop agribusiness value chains. Rigorous research into the financial and technical viability of different value chains would be the starting point of any such intervention.
- **Upgrade Transportation Infrastructure**: The sustainable upgrade of internal road networks connecting North Bekaa to the rest of the country would facilitate growth and boost the region's role in the transport sector, especially when export markets that require transit through Syria open up again. The core of such a transport upgrade will be the construction of the Baalbeck-Zamrani Highway to facilitate cross-border transport as well as the upgrade of the existing Aynata-Arz Road to increase access to markets across the country.
- **Incentivize Formalisation of Work**: Informal work results in vulnerable employment that dissuades investment and sustainable development. Government and development players must incentivize businesses to transition toward formal structures, offering legitimate access to capital, credit, and capacity-building programmes.
- **Organize Labour Production**: Current labour organizations are inadequate and overly-politicized. In order to protect and strengthen cooperation among Arsali producers, future labour organisations must focus on economically viable association to access contracts, product quality and economies of scale. The development of appropriate legal and financial infrastructure will also necessary to enable contract farming, as well as public agricultural extension services.
- **Integrated Authority**: Arsali enterprises, farmers, national stakeholders, and development organisations must cooperate for reforms to take hold. Hence, it is recommended that a dedicated body be established and tasked with value chain development in Arsal and North Bekaa under the authority of the National Economic and Social Council.

Near-term Actionable Recommendations:

- **Agribusiness Development**: Prioritization tables included in this report should be utilized to identify select crops ripe for development and export. Following selection, government and development agencies should conduct rigorous product-testing so as to ensure quality appropriate to demand. Products can then be ranked by cost, revenue-generating potential, and market access. Finally, farmers should be encouraged to adopt the most viable crops and products.
- **Cash for Work**: Employ Syrian refugees in community construction projects to rehabilitate infrastructure, redevelop agricultural land and bolster social cohesion.

- **New Schools**: Invest in second shift schools for Syrian refugees that educate underserved communities and employ both Syrian and Lebanese women.
- **Reforestation**: Encourage cooperation between the Higher Relief Council, Green Plan, and Ministry of Agriculture to jumpstart the process of replanting orchards, groves, and vineyards.
- **Proliferation of Green Houses**: Supply farmers with 100 more green houses to meet demand for vegetables and cultivate agribusiness skills in the labour market.

As Arsal recovers from conflict, national stakeholders have a unique opportunity to transform a dependent, informal economy into a productive, formalised, and prosperous exemplar of post-conflict revival. For a town that has borne so much of the fallout from the Syrian conflict, a true sustainable economic recovery in Arsal would prove a shining example to emulate across Lebanon and further afield. Arsal is an opportunity that cannot be missed.

1. Research Objectives

In order to understand employment and labour market patterns in the Arsal district of Lebanon, as well as provide recommendations for potential livelihood interventions targeting vulnerable Lebanese and Syrian refugees, the UNDP required an in-depth labour market assessment. Accordingly, this research, entitled The Arsal Labour Market Assessment (ALMA), focuses on mapping Arsal's key economic activities and employment trends among Syrian refugees and Lebanese residents, as well as on barriers to employment, opportunities to promote access to employment and income generation activities.

The objectives of this research can be summarized as follows:

1. Analyse domestic economic activities and market opportunities open to Syrians and Lebanese through the assessment of local capacities, potential competitive and comparative advantages (including access to market), as well as the production potential of different domestic market locations.
2. Identify opportunities for employment/self-employment of Syrian and Lebanese household members including entrepreneurial women and young labour market entrants.
3. Identify the main barriers to employment/self-employment and other barriers to entry facing Syrian refugees and Lebanese residents.
4. Identify the main opportunities available to promote access to employment through a synthesised gap analysis aimed at identifying areas suitable for income generation activities, including inception and expansion.

2. Methodology

This labour market assessment was built upon an action-oriented empirical research methodology specifically oriented towards understanding employment and labour market patterns in Arsal, with a view to inform livelihoods interventions targeting Lebanese and Syrian refugees. The field research was conducted from November 1, 2017 to December 1, 2017. The methodology comprised of an initial desk review of all relevant development and academic literature. Data collection activities comprised of a total of 29 key informant interviews, a labour market assessment survey (785 respondents, 215 households), an enterprise survey (100 enterprises), in addition to 10 focus group discussions (FGDs) with Syrian refugees and Lebanese residents.

a. Literature Review

A literature review of developmental, governmental, academic, journalistic, and grey literature which frames the labour market assessment in the context of Arsal's political economy was conducted. The literature review also considered wider employment patterns and labour market dynamics across the Bekaa region and Lebanon more generally.

b. Labour Market Assessment Survey

The Labour Market Assessment Survey (LAMS) included questions about household living conditions and labour market dynamics and was conducted with Syrian refugees living in informal tented settlements (ITSs) as well as Lebanese residents. The survey was based on a representative sample of 785 respondents within 215 households.

The survey provided for an examination of labour force participation, skills, education levels, and employment preferences, in addition to inactivity and unemployment. The research team adopted an initial stratified sampling technique within the geographical boundaries of Arsal, with a 95% confidence level and 5% confidence interval. The sampling methodology considered the household as the primary economic unit and assessed each member of the household accordingly. A random walk sampling approach was employed to select households. Google Earth imagery and GIS software were employed to develop the sampling frame.

In order to conduct the LAMS in ITSs, the research team adopted an initial stratified sampling technique with two stage cluster sampling method. The sample size was set by selecting clusters among the different ITSs within Arsal using a simple random sampling method. ITSs were then geolocated and validated by field teams. The village area was defined by approximate polygon of village geographical extension and keyhole market language files were produced to guide enumerators.

LAMS design employed the international standard classification of occupations (ISCO) as the basis for classifying local skills. The ISCO is a tool for organizing jobs into clearly defined set of groups, according to duties undertaken in the job.

c. Enterprise Survey

An enterprise survey (ES) was utilized to understand the characteristics of existing enterprises in the Arsal area. The ES explored and mapped the economic sectors that possess growth and employment potential and provided crucial information regarding the skills demanded by local businesses. Since there is presently no reliable data regarding the number of businesses operating in Arsal, a representative sampling frame was not possible, and the sample was set at 100 enterprises (See Table 1). In addition, high informality and the lack of available or accessible lists of formal enterprises made it impossible to perform any sort of random selection on the targeted sample. As such, the ES sampling methodology was based on purposive sampling, with particular attention given to the type of businesses available for surveying. In the field, a snow-ball sampling method was employed with particular attention given to geographic distribution.

Table 1: Enterprise Survey sectors by number of surveys

Number	Gender	Number of Surveys
1	Quarries, stone cutting and construction	(20)
2	Retail and wholesale vendors	(15)
3	Agricultural workers and farm holders	(10)
4	Livestock and pastoral	(10)
5	Handicrafts and manufacturing	(10)
6	NGOs, education and healthcare	(10)
7	Professional occupations	(10)
8	Transport (formal and informal transport)	(15)

The LAMS and ES were treated and processed using research and data processing software (SPSS 20.0). Quantitative data underwent cross-tabulation across socio-economic parameters and data outputs were produced in the form of tables on which percentages were compared, and graphs were created accordingly. Quantitative analysis delved into tabular findings in search of further significance that highlighted particular findings and build theory accordingly.

d. Focus Group Discussions

Ten FGDs were conducted with Lebanese host community residents, and Syrian refugees according to the disaggregation in Table 2.

Table 2: Focus Group Disaggregation

Number	Gender	Nationality	Sector
1	Females	Lebanese	Handicraft
2	Males	Lebanese	Transport
3	Females	Lebanese	Unemployed
4	Males	Lebanese	Unemployed
5	Males	Syrian	Unemployed
6	Females	Syrian	Unemployed
7	Mixed	Lebanese	Public sector
8	Mixed	Lebanese	Humanitarian
9	Males	Mixed	Quarrying & Construction
10	Males	Lebanese	Agriculture

e. Key Informant Interviews

A total of 29 key informant interviews (KIIs) with various stakeholder categories were conducted. Interviewees included municipal leaders, farmers, social workers, development economists, INGO representatives, and representatives from the Ministry of Economy and Trade and the Ministry of Agriculture. KIIs were selected using snowball sampling, a non-probability sampling technique.

3. Limitations

ALMA was an extensive and complex exercise, which covered various interrelated aspects of Arsal's labour market and population. Given the strict timeframe of the assessment (2.5 months), the research was subject to several methodological and field research limitations.

a. Sampling bias

Cost considerations placed a constraint on the overall sample size, which was limited to 215 households and 785 number of individual surveys. All LAMS data that were greater than the confidence interval (5%) were considered significant and, at the minimum, each question underwent cross-tabulation to investigate differences across gender, nationality, and age.

Due to the diverse nature of employment sectors, sampling variability limited the level of detail that could reasonably be considered significant. For example, while the LAMS was used to compile estimates of employment and unemployment across several economic sectors and nationalities, it could not be reasonably expected to yield reliable figures at a detailed level of disaggregation. The sampling base on which estimates would depend were at times too small to be significant, while effect sizes were relatively high.

Enumerators were trained and instructed on how to conduct random sampling in the field according to the methodology mentioned in Section 2, as well as how to involve Syrian inhabitants in urban areas among the Lebanese (as opposed to ITSs). Nonetheless, findings of the LAMS found a lower number of Syrian refugees living in urban areas than estimated by UNHCR. There may be various reasons for these differences; for instance, it is possible that many such refugees have already departed from Arsal following the cessation of hostilities or time of day could have affected the nature of respondents, and thus this limitation should be considered. However, while Syrian refugees living in urban areas might exhibit particular household characteristics, qualitative data reveals that Syrian refugees witness similar structural issues, employment dynamics, and household characteristics.

In terms of reliability, all quantitative and qualitative data are self-reported, something which always subjects findings to an uncertain level of perception bias as well as variations attached to the willingness to disclose data. All possible measures to reduce such biases—such as anonymity, do no harm and safe spaces—were built into the research methodology.

b. Data availability

The lack of official municipal or central government data posed a significant constraint in designing the sampling frame. Due to relatively high informality in the labour market and business ecosystem, it was impossible to acquire a list of registered or non-registered businesses. Hence, the enterprise survey was conducted based on estimates provided by municipality and key informant interviews. The enterprise survey provides an indication of the business environment, but its statistical significance remains subject to further investigation of the enterprise environment in Arsal.

Seasonal fluctuations

Total employment and unemployment in Arsal is higher during some periods of the year than in others. For example, unemployment tends to be higher during the winter where work in agriculture, construction and other seasonal industries is curtailed. To take into account seasonal fluctuations, the research team would ideally need to conduct multiple surveys across several instances, and subsequently account for a statistical seasonal adjustment. Due to the strict timeline attached to this study, the research team had neither the option, nor records of past labour surveys to take into account such fluctuations. Hence, the current findings should be seen as a snapshot of employment and unemployment patterns in Arsal at the beginning of the winter season, rather than across the year. Accordingly, it is probable that overall employment and unemployment levels across 2017 were slightly lower than the estimates presented in this report.

4. Background & Context

The town of Arsal is situated in the north-eastern segment of the Baalbek district (Arabic: *qada*) of Lebanon's Baalbek-Hermel governorate.[5] The municipal jurisdiction of the town covers around 317 square kilometres and is comprised of six geographical zones: the high Jurd (altitude 1,950–2,400 metres); the middle Jurd (1,550–1,950 metres); the lower Jurd (1,300–1,500 metres); the wadis, or valleys, at the foothills of the lower Jurd; the Sharqi, or eastern segment that borders Syria; and the Garbi, or western segment, which borders the rest of the Baalbek-Hermel governorate.[6] Average

[5] Localiban. Last updated 13 July 2016. Retrieved from: http://www.localiban.org/article3988.html

[6] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.

annual rainfall in the area is around 300 millilitres, meaning that, by most accounts, Arsal qualifies as a dryland.[7]

Historically, Arsal was a resting ground for transhumant Bedouin nomads travelling the northern pass through the Anti-Lebanon Mountains to Damascus; the town has witnessed several socioeconomic and political transformations that have shaped its history and its current context. Until the 1950s, Arsal's people and economy relied mainly on agro-pastoral activities for subsistence and governed their economy through intra-communal arrangements.[8] As Lebanon entered the post-independence period, low-input fruit farming activities began to replace pastoralism, altering the traditional agro-pastoral economy and lifestyle of Arsal and its residents.[9] By the early 2000s, the transformation was all but complete with approximately 700,000 fruit trees planted across Arsal.[10]

As this transformation was taking place, the eruption of the Lebanese Civil War (1975-1990) and the subsequent devaluation of the Lebanese pound (mid-1990s) contributed to a surge in smuggling activities to and from Syria.[11] This cross-border exchange, however, was not limited to illicit activities. The relatively remote location of Arsal on the border with Syria resulted in Arsalis becoming more and more dependent on their eastern neighbour to consume cheaper goods and services (such as healthcare) in order to meet their basic needs.[12] Following the end of the civil war, another industry proliferated in Arsal: unregulated quarrying and stonecutting. Even though quarries have been present in Arsal since the 1970s, the post-war period has seen the sector and its subsidiaries mushroom to become a main source of livelihood for thousands of Arsalis.[13]

Lebanon has not carried out an official census since 1932, and hence population figures are based on estimates from various sources—the same is true for Arsal. However, the general consensus is that the resident Lebanese population ranges between 30,000 to 35,000 persons.[14] As the conflict in Syria turned from protest to violent conflict between 2011 and 2015, hundreds of thousands of Syrian

[7] FAO Definition of Drylands. For simplicity, this report will refer to all these areas as simply Arsal.
[8] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.
[9] Lebanon's Ministry of Environment. State of the Environment Report (2001). Chapter 2. Retrieved from: www.moe.gov.lb/ledo/soer2001pdf/chpt8_wat.pdf
[10] MOA, 2010. Comprehensive Agricultural census. Retrieved from: http://www.agriculture.gov.lb/html/%D9%86%D8%AA%D8%A7%D8%A6%D8%AC_%D8%A7%D9%84%D8%A7%D8%AD%D8%B5%D8%A7%D8%A1_%D8%A7%D9%84%D8%B2%D8%B1%D8%A7%D8%B9%D9%8A_%D8%A7%D9%84%D8%B4%D8%A7%D9%85%D9%84_2010/liban.html
[11] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.
[12] International Crisis Group, Middle East Briefing N°46. (February 2016). Arsal in the Crosshairs: The Predicament of a Small Lebanese Border Town.
[13] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.; and Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[14] Key Informant Interviews, Arsal Municipality, September 2017.

refugees poured over the border to Lebanon. Arsal reportedly welcomed around 90,000 refugees and acted as a way station for refugees travelling to other parts of Lebanon.[15] While exact figures are disputed, according to UNHCR latest figures there are some 31,037 refugees who still reside in Arsal, mostly in 152 informal settlements.[16]

In 2014, Syrian rebel factions and extremist groups became encamped in the Qalamoun mountain range adjacent to Arsal and came into confrontation with the Lebanese Armed Forces (LAF). Subsequently, the Lebanese Armed Forces (LAF) established a security cordon that all but closed off entry points to Arsal and launched repeated offensives to repel militants from Lebanese territory. While the cordon was an essential security measure for the LAF, it also constituted a serious and almost debilitating barrier to the movement of goods, labour, and livestock. Economic activity such as pastoralism and agricultural work (which rely heavily on freedom of movement as well as on regional and international markets), smuggling (which requires an open border with Syria), as well as quarrying and stone cutting (which have all but shut down since the security situation deteriorated), ground to a virtual halt as a result of the cordon.

An unworkable predicament

While security situation in and around Arsal was deteriorating, so too was the state of its local economy. Timely and reliable statistics on the local economy in Arsal are sparse, particularly during the period from 2012 to 2017 when the bulk of refugees settled in the area and insecurity rose to unprecedented levels. However, anecdotal evidence from qualitative research points to significant stresses on the local economy and labour market. Add to these stresses the informal nature of much of the work conducted by Syrian refugees and Arsali residents, the ability to attain objective and reliable data becomes even harder to procure and indeed produce. That said, any population influx of over 100% – as is the case in Arsal – is bound to place both downward pressure on certain wage segments as well as upward pressure on demand for certain consumables, amongst a myriad of other potential economic effects.[17]

Prior to these security incidents, agriculture in Arsal was thought to be the primary employment sector for Arsalis and Syrian refugees. As mentioned, in the 1960s, agriculture in Arsal had begun to replace pastoral work.[18] In particular, the proliferation of cherry and apricot trees used to produce 20 thousand

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[15] Jamil Mouawad and Agnès Favier (May 2017). Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.

[16] United Nations High Commission for Refugees. IAMP 43, List of Informal Settlement, last version 29 September, 2017

[17] Shellito, K. (2016). "The Economic Effect of Refugee Crises on Host Countries and Implications for the Lebanese Case," Joseph Wharton Research Scholars. Available at: http://repository.upenn.edu/joseph_wharton_scholars/3

[18] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.

tonnes of cherries,10 thousand tonnes of apricots, and 300 tonnes of grapes.[19] By 2010, agriculture was thought to employ around 6300 labourers.[20] Many Arsalis are still pastoralists, however, the crowding out of grazing lands which are now being used to grow fruit, coupled with the move toward wage-based pastoralism (mainly performed by Syrian labourers) means many of the estimated 170 Lebanese households who own flock are also engaged in other forms of economic activity.[21] The same can also be said for small-scale farming households, many of whom use income from farming to supplement their main source of income from other forms of employment.[22]

Apart from agriculture, unregulated quarrying and masonry work was the second most prevalent employment sector in Arsal. Of course, due to the informal nature of the sector, estimates around its size and revenues vary – yet no doubt the sector has increasingly become the economic lifeblood of many Arsalis.[23] By 2005, it was estimated that illicit quarrying brought in some LBP 2 billion (approximately USD 1.3 million) in revenues to the local economy, relative to an estimated LBP 500 million (approximately USD 330,000) garnered from smuggling activities.[24] Yet, what's certain is the sector has seen rapid growth in the town since the mid-1990s, when press reports cited the number of quarries in the single digits.[25] By 2013 it was thought that some 300 stone quarries were present in Arsal.[26] The industry also produced employment opportunities in complementary vertical sectors such as stone cutting workshops which were thought to number at around 145 establishments.[27] Some 150 truckers were estimated to be reliant on the quarrying and stone cutting sector in Arsal before the recent bout of instability, which itself is thought to have caused an estimated 95% of the quarries to shutter, resulting in the loss of some 3,500 jobs.[28]

As a result of job losses in both quarrying/stone cutting as well as agriculture, perhaps the most important sector that currently garners income for resident households in Arsal is the public sector. Indeed, the lack of secure jobs in the private sector has encouraged many Arsalis to seek employment

[19] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[20] MOA, 2010. Comprehensive Agricultural census.
[21] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.
[22] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.
[23] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[24] ٢٠٠٥ (البحث الاجتماعي السريع، مجلس الانماء والاعمار)
[25] Tony Mattar, Al Diyyar, Arsal: A Town in the Bekaa that Gained its Experience from Rock Quarries.
[26] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[27] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[28] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.

in the public sector, mainly as teachers and soldiers.[29] Partially as a result of the fact that younger Arsalis achieve higher levels education than previous generations, by the mid-2000s it was thought that around 600 Arsalis were able to enter the public sector.[30] Indeed, by 2005 annual revenues from public sector employment were estimated at LBP 7.8 billion (approximately USD 5.1 million), making government employment the largest revenue source for Arsal's residents.[31] Today, it is estimated that some 2,000 to 3,000 Arsali men are employed in the LAF.[32]

Other sources of income for Arsalis include unconditional cash assistance from the government as part of the National Poverty Targeting Programme, which covers some 600 households in Arsal.[33] In addition, in 2016 Lebanon's Higher Relief Council compensated Arsal's cherry farmers to the tune of LBP 10 billion (approximately USD 6.6 million) for three years of losses stemming from the security situation.[34] However, according to members of the municipal council quoted in the press, losses in the subsector amount to LBP 23 billion (approximately USD 15.3 million).[35]

Apart from government assistance, Arsalis have also garnered income from renting land or property to refugees. Anecdotal evidence from studies in the area estimate that a domicile can garner between USD 200 and USD 500 per month for a property owner, while the cost of an entire informal tented settlement can garner between USD 5,000 and USD 10,000 per year, depending on the number of Syrian refugee households it holds.[36]

As for formal private sector commerce, reliable statistics are unavailable. But, from the information that does exist, formal private sector employment seems to be in short supply. By the mid-2000s it was estimated that only around 250 households were engaged in small business and commerce.[37]

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[29] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[30] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.
[31] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[32] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[33] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[34] Women Economic Empowerment Portal, Meager financial compensations to 3arsaal farmers and poultry owner, October 2016. Retrieved from: http://www.weeportal-lb.org/news/meager-financial-compensations-3arsaal-farmers-and-poultry-owners.
[35] Women Economic, Empowerment Portal (14 October 2016). Meager Financial Compensations to Arsal Farmers and Poultry Owners. Retrieved from http://www.weeportal-lb.org/news/meager-financial-compensations-3arsaal-farmers-and-poultry-owners
[36] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[37] Shadi Hamadeh et al. International Development Research Centre (2006). Research for Development in the Dry Arab Region. The Cactus Flower.

Similarly, in around 2007 it was presumed that only 30 companies in Arsal had more than five employees.[38]

When it comes to Syrian refugee employment, the security situation in Arsal has made it nearly impossible to acquire timely and reliable data. However, some evidence portends to Syrian refugee employment being predominantly employed in informal work within ITSs, which have developed their own proverbial mini-economies.[39] Work documented in the ITSs includes hairdressing, cotton weaving, sale of second hand clothing, as well as work in transport and small-scale farming.[40] For Syrians who seek to sell goods and services in Arsal, the municipality also levies a fee of USD 13 to USD 17 per month, or asks that the business be registered in the name of a resident of Arsal.[41]

5. Findings

5.1. Economic Snapshot: Lacking Labour

The Arsal Labour Market Assessment established the town's first baseline of labour market characteristics. Accordingly, the overall unemployment rate of Arsal stands at nearly two-thirds of the working age population, with nationality and gender seen as the main determining factors of labour force participation and employment. Among active labour market participants, 43% of Lebanese are unemployed, relative to 76% of Syrians. Overall, the male labour force participation rate in Arsal is 84% (Male Lebanese: 83%, Male Syrian: 85%) relative to a female labour force participation rate of 54% (Female Lebanese: 51%, Female Syrian: 58%).

No work, no contracts

Takeaways:

- ***The overall unemployment rate in Arsal is 59% with inactivity at 31%.***
- ***Among active labour market participants, 43% of Lebanese are unemployed, relative to 76% of Syrians.***

[38] Central Administration of Statistics (Lebanese Presidency of the Council of Ministers) - Office of the Minister of State for Administrative Reform (OMSAR): http://www.localiban.org/article3988.html
[39] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[40] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.
[41] Jamil Mouawad and Agnès Favier (May 2017), Lebanon's border areas in light of the Syrian war, New actors, Old Marginalization. Unpublished.

- ***The male labour force participation rate in Arsal is 84% (Male Lebanese: 83%, Male Syrian: 85%) relative to a female labour force participation rate of 54% (Female Lebanese: 51%, Female Syrian: 58%).***
- ***Around three quarters of workers are employed in informal jobs.***

Until this study was conducted, no representative labour market assessment had been conducted within the administrative jurisdiction of Arsal, which makes it impossible to estimate how employment has changed over time. Findings from this study show that the adverse effects of the crisis in Syria and unstable security situation in Arsal have led to a significantly constrained labour market. The current post-conflict situation constitutes what is perhaps the lowest baseline of labour market activity in Arsal since the end of the Lebanese civil war in 1990.

At present, the overall unemployment rate among the working age population of Arsal stands at 59%, with inactivity at 31%.[42] Even though different legal employment regimes for both Syrians and Lebanese are in place[43], their labour force participation rates are similar: 34% of Lebanese and 28% of Syrians are outside of the labour market. The likelihood of being part of Arsal's labour force is also highly dependent on gender. Overall, the male labour force participation rate in Arsal is 84% (Male Lebanese: 83%, Male Syrian: 85%) relative to a female labour force participation rate of 54% (Female Lebanese: 51%, Female Syrian: 58%).

With respect to whether those active in the labour market are actually employed, nationality can be seen as a main determining factor. Among active labour market participants, 43% of Lebanese are unemployed, relative to 76% of Syrians (See Figure 1). The instance of employment is also significantly determined by gender: Lebanese women are more than three times more likely to be employed than Syrian women, while Lebanese males are around two times more likely to be employed relative to their Syrian counterparts (See Figure 2).

[42] Based on the ILO definition of employment, this study considers the working age population of Arsal to be all inhabitants aged 15-65 which are had worked or actively sought employment within a one-week period previous to the survey. For ease of reading, the participation, employment, and unemployment rates in this report are expressed in terms of the working age population.
[43] Decree No 41/1 from the Ministry of Labour (issued in January 2017) forbids work to non-Lebanese citizens in several sectors. In all other sectors a ratio of ten Lebanese for every foreign employee has been decreed, with the exception of businesses in the "environmental sector" (i.e. public cleaning services), agriculture and construction.

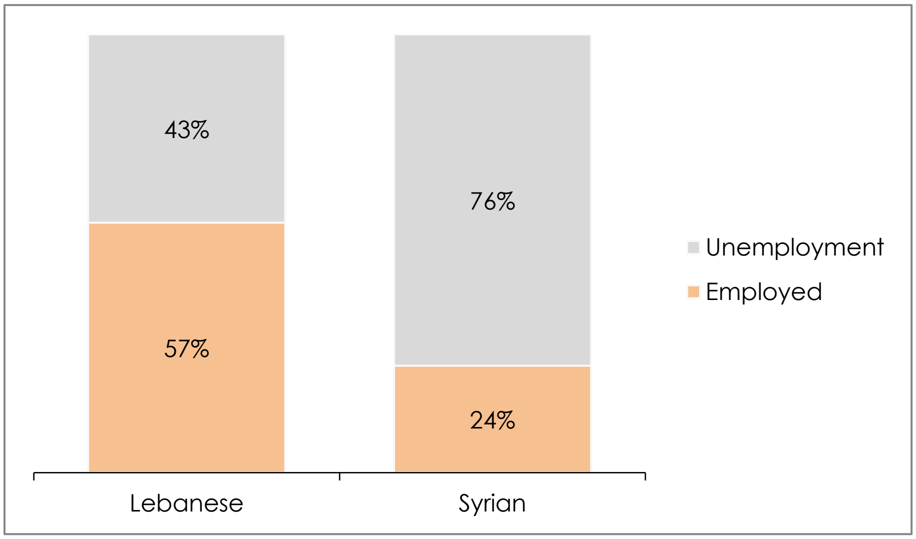


Figure 1: Employment rate per nationality, Percentage of respondents per nationality

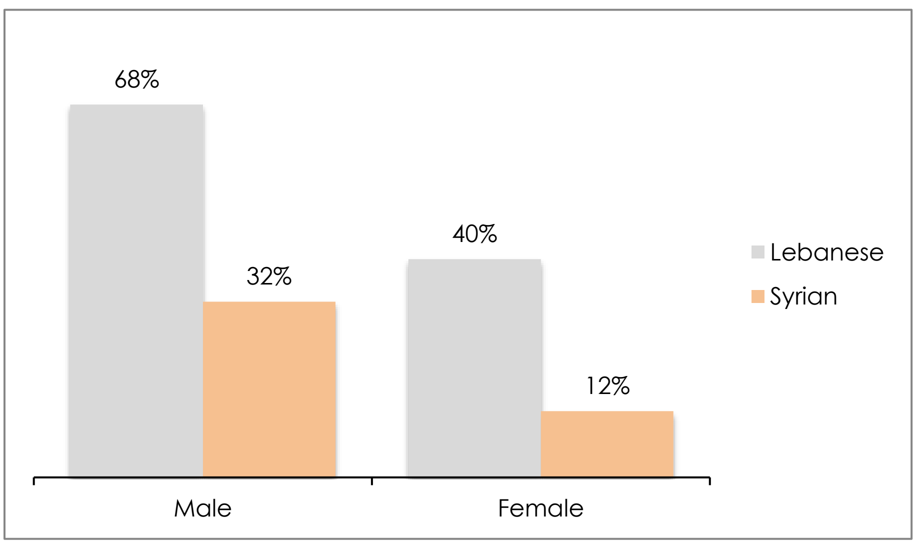


Figure 2: Employment rate per gender, Percentage of respondents per nationality

At present, the bulk of employment in Arsal is comprised of informal work, which exposes workers to vulnerable employment, distorts markets, and deprives government of tax revenue. In fact, around three quarters of all labour in Arsal is conducted on an informal basis (See Figure 3). Lebanese workers account for the majority of formal work in Arsal (91% of all formal work), while only 8% of Syrian workers have accessed formal employment. Lebanese workers are also more likely to hold full time employment (37%) relative to Syrian workers (21%), while rates of own-account work are similar across both nationalities (See Figure 4). That said, informality dominates across all types of employment among both Syrians and Lebanese (See Figure 5). It is noteworthy that inactivity rates are higher among the youth aged 15 to 18 (60%), likely due to their pursuit of education (59%). Moreover, male Syrian participants named disability to be the main reason for their inactivity (24%), while female Syrians said they did not enter the workforce in order to perform household duties (35%).

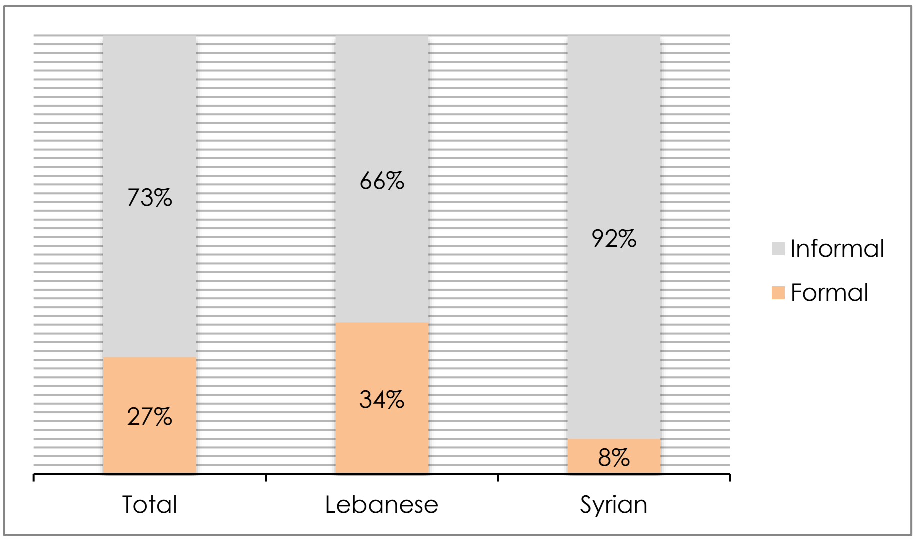


Figure 3: Nature of employment, Percentage of respondents

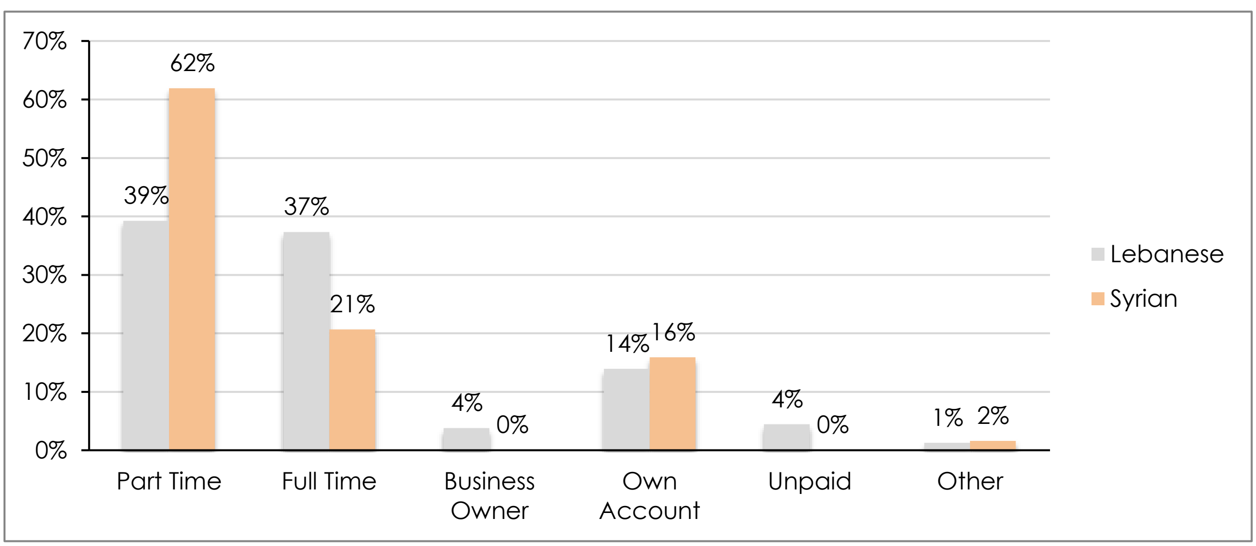


Figure 4: Type of employment per nationality, Percentage of respondents per nationality

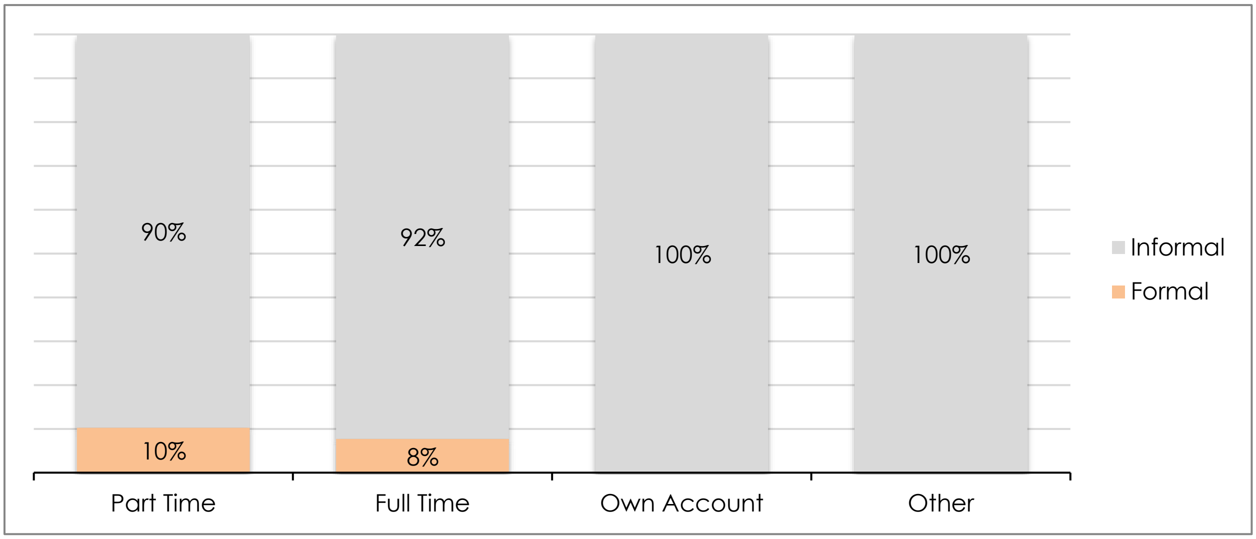


Figure 5 Type of employment Percentage of respondents

5.2. Sector Overview: Sectors in shambles

The bulk of employment in Arsal is comprised of work in the informal sector, with around three quarters of all labour in the town conducted on an informal basis, and over 90% of formal work conducted by Lebanese. The largest employment sectors for Lebanese are respectively quarrying/stone cutting, followed by trade and education; while the largest employment sectors for Syrians are construction, quarrying/stone cutting and general trade, respectively. All sectors in Arsal have been affected by the recent years of instability and refugee influx; traditional sectors such as quarrying/stone cutting and agriculture have been in decline while sectors which are dependent on aid flows have flourished, namely the education and humanitarian sectors.

Takeaways:

- ***The largest employment sectors for Lebanese in Arsal are quarrying/stone cutting (20%), followed by trade (13%), and education (9%).***
- ***Syrians are mainly employed in construction (33%), quarrying/stone cutting (13%), and general trade (13%).***
- **The largest employment sectors in Arsal maintain levels of informality above 80%.**

Employment sectors in Arsal have also borne witness to significant employment effects caused by years of refugee influx and lack of access to traditional employment activities. While all sectors have been adversely affected, traditional employment sectors such as agriculture and cross-border smuggling have taken a backseat to quarrying/stone cutting, general trade[44] and construction. The quarrying/stone cutting sector currently makes up almost a fifth of all employment in Arsal (18%) and directly contributes to the vertical construction market, which makes up around 13% of all employment in the town, not to mention the transport sector which makes up 8%. The only other employment sector with a comparable share of the labour market are general trade of goods and services, on par with construction (13%). By contrast, agriculture constitutes just 6% of employment and has been overtaken by sectors such as education and in-country transport (both at 7%). Since the closure of the Lebanese-Syrian border, cross-border transport has ground to a halt, and no longer registers as a source of employment in Arsal.

Employment sectors vary significantly among Lebanese and Syrian workers in Arsal. A third of all Syrian workers in Arsal are employed in construction, compared to just 4% of Lebanese workers. Syrians are also more likely than Lebanese to be employed in domestic work (10% Syrians, 3% Lebanese), and agriculture (8% Syrians, 5% Lebanese). As the largest employment sector in the town, the quarries and stone cutting sector constitutes a significant source of employment for both Syrians and Lebanese, making up 13% and 20% of employment respectively, while general trade makes up

[44] General trade includes activities such as business-to-consumer retail and wholesale stores as well as business-to-business trade of goods and services.

13% for both Syrians and Lebanese. Indeed, the Lebanese are also more likely than Syrians to be employed in sectors such as in-country transport (8% relative to 3%), the security forces (7% relative to 0%), humanitarian work (6% relative to 2%), pastoral activities (4% relative to 0%), manufacturing (3% relative to 0%), public services[45] (2% relative to 0%), and environmental services[46] (See Figure 6 and Figure 7).

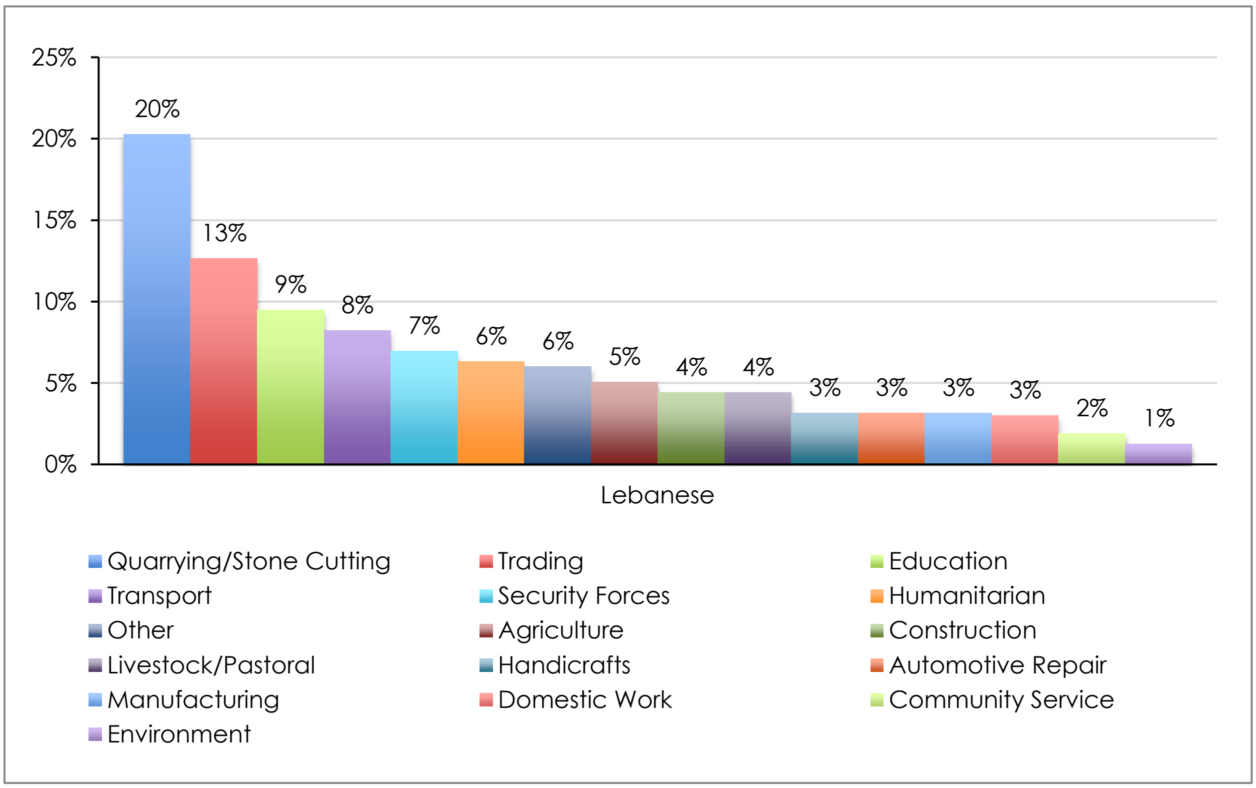


Figure 6: Sector of employment, Percentage of respondents (Lebanese)

[45] Public services include social work, local community organizations, and municipality workers.
[46] Environmental services are inclusive of solid waste, sewage, and water transportation.

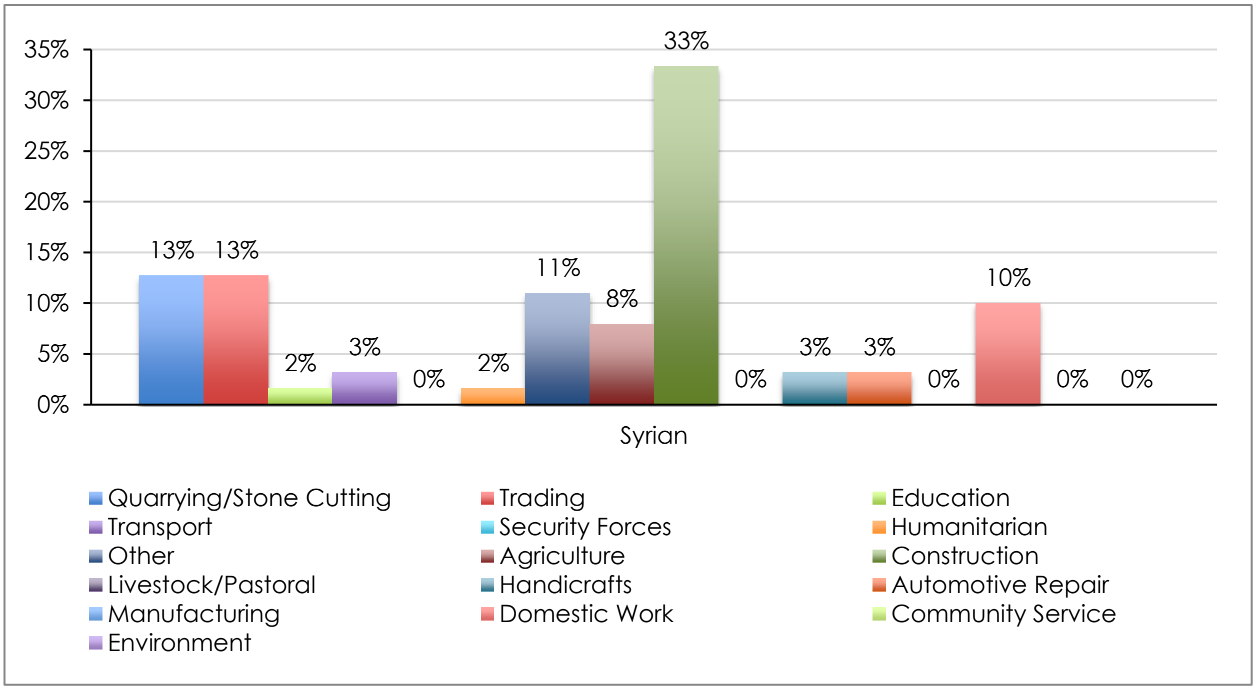


Figure 7: Sector of employment, Percentage of respondents (Syrians)

Most of the productive sectors in Arsal are largely informal, which distorts competition, negatively affects workplace rights, has adverse effects on efficiency and sector development, and crowds out formal enterprises, reducing tax revenues.[47] As the largest employment sectors in town, the quarrying/stone cutting, general trade, and construction sectors maintain informality levels of 100%, 88%, and 82%, respectively. In addition, the agriculture and livestock/pastoral sectors are completely informal (100%). Conversely, education, security forces and humanitarian sectors are the most formal with formality levels at 81%, 91% and 91%, respectively (See Figure 8).[48]

[47] C. Williams & A. Martinez, "Entrepreneurship in the informal economy: A product of too much or too little state intervention?." Entrepreneurship and Innovation. Vol 15, No 4 (2013)

[48] Because Syrian refugee work is almost completely informal, formality in Arsal is largely representative of sectors where Lebanese work, while findings for Syrian formal workers by sector contain large confidence intervals which render them statistically insignificant.

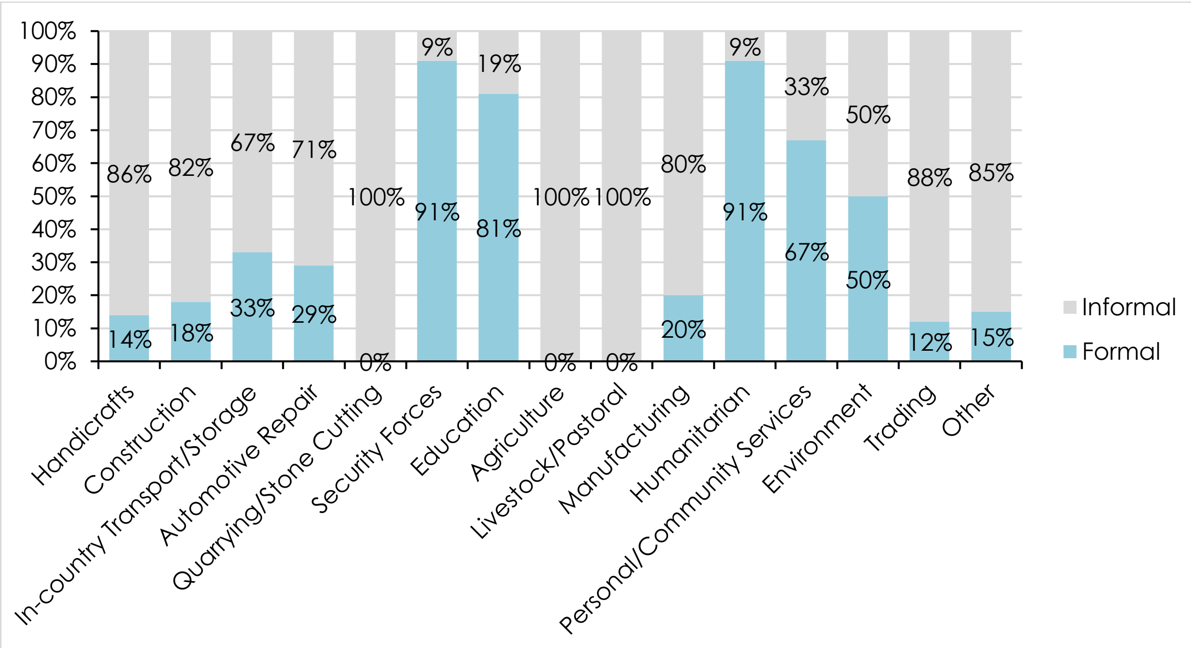


Figure 8: Informality by sector, Percentage of informality by sector

Stone Cold Sector

Takeaways:

- ***The quarries and stone cutting sector directly employs about 4,000 workers and indirectly activates vertical markets.***
- ***The sector is completely informal, unregulated, and dependent on low skilled daily labour to be competitive.***

As the sector which presently accounts for the highest proportion of active workers, quarries and stone cutting is thought to directly employ up to 4,000 workers by employers in the industry, a figure which coincides with evidence from secondary literature. These employers also estimate that the sector is comprised of two main sub-sectors: around 300 stone cutting workshops which employ an average of 10 workers each; and around 150 quarries, which employ roughly 5 workers each.

While quarries and stone cutting represent the main employment sector in Arsal, it is also the main driver of informal and unregulated employment. At present, the bulk of quarries and stone cutting operations in Arsal have not received an official license or permit from the interior and environment ministries. This takes place despite efforts by the Government of Lebanon to organize the sector and rehabilitate disused quarries in the country.[49] As a result, the sector lacks appropriate protection for

[49] Osseiran, N, Machnouk freezes quarrying for one month, The Daily Star, Available at:

workers, many of whom say they receive no compensation for workplace injuries and are not offered any form of medical insurance. In addition, workers also mention that the sector attracts child labourers and even attest to enlisting the labour of their own children to work in what is considered one of the worst forms of child labour under Lebanese law.[50]

'We have transformed the face of earth. It's like eating our own flesh. We do not like the quarries, but we need them to survive.' – Herdsman, Arsal.

Residents of Arsal also claim that the dominance of the quarries and stone cutting sector has crowded out other sectors, particularly agriculture. This over-reliance on the sector to garner employment and income exposes Arsalis to external shocks and longer-term trends in the sector. For one, demand for stone products was said to be highly dependent on the construction sector in Lebanon, which, while relatively steady, has seen fluctuations in recent years.[51] Secondly, Arsali residents describe increased competition in the stone cladding sector from imported stones, specifically from Egypt where production costs are seen to be lower.[52]

'If you work in the quarry for 20 years you don't dare to ask the owner for an additional dollar. If you don't like to work under these conditions, there are 10 others who do.' – Quarry worker, Arsal.

Residents of Arsal describe the quarries and stone cutting sector to be one of high informality and low productivity. The sector requires that low skilled daily labourers (males) perform manual labour at a low cost (approximately USD 20 for a full day's work) to produce a product that can be competitive on the local market. For their part, employers in the sector feel that the sector could become more productive through the introduction of specialised machinery and the capacity to maintain existing machinery locally. At present, when machinery malfunctions, operators transport it to Zahle for repair, during which time quarries and stone cutting are shut and workers are not paid. Yet, were the quarries and stone cutting sector to be formalised, employers believe that the extra budgets required to comply with labour and environmental regulations would increase their costs to a point where the sector would no longer be competitive with foreign competition.

http://www.dailystar.com.lb/News/Lebanon-News/2017/Apr-21/402729-machnouk-freezes-quarrying-for-one-month.ashx

[50] See Council of Minister's Decree 8987: http://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_443273.pdf

[51] Bank Med report: https://www.dropbox.com/s/rs1i4obt6h93rie/Real%20estate%20and%20construction%20sector%20report%202017.pdf?dl=0

[52] It should be noted that stones from Arsal are mainly used for building facades (stone cladding) rather than for cement products. Indeed, cement imports are banned in Lebanon to protect local industry: https://www.export.gov/article?id=Lebanon-Prohibited-Restricted-Imports

Another consideration which needs to be taken into account is the fact that most quarries were shuttered during the recent years of conflict in Arsal, according to employers. Workers were unable to access quarries because of the presence of extremist militant groups and restrictions on movement by the LAF. However, now that access is possible, the sector is starting to regain its previous capacity to attract labour, albeit sluggishly.

Withering Away

Takeaways:

- ***The Syrian conflict has negatively affected the agricultural sector through the closure of export routes and the dying-off of trees and crops on unattended land.***
- ***While agriculture has lost its role as a major employer in Arsal, it still provides a secondary source of income for many households in Arsal.***
- ***Many residents of Arsal own farm land, which has led to a small-scale agricultural production.***

While the quarries and stone cutting sector was and remains the main economic driver in Arsal, the sector that has lost the most of its labour market share in recent years is agriculture. According to residents, before the recent crisis agriculture constituted the second largest employment sector after quarries and stone cutting. While this may not be the case presently, Arsalis insist that the sector has always provided a mainstay source of income for households in the town, as well as employment for Syrian workers (especially during harvest seasons). And even if agriculture is not the primary source of employment for most of Arsal's inhabitants, according to residents, agriculture provides a secondary source of income for households who have access to land (53% of survey respondents with non-financial assets had land).

The last official agricultural census in 2010 estimates fruit trees to cover a total area of 3583 ha, or around 716000 fruit trees (estimated based on an average of 200 trees/ha).[53] These trees apparently maintain an annual production capacity of some 8,000 tonnes which, in turn, constitutes an overall turnover of LBP 12 billion (USD 8 million) per year. By and large, farmers in Arsal grow tree crops rather than cereals, and legumes. In fact, 99% of Arsal's crops were tree crops dominated by cherry and apricot trees, according to the Agricultural census of 2010.[54] Local informants estimate that the cultivation of vegetables and non-fruit trees have witnessed a significant expansion after the Syrian refugee crisis in 2011.[55] Those same sources also said that farms in Arsal are dominated by small-scale plots, most of which are not run in a manner which maximises yields or sustainability. As a result,

[53] MOA, 2010. Official Comprehensive Agricultural Census.
[54] Ibid.

[55] Key informant interviews

larger economies of scale are difficult to attain for farmers, meaning agricultural output is confined to low production levels.

A further constraining factor mentioned by key informants is the lack of agricultural infrastructure to support the agriculture sector. Major infrastructure deficiencies mentioned by informants include the lack of such agricultural roads, irrigation canals, or artificial reservoirs.

'All of our dreams went back to zero when the Syrians came. When Nusra and ISIS came, they cut down the trees and they burned down our orchards. They took all of our generators. There are 40-year-old trees that were destroyed.' – Farmer, Arsal.

Recent years have seen the agriculture sector deteriorate further, with a precipitous fall in output caused by a number of factors, famers say. Firstly, the conflict in Syria has closed off export routes for agricultural products to traditional markets, particularly Gulf Cooperation Council countries. Second, in many areas of the *Jurd* (countryside) and *Gharb* (western area) fruit trees and other crops have withered. The presence of militants around the main town of Arsal effectively cut off farmers from the upper, middle, and lower Jurds, where dryland crops (mainly cherry and apricot trees) were planted. Due to the fact that the upper Jurd enjoys the most water, it was least affected by the lack of attention given to crops. However, the lower and middle Jurds were severely affected.

The major cause of tree crop failure, according to farmers, was that rodents ate away the bark around the base of tree trunks for food, which damaged and killed fruit trees. Typically, farmers would apply rat poison around tree orchards to prevent rodents from damaging their crop. Yet, with the presence of militants, farmers estimate that 60% to 90% of trees in the lower Jurd had withered away, compared to 40% of trees in the middle Jurd and around 20% in the upper Jurd. In the Gharb, famers were also unable to irrigate their crops due to the presence of militants and restrictions on movement. As a result, farmers say their crops have been completely decimated.

'The trees contribute to a whole economic cycle. Those who have a store, those who have a tilling machine or trucks also benefit.' – Farmer Arsal.

Like Herding Cats

Takeaways:

- ***Due to the closure of the Syrian border and restrictions on movement, the livestock has been halved, from 63,000 heads to about 30,000.***

Lack of access to rangelland also adversely affected the livestock and pastoral sector in Arsal, a sector that maintains both historical and current importance for both Syrians and Lebanese. Given Arsal's location on the border, herds (mainly sheep and goats) have historically been able to graze and pastoralized have produce meat products (rather than dairy) on both sides of the border. The MOA agricultural census 2010, estimates Arsal livestock sector to possess 13111 goats, 10,858 sheep and

347 cows.[56] Local key informants estimate that Arsal's livestock sector was significantly larger before 2012 and comprised of 63,000 heads of which some 40,000 were sheep (around ⅛ of all sheep in Lebanon) and 23,000 were goats. The closure of the border with Syria and restrictions on movement stemming from the recent conflict have resulted in pastoralists having to graze on lands in the adjoining district of Hermel. Doing so, however, has increased the cost of production because municipalities charge a fee for shepherds to graze on public land. This was not the case in Syria where no such levy was applied, and feed was subsidised before the current conflict. As a result, the size of the livestock sector in Arsal is estimated by residents to have fallen to 30,000 (entire heard).

'The Syrian crisis definitely hit the livestock sector because cattle couldn't move across the Jurd, especially during winter, and we did not have access to feed in Syria which tends to be cheaper. We started selling our flock.' -- Livestock Herder, Arsal.

Much of this decrease is attributed by residents to herdsmen culling their flock and selling the meat. In addition, stabilizing flock sizes in order to sell wool has not made financial sense for pastoralists, who claim that there is no demand for wool in the local market, even though wool from Arsal has been historically employed by carpet weavers in the Northern plains of the Bekaa Valley.

Not Much to Load

Takeaways:

- **The transportation sector is a major employer in Arsal, providing services to both legitimate as well as illegitimate trade and transportation.**
- **Transportation has been indirectly affected by the general economic downturn in Arsal and directly affected by the closure of the Lebanese-Syrian border.**

Another sector which Arsalis have come to rely on is the transport sector, both illicit and legitimate. The transport sector has become integrated into the economic fabric of Arsal. The legitimate segment of the sector acts as a key vertical market to the quarries and stone cutting sector, while illicit smuggling was a mainstay for many households previous to the closure of the Lebanese-Syrian border. Since that closure, the smuggling sector has all but disappeared, which has had wider effects on the local economy due to its impact on other verticals. Specifically, the licit/illicit transport sector is also a main driver of employment in the automotive repair sector, which is one of the horizontal markets that supports employment for both Syrians and Lebanese (See Figure 6 and Figure 7). Other complementary sectors supported by the transport sector include roadside retail establishments and petroleum stations that cater to drivers.

[56] MOA, 2010. Official Comprehensive Agricultural Census.

Truck drivers in Arsal claim that the quarries and stone cutting sector used to support around 400 truck drivers, of which only 10 to 15 are currently operational – a figure which indicates the extent to which the sector has recovered since the end of active conflict. Drivers attribute this downfall to lower demand in the Lebanese market for stone cladding products. In order to compensate, many drivers have turned to other subsectors such as water trucking (mainly to Syrian refugees, which are not connected to the public water system) and bussing for schools. Syrian refugees are also involved in the transport sector, mainly as taxi drivers. Refugees working as taxis only do so within the confines of the LAF cordon, because such work is technically illegal for Syrians, and many do not have valid residency documents or driver's licenses.

'We smuggle aluminium, diesel and all electric appliances to Syria. We were the backdoor to Syria for a long time. Arsal is basically a port.' – Driver, Arsal

The adverse social effects of the recent conflict continue to linger over the transport sector. Drivers consistently complain about time-consuming security procedures they must endure at the entrance of neighbouring towns and cities, such as Labweh and Baalbek. In turn, given the reduced number of trips over any time period, drivers claim that the productivity of the transport sector has suffered significantly.

Public Over Private

Takeaways:

- **Residents of Arsal prefer public sector jobs over employment in the private sector, as they provide a steady income source and social protection.**
- **The public education sector is a major employer of females and has expanded considerably since the onset of the Syrian refugee crisis.**

Alongside employment in the private sector, Arsal's Lebanese households are also largely reliant on public sector jobs. Across the board, Arsalis view public sector jobs to be more attractive than those in the private sector, as they provide security over time, especially during times of crisis. By far, the security services make up the largest portion of public sector employees in Arsal. According to residents employed in the public sector, an estimated 3,000 persons are employed in the security services, while some 400 more are employed as teachers in 9 public schools and one vocational training centre.[57]

The public education sector in Arsal is also considered the main sector of employment for females in the labour force. Since the onset of the Syrian refugee crisis and the institution of second-shift schooling, the education sector has expanded, according to teachers in the sector. This expansion

[57] Arsal also possesses 4 private schools.

has increased the number of teachers in each school by around 25%, they say. In turn, this expansion allowed both existing and new teachers (both Syrian and Lebanese) access to more income, as second-shift schooling is paid for through Syrian refugee response aid rather than government coffers.

'At this time [during active conflict], the best thing was to be employed in the public sector; people working in other sectors had nothing to eat.' – Teacher, Arsal.

Economic Lifejacket

Takeaways:

- ***In contrast with most of Arsal's economy the humanitarian sector has thrived during the recent bout of instability and refugee influx.***
- ***The humanitarian sector generally provides higher income than other sectors, but Arsalis view the sector as unsustainable.***

While the majority of Arsal's employment sectors took a hit during the recent years of insecurity, one sector that flourished was the humanitarian sector. Since 2011, the humanitarian sector in Arsal has grown out of a volunteer-based sector into a full-fledged industry that pays relatively high salaries to an estimated 250 workers. Local NGO workers claim the sector currently generates a turnover of around USD 400,000 per month. While an important source of employment, given its temporary nature, many Arsalis view the humanitarian sector to be one of vulnerable and uncertain employment. As a result, the sector is said to attract mainly Lebanese females, while males often opt to join the security services (when feasible).

Employment of Syrians in the humanitarian sector does occur, albeit in a more limited manner. A principal barrier to Syrians entering the sector are the regulatory measures required to justify that a Lebanese candidate cannot fill a vacant post. According to key informants, the municipality is aware that jobs in the sector are relatively well paid, and thus insists that there are sufficient local Arsali workers who should receive priority over Syrians. Secondly, according to key informants, the number of Syrian workers with the skill sets and education levels required for humanitarian work is low relative to the Lebanese.

Yet, as the refugee crisis enters its seventh year, local NGO workers say that more Syrians have started to understand how the sector operates and are beginning to attract humanitarian funding to their own non-governmental or informal organizations. While this could mean greater effectiveness in the humanitarian sector, there are also risks of social cohesion being eroded, as competition for jobs and funding in the sector increases between Lebanese and Syrians. Arsalis claim that such organizations are insular, focused on the refugee community and only employ Syrian workers, something which stands in contrast to aid policy in Lebanon which seeks to support Lebanese and

Syrians equally. However, for their part, Syrian refugees perceive that because humanitarian aid targets refugees, local residents should not necessarily receive funding or jobs in the sector.

The humanitarian sector also poses sustainability risks to jobs and livelihoods in Arsal down the line. A transition out of humanitarian work and into development would necessitate a burgeoning of development projects and productive capacity to absorb the current humanitarian labour force, something which presently does not exist. Humanitarian workers are aware of this dynamic and feel that the skills they have built are transferable to the development sector. However, they also say that the culture of volunteerism which existed previous to the refugee crisis has been all but wiped out.

'***Today, when you want to conduct a training session, or a distribution and you ask the youth to help out, they always ask how much they will get in return. The international organizations killed the volunteering sector.' – Local NGO worker, Arsal***

Winners Among the Rest

Takeaways:

- ***The retail sector has seen some growth because of larger demand from Syrian refugees.***
- ***Increased consumer demand was met by both legal and newly established informal Syrian retailers who charge lower prices than their Lebanese counterparts.***
- ***Some owners of capital and property gained form the influx of refugees.***

Another sector which has ostensibly witnessed growth in the past several years is the retail sector. Residents attribute much of the expansion in the sector to the influx of Syrian refugees, which spurred consumption of retail products. In fact, according to residents, the increase in demand has facilitated the proliferation of small, informal retail establishments which are owned and operated solely by Syrians. These establishments cater to the needs of their communities, largely inside of informal settlements. Arsalis also complain that the increase in supply of these retail establishments has also increased price competition and undercut legacy Lebanese-owned retail establishments. As a result of lower prices, Lebanese residents of Arsal say they have begun to purchase goods and services from cheaper Syrian-owned retailers.

'As an Arsali, instead of buying the bread from the Lebanese [shop] for LBP 1,500--sometimes you don't have the money—so you buy it from the Syrians for LBP 1,000 or even LBP 750. Now this helps people who cannot afford the standard prices, but it's not good for the local store owners. This has more negative than positive effects.' – Trucker, Arsal.

Despite legal restrictions on Syrians working in retail establishments,[58] residents also report that Syrian labourers have also become involved in the Lebanese-owned retail industry. Apparently, Lebanese

[58] See Ministerial Decree No 41/1 (2017).

business owners have begun to hire Syrian workers because their wages are lower relative to Lebanese workers. Residents claim that subsectors such as fruit and vegetable vending and fast food delivery are dominated by Syrian labourers, who have displaced Lebanese workers. In turn, this perception has contributed to resentment among the Lebanese of Arsal, who feel they are being treated unfairly. Specifically, residents feel this is the case because they are not entitled to a host of benefits from humanitarian agencies that Syrian refugees receive, such as cash and other forms humanitarian assistance.

Apart from retail, several other sectors have apparently benefited from the refugee influx. Principally, the owners of capital, assets, and rent-seeking sectors saw fortunes improve with the influx, according to residents. Landowners were said to have benefited from a rise in demand for housing, particularly plot rentals from Syrian refugees living in informal settlements. Manufacturing industries were also able to employ Syrian workers at lower wages, increasing their profit margins and productivity by cutting costs. Indeed, 95% of Syrian workers were found to make the equivalent of LBP 15,000 (USD 10) per day or less, relative to 40% of Lebanese who were in the same income bracket.[59]

'The Syrians helped in terms of rents; they rented from Arsalis. I earned around USD 2,000 to USD 5,000 a year [from renting out], but I still lost a lot because of the Syrians. Previously, I had an income of USD 15,000 per year.' – Unemployed Lebanese Male, Arsal.

The Coming Collapse?

Takeaways:

- ***Arsal's economy has been transformed from one reliant on primary sectors to one dependent on aid flows, unproductive services, and real estate.***

The shift in economic sectors in Arsal since the onset of instability and the Syria crisis has become clear to residents and observers alike: Arsal's economy has transitioned from one that was reliant on productive primary sectors such as quarrying/stone cutting and agriculture, to one that is more aid dependent and rent-seeking, such as the humanitarian sector, education, and the property market. Indeed, residents and key informants claim that much of the capital in the town over recent years flowed from aid agencies and the war economy. Now that more stability has returned to Arsal and the conflict in Syria enters a phase of lower intensity, local residents claim that Syrian refugees have begun to leave the town. In turn, residents, municipal leaders and aid workers all expressed fears that the eventual retreat of the aid industry coupled with the sad state of productive economies are a recipe for economic calamity. Without viable sectors to act as substitutes, many fear that poverty and unemployment could deepen, with detrimental effects on social stability.

[59] Daily wages are calculated based on the assumption that a month is constituted of 22 working days.

5.3. Enterprise Overview: Little Fish, Little Pond

More than two-thirds of Arsal's enterprises were established prior to the refugee influx and currently just over one in ten of every enterprise in Arsal is owned and operated by a Syrian national. In line with the proportion of informal labour in Arsal, almost three quarters of enterprises in Arsal are informal businesses spanning several sectors including general trade, agriculture, livestock, manufacturing, and quarrying/stone cutting. Arsal's businesses are also characterised by their relatively small size, with nine in ten businesses employing less than 10 persons, at an average of five employees per enterprise.

No Business as Usual

Takeaways:

- ***Enterprises in Arsal are mostly small, have an average lifespan of 24 years, and operate in diverse fields, generally in the primary sector.***
- ***A total of 72% of enterprises in Arsal are informal.***
- ***Some 90% of businesses in Arsal employ less than 10 persons and the average number of employees in each enterprise is five.***
- ***A total of 68% of Arsal's enterprises were established prior to the refugee influx, 11% are currently owned and operated by Syrian nationals.***

The nature and characteristics of enterprises in Arsal have been shaped by the recent turmoil and refugee crisis in the town. Aside from marginal growth in informal Syrian owned and operated businesses, enterprise development has been hammered by years of conflict and relative isolation. Indeed, 68% of establishments in Arsal were established previous to the refugee influx in 2011, of which only 4% were established by Syrians. Since then, more Syrian businesses have been established, but Lebanese enterprises still constitute 89% of businesses in Arsal (See Figure 9). As a consequence of legacy enterprise dominance in the market, the average lifespan of enterprises in Arsal is 24 years.

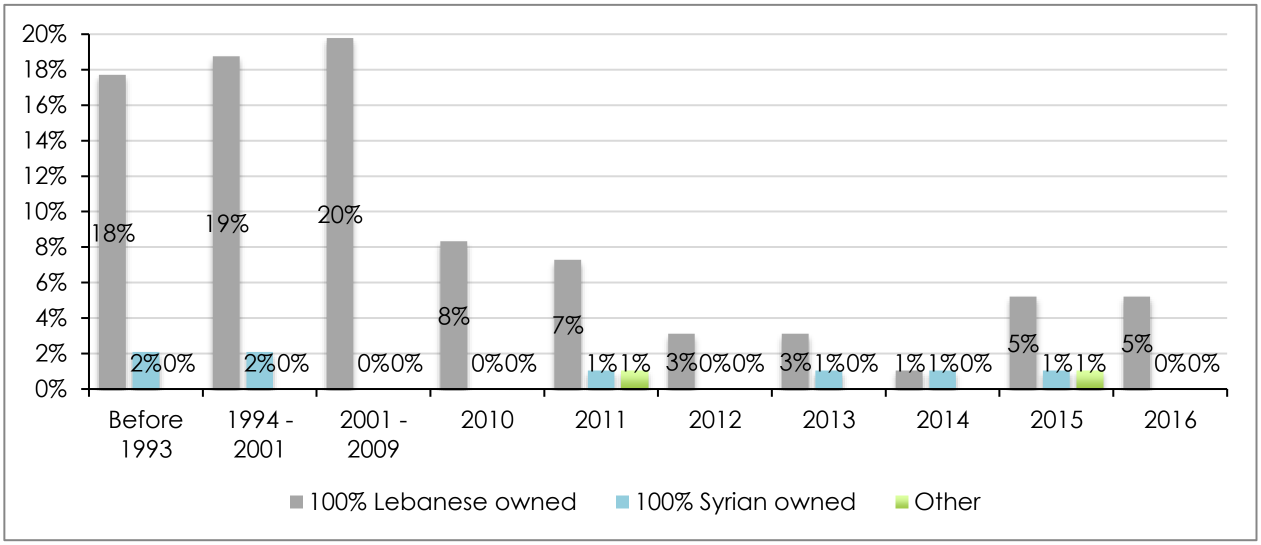


Figure 9: Ownership and establishment year, Percentage of total respondents

Almost three quarters of establishments in Arsal (72%) are informal business enterprises, meaning they are not subject to taxation or workplace protection standards (See Figure 10). Informal enterprises themselves are diverse and span several sectors including general trade (14% of informal enterprises), agriculture (14%), livestock (14%), manufacturing (13%), as well as quarrying/stone cutting (13%). The highest proportion of formal establishments were registered as limited liability companies (Société à responsabilité limitée, or SARL) with 18% of formal companies in Arsal adopting this structure. SARL companies are comprised of establishments which work in in-country transport/storage (39%), general trade (28%), health and social care (22%), as well as in education (11%). NGOs are also present in Arsal, but only constitute around 4% of enterprises, as do general partnerships.

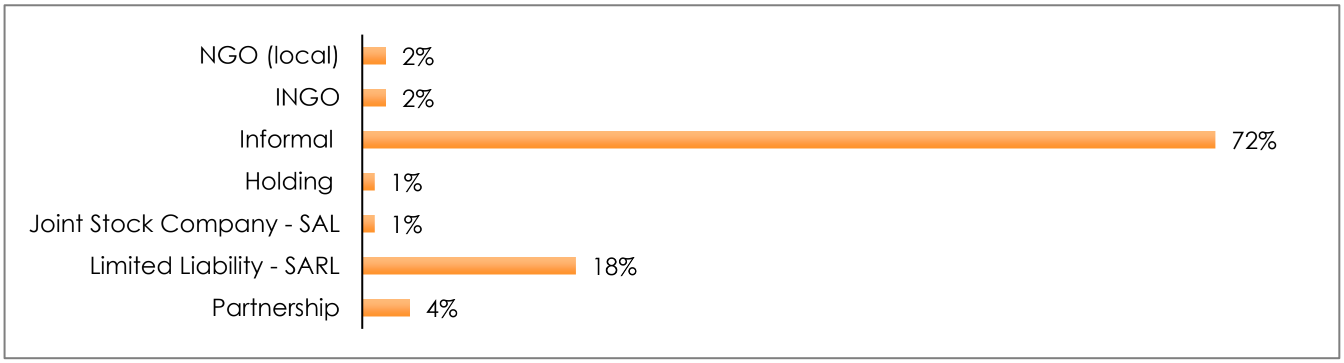


Figure 10: Registration type, Percentage of total respondents

Arsal's businesses are also characterised by their small size. Indeed, 89% of businesses were considered to be small enterprises, which employed less than 10 persons (See Figure 11). On average, these small enterprises have 5 employees each. Of the remaining enterprises in Arsal, 11% of enterprises were considered medium enterprises that employ between 10 and 50 employees, averaging 14 employees per enterprise. The only large formal enterprise in Arsal (over 50 employees) was an educational institution.

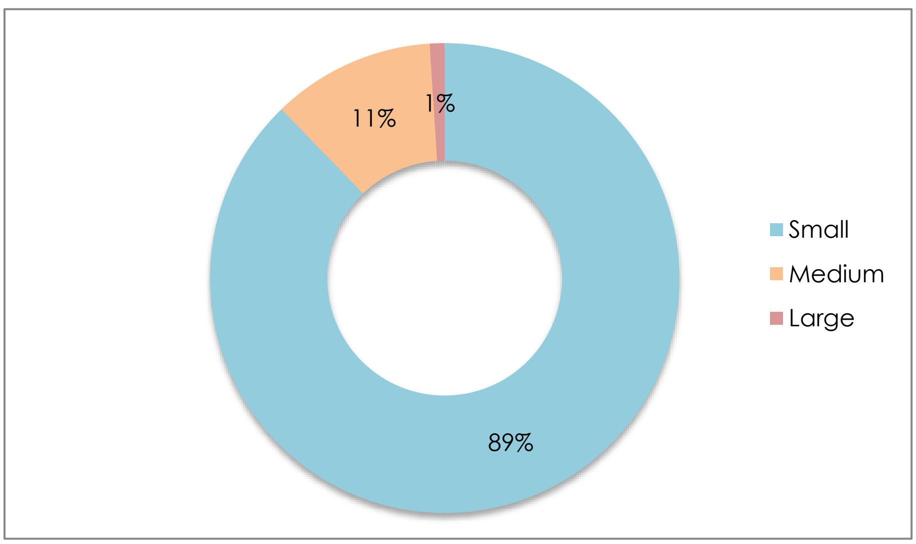


Figure 11: Enterprise size, Percentage of total respondents

5.4. Employment, Education & Skills: Mismatched Market

Years of instability, competition over scare employment opportunities, and downward pressure on wages in Arsal have resulted in a labour market which mainly produces low-wage vulnerable employment, especially among Syrian refugees. At the same time, more than half of the Lebanese in Arsal do not have stable or formal work arrangements and are paid on a daily basis, relative to 9 in ten Syrian workers. Assuming that workers can access employment month-round, 8 in ten Syrian workers make less than USD 300 per month, compared to 3 in ten Lebanese. Regardless of nationality, a significant gender pay gap also persists between men and women.

Workers in Arsal possess a range of skills in agricultural, handicraft, and other elementary work; yet the market demands higher-level skills that are managerial and professional, technical, and clerical. This skills mismatch is complicated by the fact that skills which Arsalis would like to develop are broadly the same as those that they currently possess, something which underlines a lack of awareness, or willingness, among the workforce to improve market-relevant skills.

The majority of Arsal's working age population has not passed secondary school and there are no options to attain higher education in and around the town. However, on average, Lebanese and Syrians below 35 have attained higher levels of education relative to persons between 35 and 65 years of age. Overall, the completion of tertiary education is still in the single digits, but females are also more likely to attain secondary and tertiary education than males. Education, however, may not be the main determinant of job acquisition: Arsalis generally feel that connections and clout have more influence over job attainment than merit or education.

No Pay Every Day

Takeaways:

- ***Residents claim that the Syrian conflict and subsequent refugee influx led to increased competition over scarce employment opportunities and downward pressure on wages.***
- ***Syrian refugees feel exploited by relative compensation levels, but also accept low wage levels due to their elevated needs.***
- ***Arsal has gender pay gap, with 44% of employed Lebanese women (100% of Syrian women) earning USD 300 or less per month, compared to 18% of employed Lebanese men (67% of Syrian men).***

Years of instability and the increase of labour market supply from the refugee influx have left Arsal's workers competing over predominately informal low-wage vulnerable employment without any form of workplace protection. Arsal's isolation and the subsequent market contraction (See Barriers to Entry section for details) have been compounded by job competition between residents and refugees as well as downward pressure on wages, residents claim. Arsalis generally point to the provision of humanitarian aid to Syrian refugees as an element which facilitates lower price taking by the latter. At the same time, Syrian refugees expressed frustration at the level of wages offered to them, which they felt were exploitative and grossly below going market rates.

Such emerging labour market dynamics should be considered against the general employment environment for both Syrians and Lebanese, not to mention wider living standards, as well as formal and informal social security mechanisms. In addition to higher levels of formality among employed Lebanese (See Economic Snapshot section), residents also enjoy significantly more stable payment rates: 90% of Syrian workers are paid on a daily basis relative to 56% of Lebanese workers (See Figure 12).

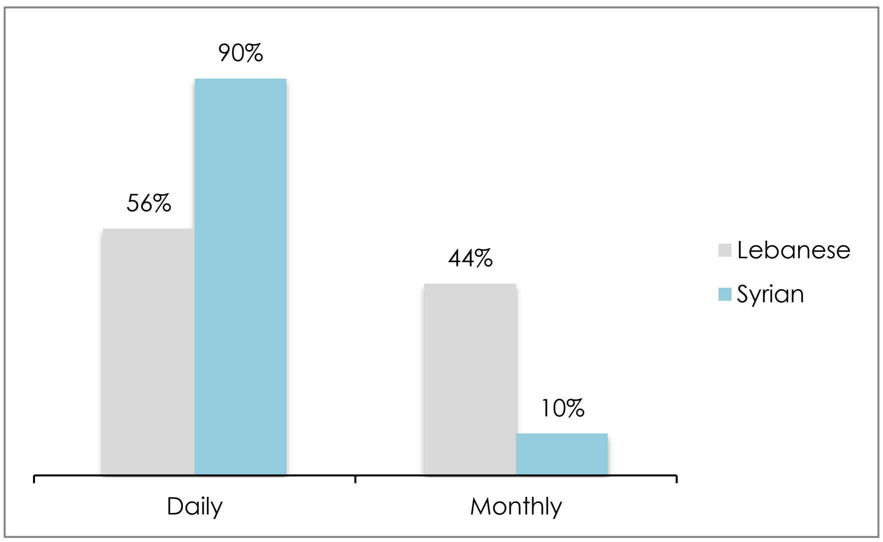
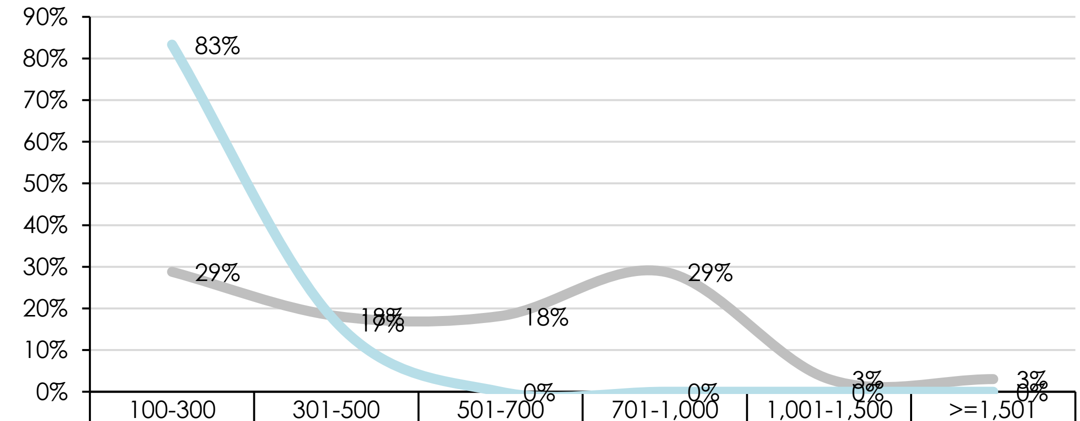


Figure 12: Payment rate per nationality, Percentage of total employed respondents

Syrians also enjoy significantly lower levels of income and access to employment sectors relative to Lebanese. On aggregate, all Syrian refugees earn less than USD 500 each month, compared to 47% of Lebanese.[60] In fact, the large majority of Syrian refugees (83%) earn between USD 100 and USD 300 per month, relative to 20% of Lebanese (See Figure 13). Indeed, monthly income for Lebanese is more evenly distributed across the population with the large majority making less than USD 1,000 per month. Of course, monthly averages mask the fact that more than half of Lebanese workers' income is garnered through daily labour (90% of Syrians) and not on a monthly basis.

[60] Monthly compensation is based on an assumption that daily wage rates are accessed 22 days each month, which may not be the case for many casual workers.



	100-300	301-500	501-700	701-1,000	1,001-1,500	>=1,501
Lebanese	29%	18%	18%	29%	3%	3%
Syrian	83%	17%	0%	0%	0%	0%

Figure 13: Monthly income per nationality (USD), Percentage of total employed respondents

It should be noted that Syrian refugees registered with UNHCR receive USD 27 per person per month in cash for food assistance from WFP, which similarly funds the Ministry of Social Affairs National Poverty Targeting Programme food assistance component for vulnerable Lebanese.[61] According to the Ministry of Social Affairs, 642 vulnerable Lebanese households in Arsal have benefited from NPTP assistance (out of 697 applicants).[62]

On the whole, Syrians garner relatively lower income and are able to access fewer sectors than the Lebanese. In the majority of sectors, Syrian workers are paid less than USD 100 per month. Notable exceptions include the quarrying/stone cutting, humanitarian work, and the education sectors, where Syrians typically earn up to USD 300 per month, and in some instances, are paid between USD 300 and USD 700 per month (See Figure 14). It's also evident that Syrian workers cannot access employment in several sectors, namely the security sector, manufacturing, personal and social care, as well as the environmental sector (in which Syrians are legally permitted to work), and the livestock/pastoral sector.

[61] NPTP assistance package consists of the following: (i) comprehensive health coverage for beneficiaries in public and private hospitals through the waiver of 10-15% of co-payments for hospitalization; (ii) registration fee waivers and free books for students in primary and secondary (including vocational) public schools; and (iii) food assistance via the electronic card food voucher program since November 2014. The food assistance was introduced lately as a means to help mitigate the impact of the refugee influx on poor Lebanese. As of December 2015, 148,785 households (around 589,310 individuals) had applied to the program, and 105,811 households (460,281 individuals) were deemed eligible to receive the hospitalization and education benefits.

[62] Ministry of Social Affairs Web Portal. See: http://im-tools.org:8080/lhsp/portal/poverty_data.php

Discussions with Syrian refugees in Arsal largely confirm findings from the survey. For instance, refugees stated that average monthly earnings for workers is around USD 30 for retail workers, about USD 300 per month in the quarrying/stone cutting sector, and between USD 110 per month for construction workers and USD 330 for foremen (See Annex A).

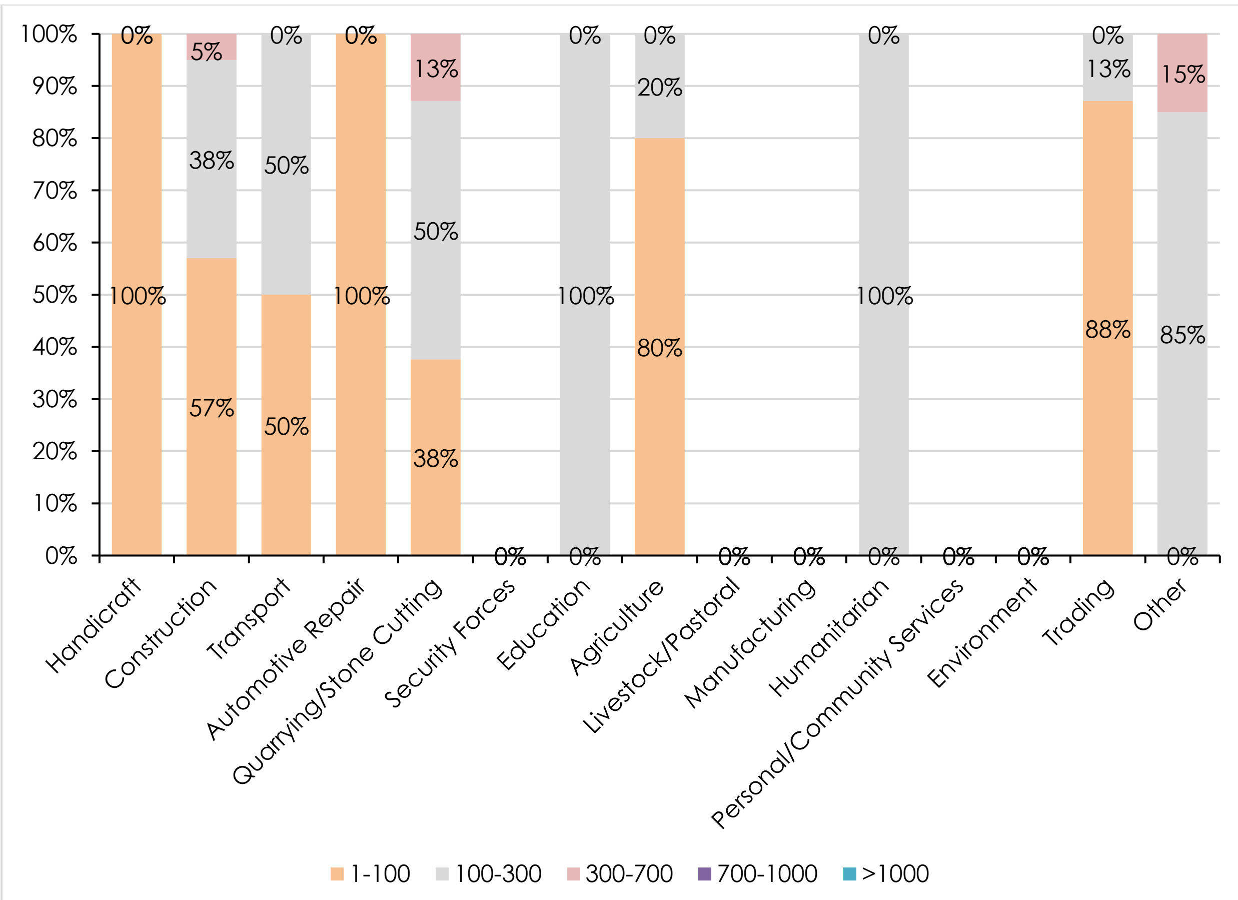


Figure 14: Monthly compensation per sector in USD (Syrians), Percentage of total respondents

Among the Lebanese, those employed in the security forces or in the humanitarian sector were the most likely to be in upper income brackets. Other relatively lucrative sectors for Lebanese workers include the transportation, automotive, and education sectors (See Figure 15). The sectors with the largest proportion of lower income Lebanese workers were the livestock and pastoral sector (60% earn between USD 1-100) and handicrafts (20% earn between USD 1-100). While income brackets among the Lebanese are diverse, residents and refugees both felt generally that Lebanese were able to make higher pay in the same profession, relative to Syrians (See Annex A).

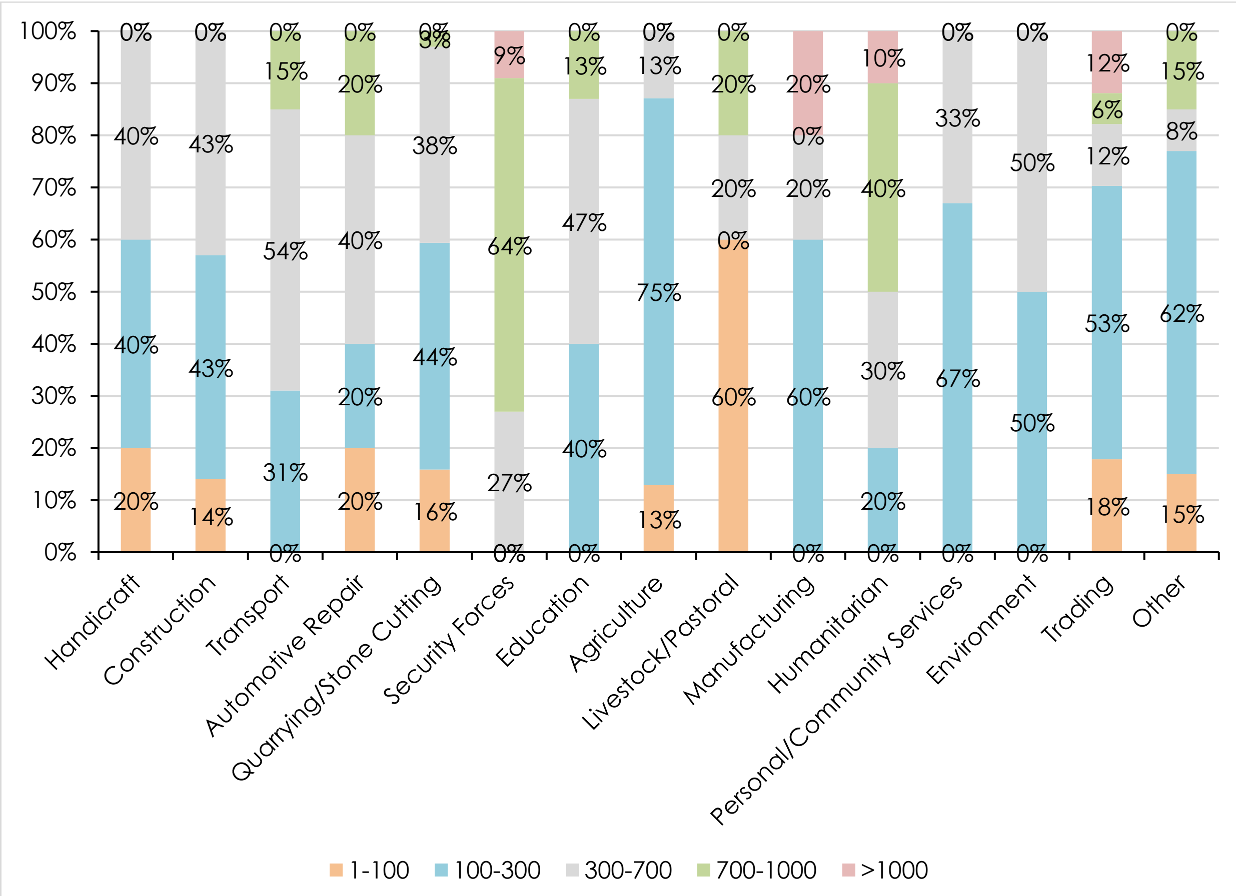


Figure 15: Monthly, compensation per sector in USD (Lebanese), Percentage of total respondents

Arsal also maintains a significant gender pay gap. A total of 44% of employed Lebanese women fall within the lowest monthly income bracket (USD 100 to USD 300 per month) relative to 18% of men. The same is true for Syrian women, all of which fall into the lowest income bracket relative to 67% of Syrian men. In fact, the only income bracket where the gender pay gap is significantly lower is among Lebanese male and female workers who earn between USD 500 and USD 700 per month (See Figure 16).

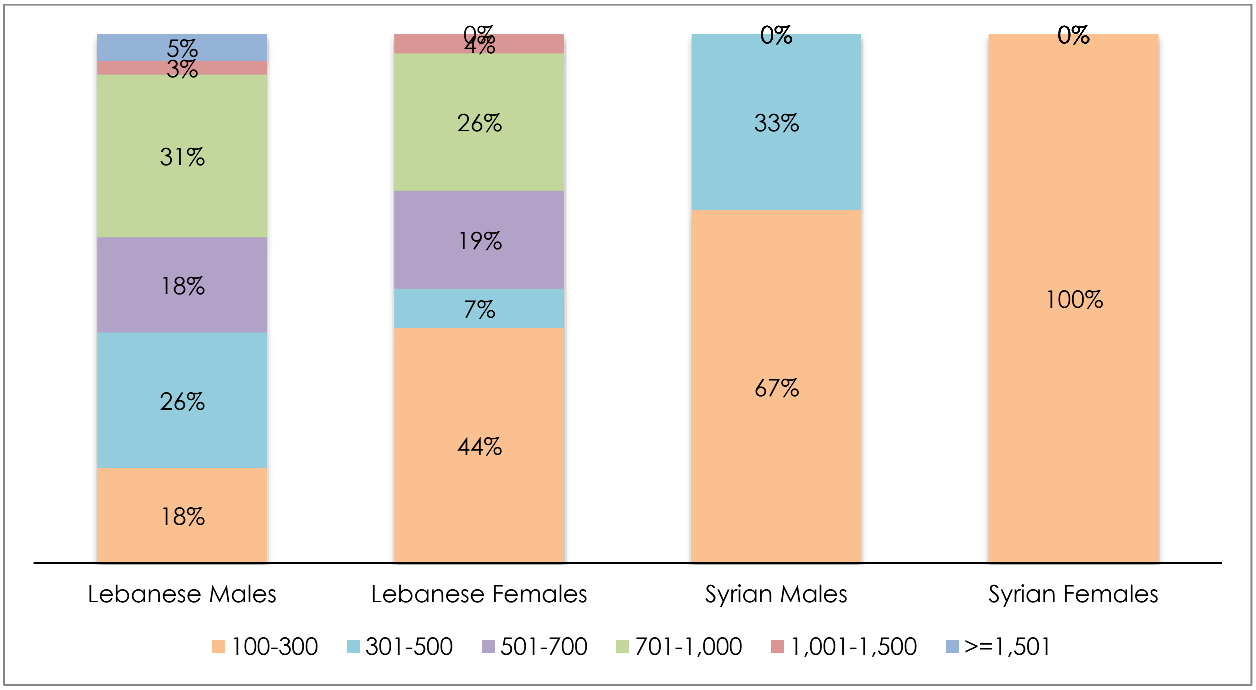


Figure 16: Income level per education group in USD/month, Percentage of respondents by nationality

Proficiency Mismatch

Takeaways:

- ***The skill sets of workers in Arsal generally match their occupations, namely in agricultural, handicraft, and other elementary skills.***
- ***Employers seek out higher-level skills that are managerial and professional, technical, and clerical; hence a skills mismatch persists.***
- ***Arsalis would like to develop skills that are broadly the same as those that they currently possess, something which underlines a lack of awareness, or willingness, among the workforce to improve market-relevant skills.***

As primary sectors such as agriculture and quarrying have long dominated Arsal's economy, it stands to reason that Arsal's workers possess a diverse range of skills in these sectors, even after the refugee influx. In fact, the majority of workers (both Syrian and Lebanese) in Arsal do possess such skills, specifically in agriculture (23%), handicrafts (23%), and other elementary occupations (21%). To a lesser extent, Arsal's workers also possess some skills in services and sales (13%). Interestingly, the skill sets of both Lebanese and Syrians in Arsal are broadly similar with some slight variance in favour of Lebanese, more of whom are skilled at agricultural and pastoral work as well as handicrafts (See Figure 17).[63]

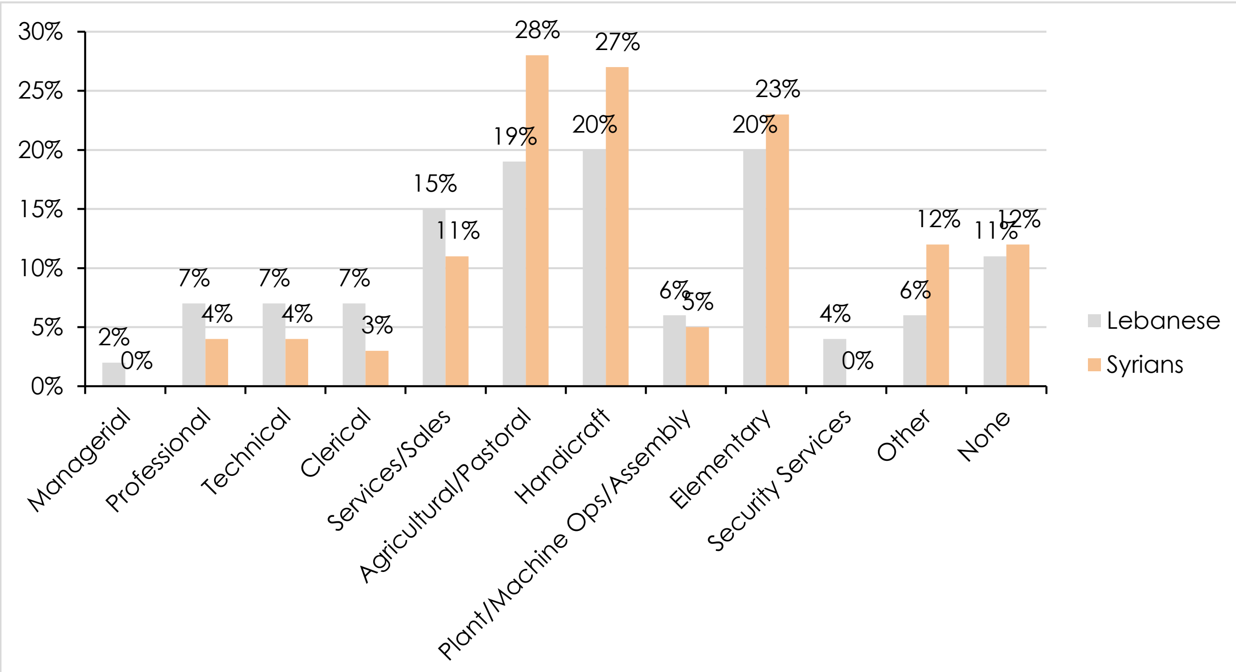


Figure 17: Skill sets among workers, Percentage of total respondents

What can be inferred, however, is that business owners in Arsal are generally not seeking out the skills that workers in Arsal possess. Instead, employers seek higher-level skills that are managerial (10%) and professional (20%), technical (23%), and clerical (20%) in nature. Demand for the more elementary skills which Arsalis possess pales in comparison: only 7% of employers seek out agricultural skills (7%), while only 6% are looking for plant and machine operation and assembly skills (3%), or the ability to perform other elementary skills (3%).

This skills mismatch between market demand and labour supply is further complicated by the skills Arsal's workers would *like* to develop. The areas where Arsal's workforce seeks to improve their skills are largely in the type of skills they already possess and not those demanded by the market, namely skilled agriculture/pastoral (20%), handicrafts (24%) and elementary tasks (16%). The only match between skills demand and supply was in sales and services: 12% of Arsal's workers felt that they wanted to improve these skill sets (See Figure 18). These findings underline a lack of awareness, or indeed willingness, among the workforce to improve market-relevant skills.

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[63] Given that the skill sets of both nationalities are broadly similar, this report does not seek to disaggregate skills levels in its analysis, as doing so would yield findings with high confidence intervals.

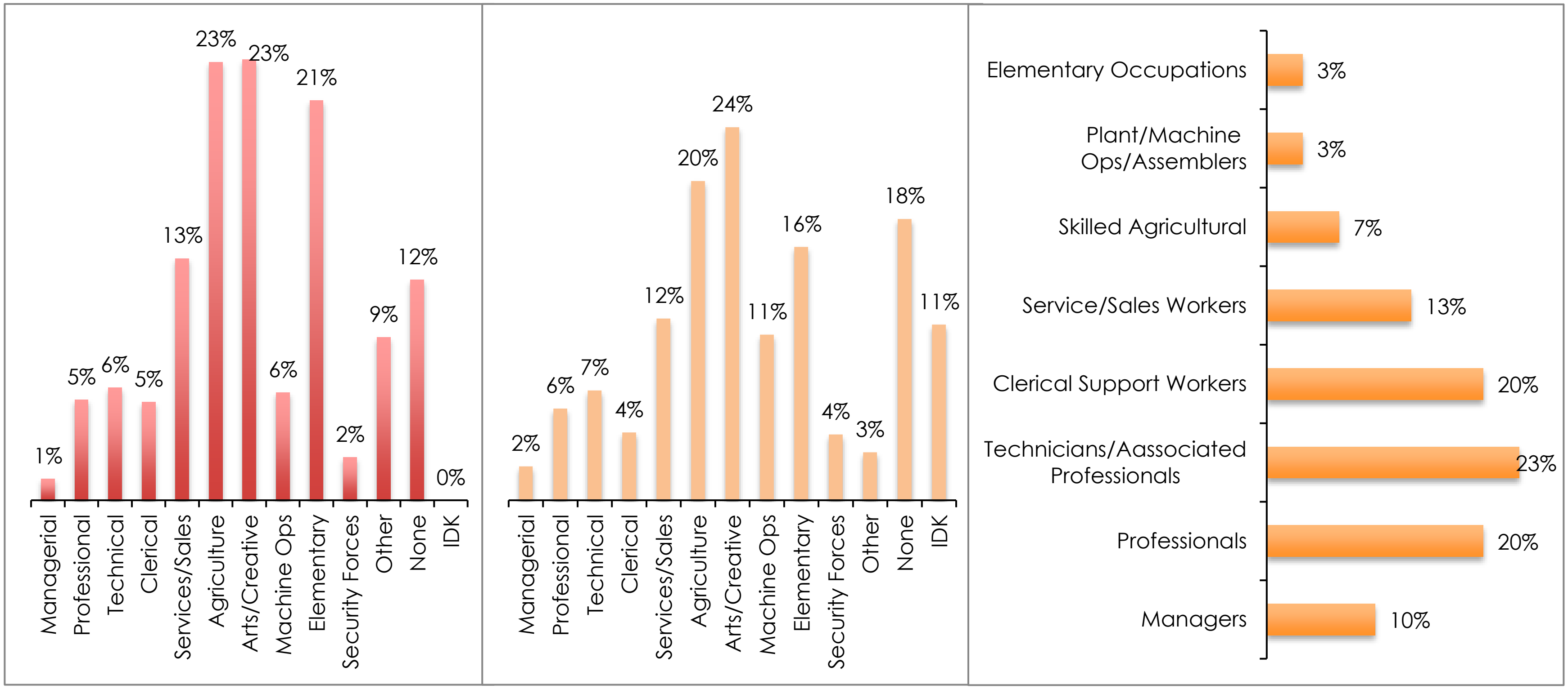

Figure 18: Skill mismatch by sector (L,C) and Difficulties hiring workers' with specific skill sets (R), Percent of total respondents

Taught for Naught

Takeaways:

- ***The majority of the working age population of Arsal has not passed secondary school. This is more the case among Syrians than Lebanese.***
- ***On average, Lebanese and Syrians aged 35 or below have higher education attainment rates than those above 35.***
- ***Some 66% of Lebanese aged 15 to 18 and 27% of Lebanese aged 19 to 25 are enrolled in some form of education, compared to 14% and 7% of Syrians, respectively.***
- ***A total of just 9% of Arsal's Lebanese residents have attained higher education (relative to 2% of Syrians).***
- ***Despite the presence of a vocational training centre in Arsal, 10% of Lebanese acquired vocational certificates (relative to 1% of Syrians).***
- ***A total of 18% and 13% of Lebanese females have attained tertiary level degrees, respectively, compared to 10% and 4% of Lebanese males.***
- ***Arsal's residents generally do not feel that educational attainment is a significant determining factor of employment, as they feel that wasta[64] outranks merit.***

When compared with other countries in the region, Lebanon's gross and net enrolment rates are relatively low.[65] According to latest available data (2015), Lebanon's gross enrolment in secondary education reaches 60%, well below the regional average of 71%.[66] The decrease in gross enrolment at secondary levels has also been steadily decreasing since 2000, long before the refugee influx.[67] In spite of the notable investment by humanitarian actors in recent years, the education system in Lebanon is affected by significant long standing structural problems.[68] Education infrastructure is still lacking and in many cases the quality of pedagogy is extremely poor. Classes are overcrowded and the educational attainment level of teachers is still insufficient.[69]

These dynamics are evident in Arsal, where higher education institutes are not present, save one vocational institute. As a result, educational attainment past the intermediate level is constrained, while attainment of higher education is in the single digits (See Figure 19). In fact, Lebanese residents of Arsal have achieved education levels that are only marginally higher than their Syrian

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[64] *Wasta* is a common an Arabic term that generally describes connections or clout to facilitate access without any basis in merit or due process.

[65] https://data.worldbank.org/indicator/SE.SEC.ENRR?locations=1A-LB, Gross enrolment is calculated as the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of basic education that began at the primary level and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction taught by more specialized teachers. Population data are drawn from the United Nations Population Division, which includes the Syrian refugee population.

[66] Ibid. Percentages are rounded.

[67] Ibid.

[68] Analysis of Lebanon's Education Sector, BankMed, June 2014. Available at: https://www.bankmed.com.lb/BOMedia/subservices/categories/News/20150515170635891.pdf

[69] UNICEF Rapid Needs Assessment Education Sector.

counterparts, but only up until the secondary school level. A total of just 9% of Arsal's Lebanese residents have attained higher education (relative to 2% of Syrians), and despite the presence of a vocational training centre in Arsal, only 10% of Lebanese have acquired vocational certificates (relative to 1% of Syrians).

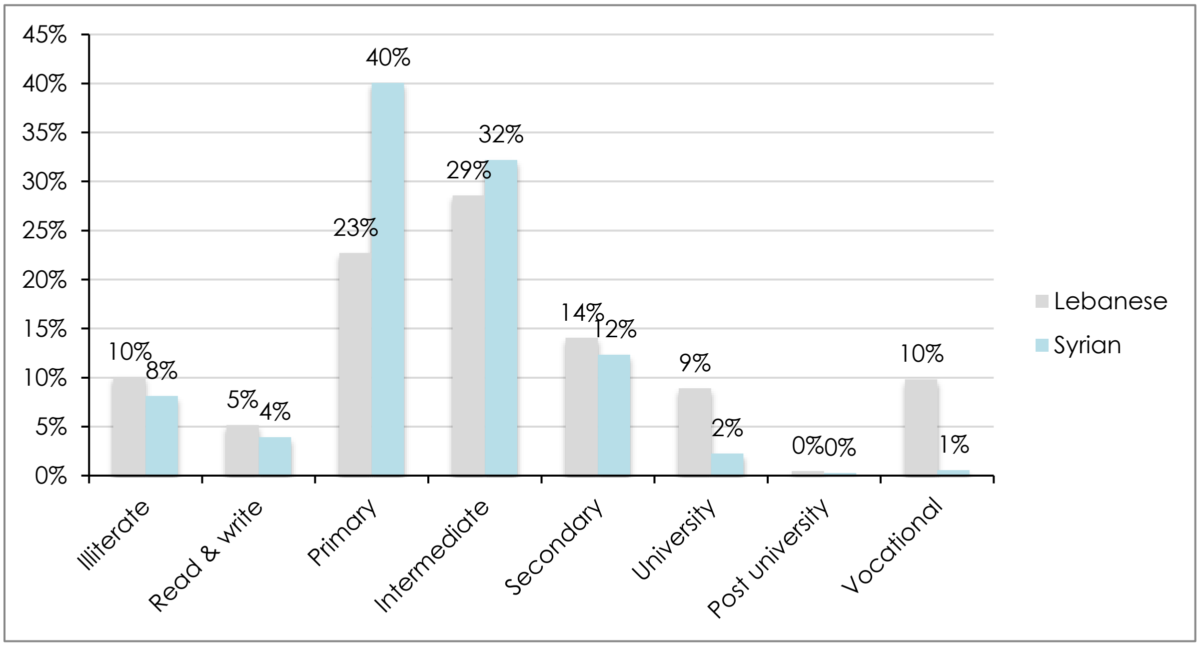

Figure 19: Highest level of education per nationality, Percentage of respondents, by nationality

Arsal's residents generally do not feel that educational attainment produces employment results, as the market is both highly informal and access to employment is more dependent on wasta rather than merit, especially in the public sector. Access to quality higher education is also constrained by distance (the closest quality higher education institution is said to be in the city of Zahle, some 72 kilometres by road) as well as the cost of education. Syrian refugees in Arsal explain relatively low attainment rates not as an issue of access, but rather that children tend to drop out of school after intermediate education in order to support household income needs.

'You study but cannot get a job, because you need a wasta. In Arsal getting a wasta is very rare, because the politicians don't profit from Arsal.' – Public Servant, Arsal.

Low education levels notwithstanding, younger people (15-35) generally have higher levels of education than older members of the populations (over 35) (See Table 2). In addition, some 66% of Lebanese aged 15 to 18, and 27% of Lebanese aged 19 to 25 are enrolled in some form of education. By comparison, only 14% of Syrians aged 15 to 18, and 7% of Syrians aged 19 to 25 are enrolled in some form of education. Among the 10% of Lebanese who have completed vocational training, most are between 19 and 35 years of age, which indicates that access could be a major driver of educational attainment, given the presence of a vocational institute in Arsal.

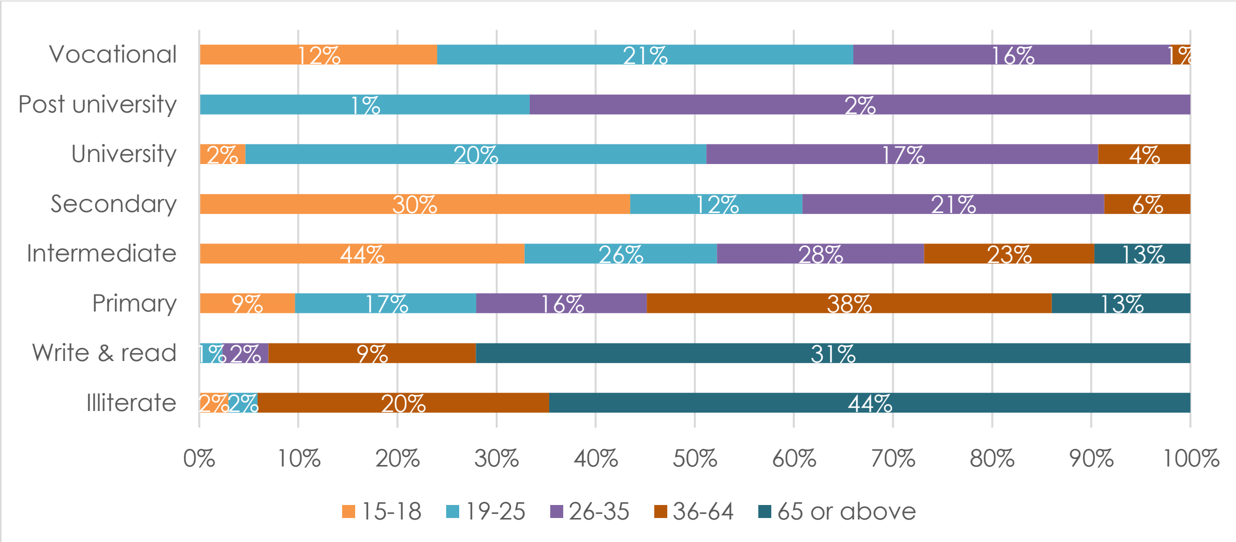

Figure 20: Level of education, Across different age groups

Whether or not higher education translates into employment and higher incomes, women in Arsal seem to be more interested in higher-level educational attainment than their male counterparts. A total of 18% and 13% of Lebanese females have attained secondary- and university-level degrees respectively, compared 10% and 4% of for males. Instead of higher education, it seems that Lebanese males either dropout after intermediate schooling or go into vocational training (12% of men, relative to 8% for women). Contrary to the Lebanese of Arsal, Syrian educational attainment at the higher end of the education spectrum favours males: 15% of male respondents have attained secondary education versus 9% of Syrian females. However, at the primary level, women enjoy higher attainment levels than men, even if there are more women who are either illiterate or have basic literacy skills (See Figure 20 and 21).

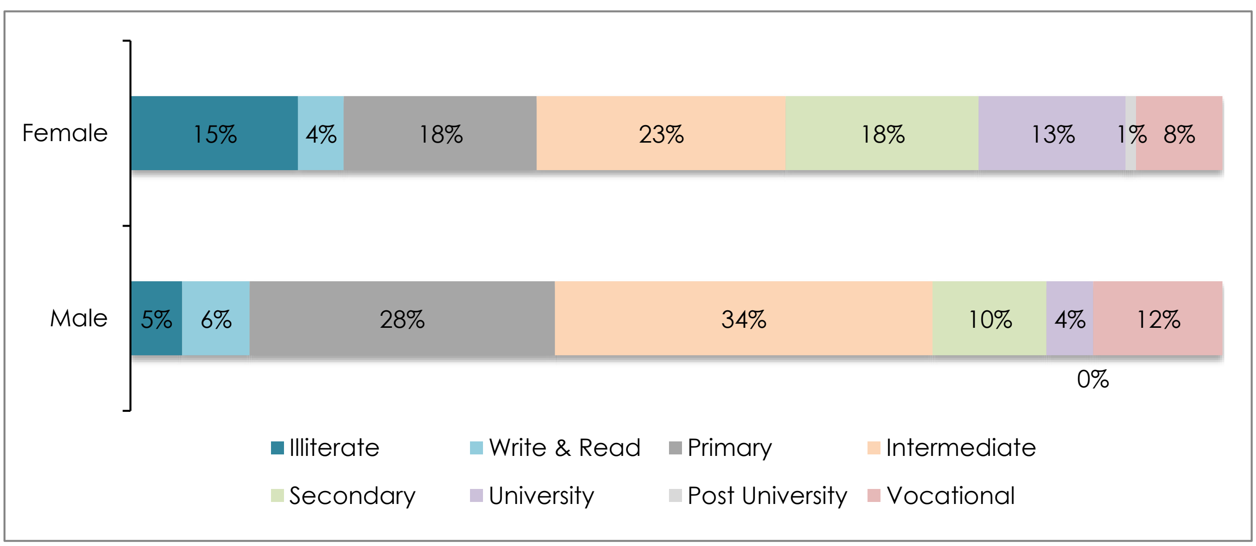

Figure 21: Education level for Lebanese by gender, Percentage of Lebanese respondents

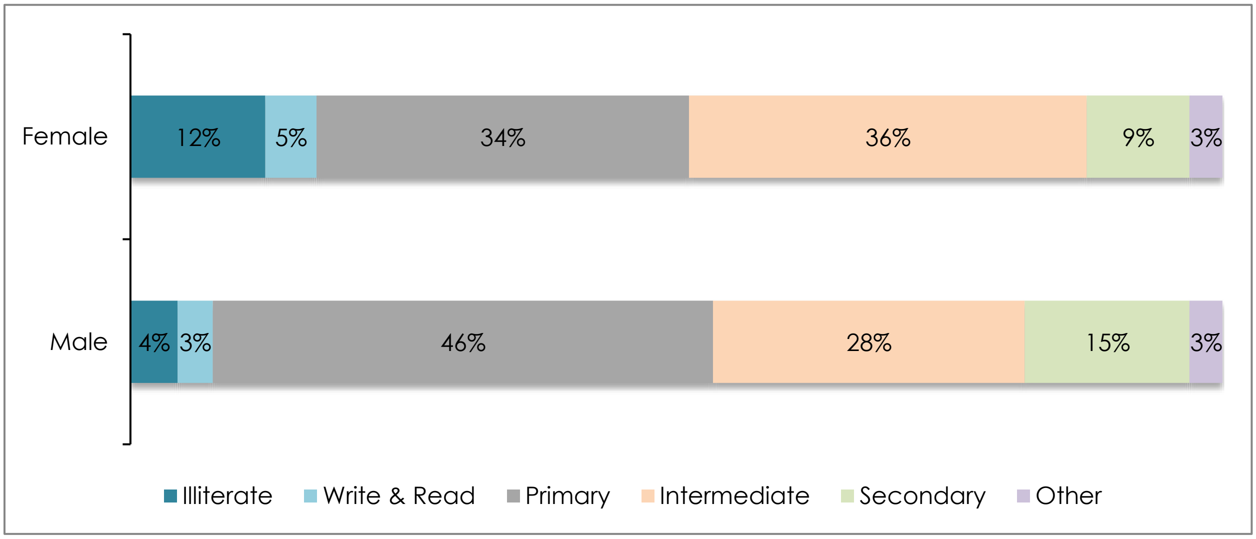

Figure 22: Education level for Syrians by gender, Percentage of Syrian respondents[70]

5.5. Barriers to Employment/ Self-employment

Since 2013, the majority of businesses in Arsal have seen reduced turnover, a trend which they expect to continue and worsen in 2018. Net hiring has broadly followed this trend with one significant outlier during the period in 2015. Net hiring is also expected to continue to fall in the coming period, as vacancies number less than staff cuts on average.

Years of instability and the informal nature of work in Arsal also contribute to businesses' most prominent contextual challenges: competition from imports and own-account workers (mainly Syrian refugees), security, and access to markets. Yet, high levels of informality also mean that enterprises are not overly concerned with government regulations or bureaucracy.

Enterprises in Arsal also have difficulty hiring and retaining workers with technical, clerical, and professional capacities. In addition, employers said they value soft skills such as work ethics, good attitude and communications skills more than hard skills such as basic IT skills and literacy.

Inactivity among inhabitants of Arsal is rife for a diverse set of reasons which range from educational enrolment to disability and the lack of employment opportunities. That said, Lebanese are more likely to be inactive because they are enrolled in some form of education while Syrians are more likely to be outside of the labour market due to disability. The most prominent reason

[70] 'Other' includes university, post-university and vocational degrees.

why working age women in Arsal are not active in the workforce was found to be the need to perform household duties.

Takeaways:

- ***Since 2013, the majority of businesses in Arsal have seen reduced turnover, a trend which they expect to continue and worsen in 2018.***
- ***Enterprises in Arsal also have difficulty hiring and retaining workers with technical, clerical, and professional capacities.***
- ***Employers value soft skills, such as work ethic, communications skills, and common sense, over hard skills, such as basic IT skills and literacy.***

Over the past several years, businesses in Arsal have had a rough ride. Pervasive instability and limitations on movement have taken their toll. Up until 2012, the large majority of enterprises in Arsal said that turnover was expanding or stable (92%). Yet, once the bulk of the refugees had arrived and instability began to set in, turnover in Arsal plummeted. Between 2013 and 2016, almost half of enterprises in Arsal reported a decrease in turnover, compared to just 7% during 2011 and 2012. Perhaps understandably, the mood among business owners has soured: 61% of surveyed enterprises expected turnover to decrease between 2017 and 2018 (See Figure 22).

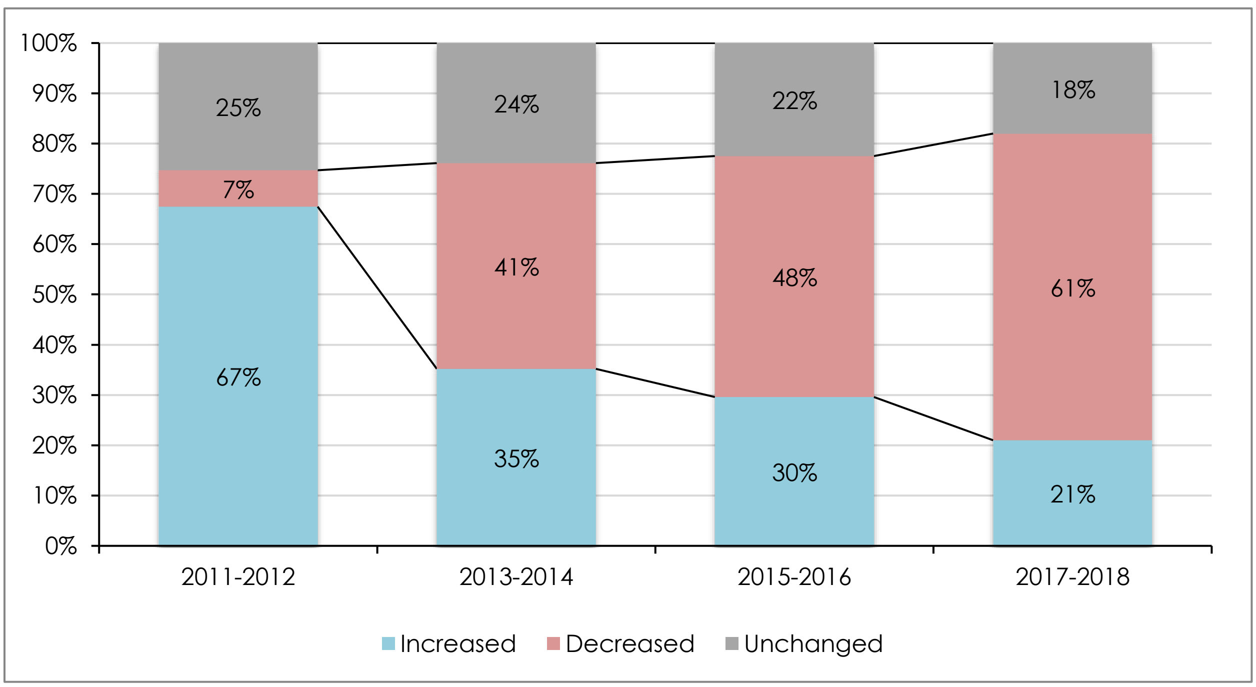

Figure 23: Turnover, Percentage of total respondents

While the prognosis may seem bleak, the decrease in turnover did not lead to a comparable decrease in employment, quite the contrary. Employment seems to have contracted 4% between 2011 and 2014 only to expand by 15% between 2015 and 2016 (See Figure 23). This increase in employment while businesses witnessed decrease turnover indicates that the job market remains somewhat resilient and may even be decoupled from production. As Arsal's economy was incapable of absorbing the increase in labour supply, it could be the case that downward pressure on wages spurred hiring. In addition, the flow of refugees into Arsal has naturally increased the local consumer base, which could suggest that enterprises catering to the local market expanded, while those depending on access to outside markets contracted. That said, the sullen mood among business owners should not be discounted: on balance, employers are looking to reduce staffing levels by some 4% during the six months subsequent to when the survey was conducted (November 2017) (See Figure 24 and 25).

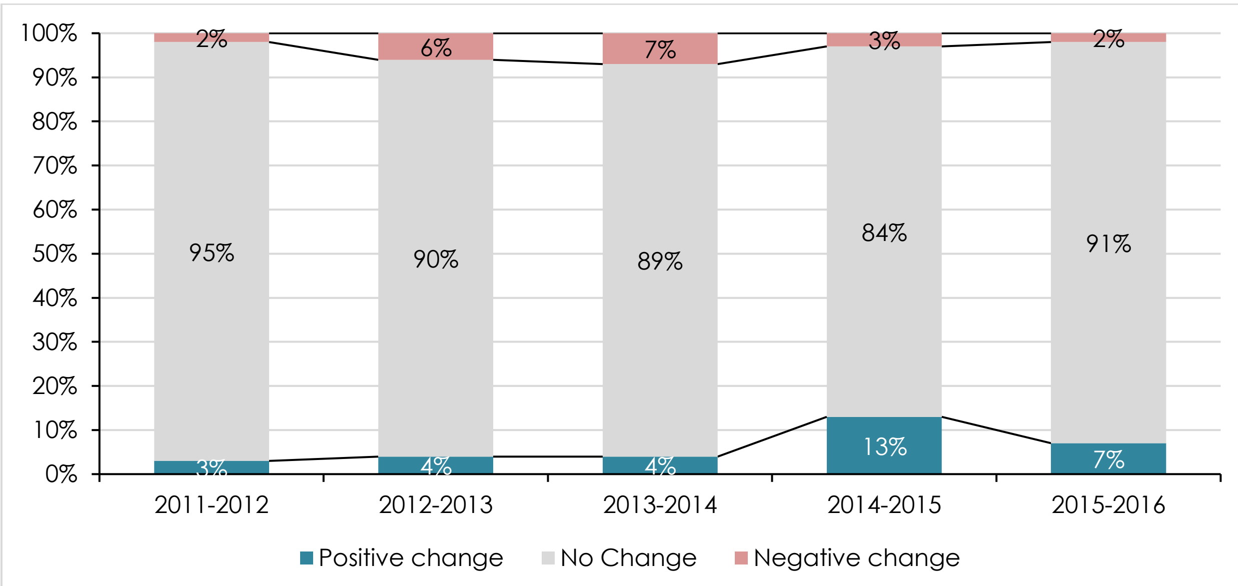

Figure 24: Employment change (2011-2016), Percentage of total respondents

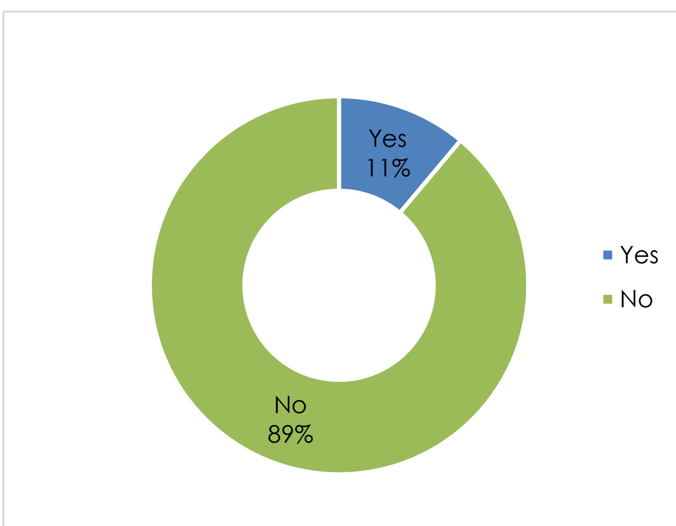

Figure 25: Hiring new staff, Percentage of total respondents

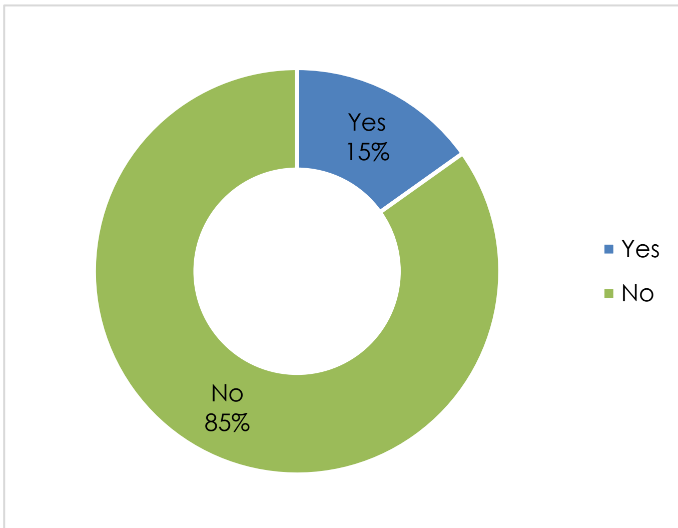

Figure 26: Decreasing employees, Percentage of total respondents

Across various sectors, enterprise owners seek out workers with technical, clerical, and professional capacities . In fact, 23% of enterprises claim to have difficulties hiring technicians and associated professionals in Arsal, which was the case for businesses operating in quarrying/stone cutting, automotive repair, and construction. Employers and workers in these sectors consistently highlight the need to upgrade the technological and technical capacity of these industries, which would allow them to increase productivity and production and spur employment. Clerical and professional work was also found to be in short supply, with 40% of enterprises claiming to have difficulties in hiring and retaining professional (20%) and clerical support workers (20%). Finally, employers in Arsal also feel that a plethora of soft skills were lacking among workers. Skills such as ethics (80%), communication (73%), and common sense (76%) were valued more than hard skills such as basic IT (30%) and literacy (47%). Indeed, having a good attitude (97%) and sound work ethic (96%) were the most valued personal characteristics sought by employers (See Figure 26 and 27).

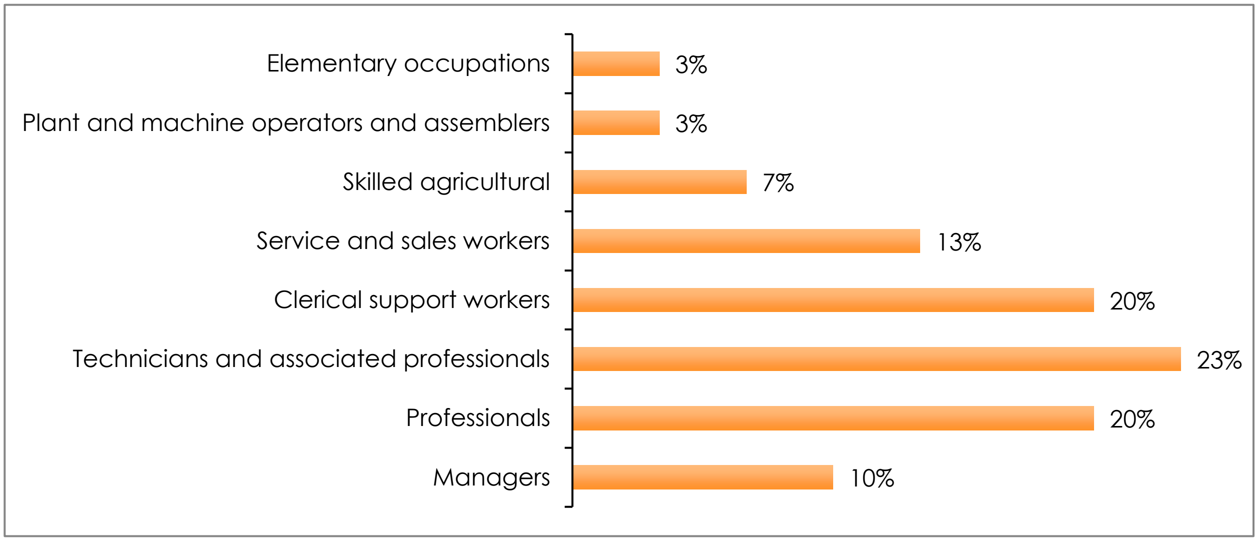

Figure 27: Difficulties in hiring & retaining, Percentage of total respondents

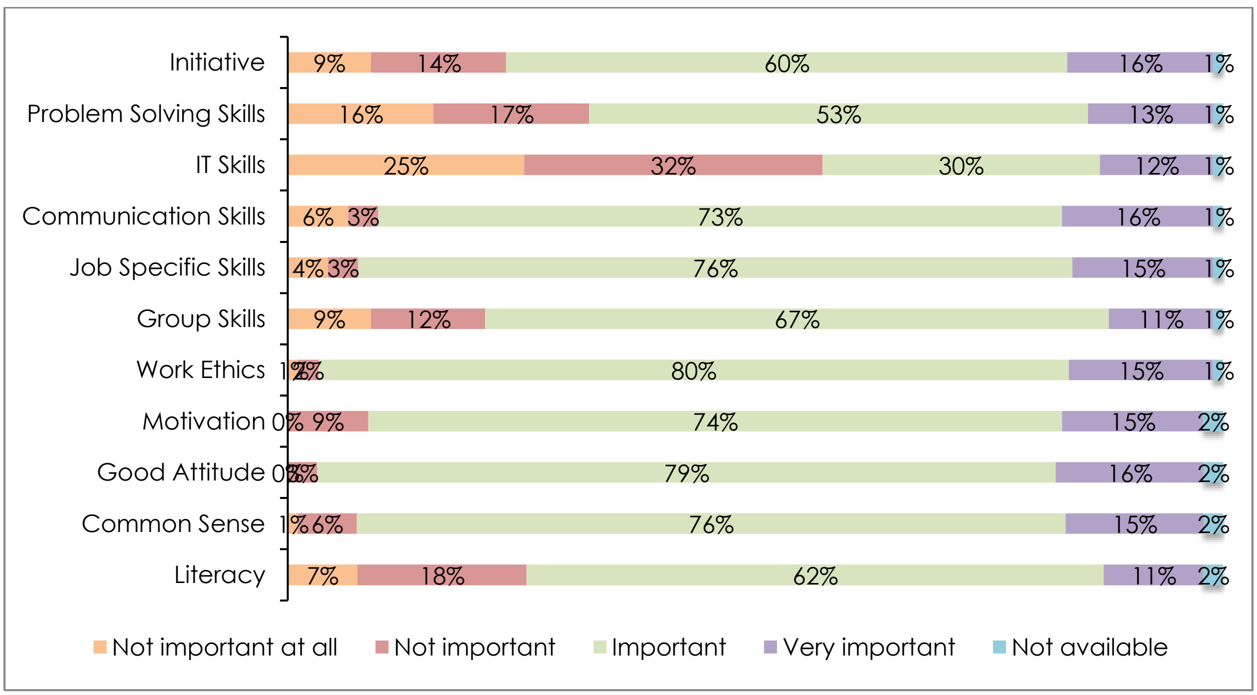

Figure 28: Personal characteristics of importance, Percentage of total respondents

Competition Not Regulation

Takeaways:

- ***The greatest challenges for businesses operating in Arsal are competition from imports and own account workers, as well as security, access to markets, and costs of production.***
- ***Likely due to the fact that the majority of enterprises in Arsal are informal, regulation and bureaucracy do feature as major concerns for businesses.***

Due to high levels of informality (See Economic Snapshot section), regulatory issues were not seen as a major concern by enterprises operating in Arsal. Yet, business owners do worry about competition (73%) and security (72%), followed by access to market (64%) and production costs (62%) (See Figure 28). Competition largely refers to competition from foreign imports, Syrian businesses, and own-account workers, which Lebanese enterprise owners feel undercut their prices. For instance, in the case of quarries, competition from Egyptian stone cladding was seen to limit the future financial viability of the sector, especially given that local quarries do not use technically advanced methods to increase stone production and instead rely on manual labour. According to agricultural workers and pastoralists, vegetables, fruits and livestock coming from Syria were seen as an important competitor to local agriculture. Due to cheaper feed and access to grazing grounds, Syrian livestock was seen to have lower cost of production, which means it competes heavily in Lebanese markets. As Arsal currently does not enjoy significant economies of scale, local handicraft workers say their capacity to sell is constrained by mass production imports from China and similar import-based economies.

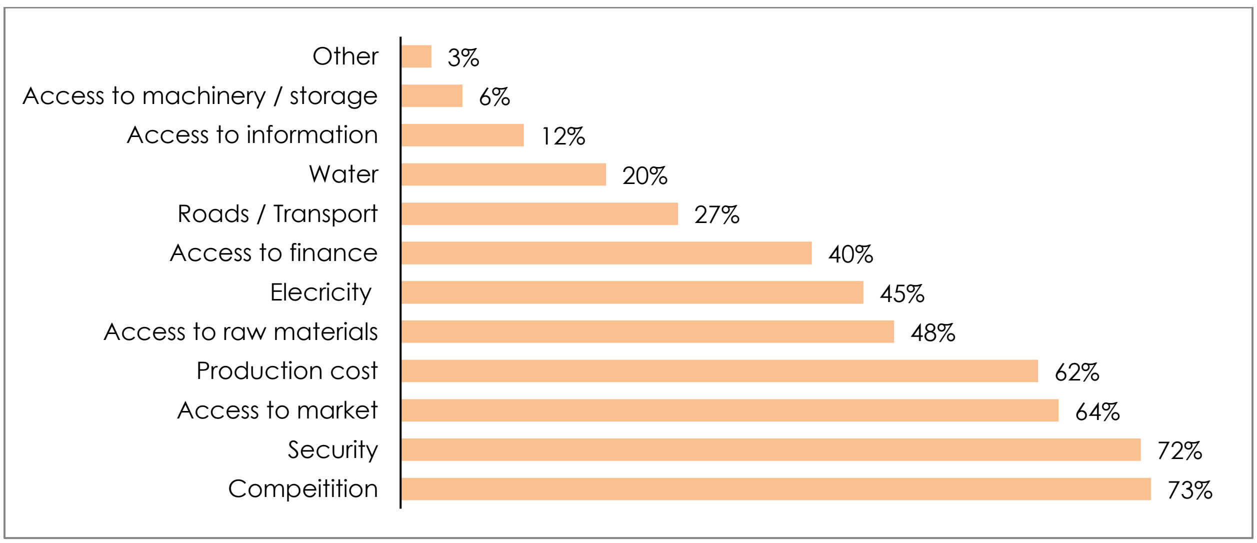

Figure 29: Business challenges Percentage of total respondents

Build It and They Will Thrive

Takeaways:

- ***The lack of economic infrastructure (transport systems, access to finance, and consistent electricity) creates an environment where operating a business remains difficult.***
- ***Agricultural infrastructure is lacking, specifically in terms of irrigation networks, appropriate research, and agricultural roads***.

In addition to market-based barriers, like most of North Bekaa, Arsal requires a considerable investment in the economic infrastructure, something which was echoed by business owners. Barriers such as issues with electricity (45%), access to finance (40%), and inappropriate roads/transport systems (27%), are among the infrastructure challenges facing local businesses in Arsal. Key informants claim that potential growth markets such as agro-businesses require large investments to increase agricultural production, roads to facilitate access to markets and reduce transport costs, as well as research programmes to develop suitable crops and cooperatives to sell the produce.

For their part, farmers seek a stronger presence of the Ministry of Agriculture (MOA), specifically in the form of extension services as well as research and guidance from the Lebanese Agricultural Institute (LARI), a quasi-government institution connected to the MOA. Other sectors also suffer from similar constraints: the quarrying/stone cutting sector lacks an implemented regulatory framework or the capacity to widen the sector's value chains (e.g. in ceramics or tiles). Residents also said that lack of zoning, public parks, or land management also constrain the ability to expand ecotourism.

Reasons For Inactivity

Takeaways:

- ***Inactivity in Arsal is commonly caused by youth being in education or women performing household duties.***
- ***For women across both communities, the opportunity cost of finding a job in Arsal is higher than unpaid domestic work.***

Inactivity among inhabitants of Arsal is rife for a diverse set of reasons which range from educational enrolment to disability and the lack of employment opportunities. Lebanese are more likely to be inactive because they are enrolled in some form of education (22% of men and 24% of women), while Syrians are more likely to be outside of the labour market due to disability. Indeed, Syrian men are more than twice as likely to cite disability (24%) as a reason for inactivity relative to Lebanese male counterparts (11%), which could be the result of injuries from the conflict and lack of healthcare coupled with injury in the workplace (i.e. quarrying/stone cutting).

Yet, the most prominent reason that inhabitants of working age in Arsal are not active was found to be the need to perform household duties. The need to perform household duties is linked to traditional gender roles, with 26% of inactive Lebanese women and 35% of inactive Syrian women citing household duties as a reason for not being part of the labour market (See Figure 29 and 30), relative to negligible rates for Lebanese and Syrian men. Furthermore, women of both nationalities are prevented from entering the labour market due to objections lobbied by their families (10% of Lebanese women, 11% of Syrian women), something that practically does not exist among their male counterparts.

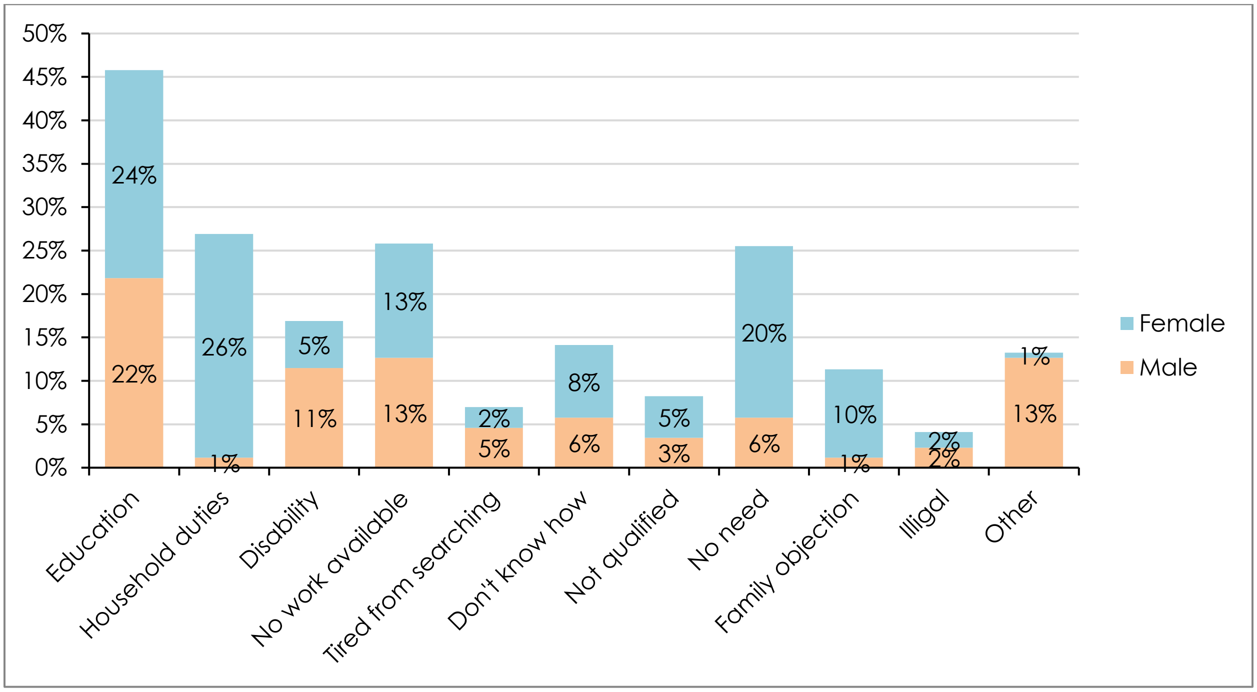

Figure 30: Reason for inactivity, Percentage of Lebanese respondents

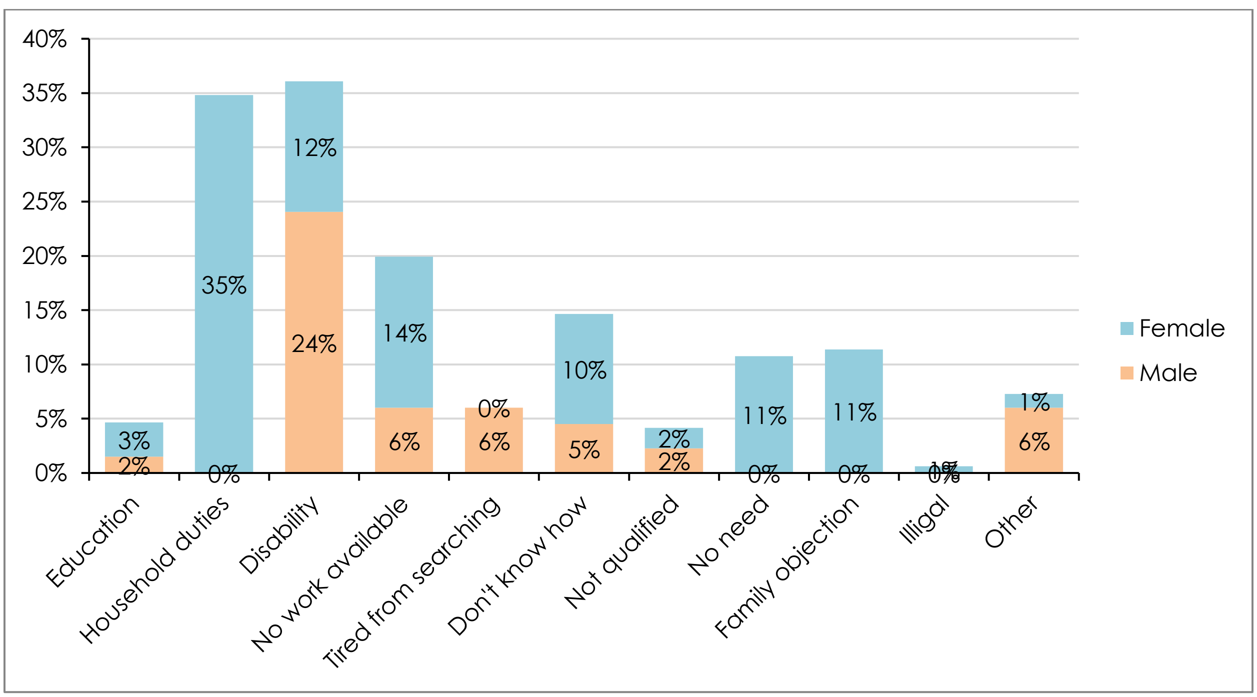

Figure 31: Reason for inactivity, Percentage of Syrian respondents

According to unemployed Syrian and Lebanese women, the barrier to finding work in Arsal is too high to leave behind unpaid domestic work, while incentives remain too few. Unemployed women attribute the Syrian refugee influx to lower wage levels in occupations traditionally practiced by women. For instance, women felt that clerical jobs in retail establishments paid as low as USD 100 per month, compared to two or three times that amount previously. While the majority of women remain bogged down by traditional gender roles such as housekeeping, many Syrian women claim that due to war and the difficult financial situation of households, their male family members show less resistance to them entering the labour market. However, both Lebanese and Syrian females prefer to work from home and inside Arsal. Leaving the town was seen as dangerous for women from a security perspective, but Syrian women also felt a greater need to do so because they lacked access to materials to conduct home-based work.

5.6. Opportunities to Promote Employment/ Self-employment in Arsal.

As Arsal transitions out of insecurity and restrictions on the movement of goods and labour, its job market is also expected to change. The majority of the working age population in Arsal feels that jobs in traditional primary sectors such as agriculture as well as quarrying/stone cutting will increase. On the other hand, indications from enterprises suggest that non-traditional sectors will be those which garner higher employment in the upcoming period.

While the quarrying/stone cutting sector is where most Arsalis feel job potential rests, the informal, dangerous, and environmentally destructive nature of the sector does not make it the ideal candidate for value chain development. The agriculture sector, on the other hand, provides ample room to add value and ramp up decent employment for both Syrians and Lebanese. Experts feel that there are numerous opportunities in the sector, but that there should be a concerted effort to establish the technical (viability of yields and irrigation) and financial feasibility assessment for each agricultural value chain (raw food or agro-processed food) before investments are made.

Non-agricultural prospects for employment are dominated by opportunities in the livestock and pastoral sector, specifically with regard to processed dairy products. Other potential job creating sectors are the handicraft sector and, over the longer term, the agrotourism sector. Accordingly, access to markets remains the central factor which affects the viability of agricultural and non-agricultural value chain development.

Back to Basics

Takeaways:

- ***Lebanese and Syrians alike consider future jobs to be found mainly in more traditional, labour intensive sectors, such as in quarrying/stone cutting and agriculture.***
- ***Employers feel that non-traditional, less labour-intensive sectors, such as the energy and humanitarian sectors will yield employment in future.***

Arsal’s economic transition towards greater dependence on new rent-seeking sectors and the war economy has been several years in the making. But now that the security situation has improved, Arsal’s residents are again looking toward more traditional sectors to drive future job growth. In line with their present skill sets, Lebanese and Syrians in Arsal feel that labour intensive primary sectors are those which present the most opportunity. Perhaps unsurprisingly, the low-skilled labour-intensive quarrying and stone cutting topped the list of industries where workers feel there are jobs to be had (53%) followed closely by agriculture (45%). Agriculture in particular seems to be attractive to Syrian workers as 54% feel the sector provides employment opportunities relative to 38% of Lebanese. Workers also feel that there are jobs in construction (43% of Syrians relative to 34% of Lebanese), the humanitarian sector (44% of Syrians relative to 32% of Lebanese), and general trade (40% of Syrians relative to 26% of Lebanese) (See Figure 31).

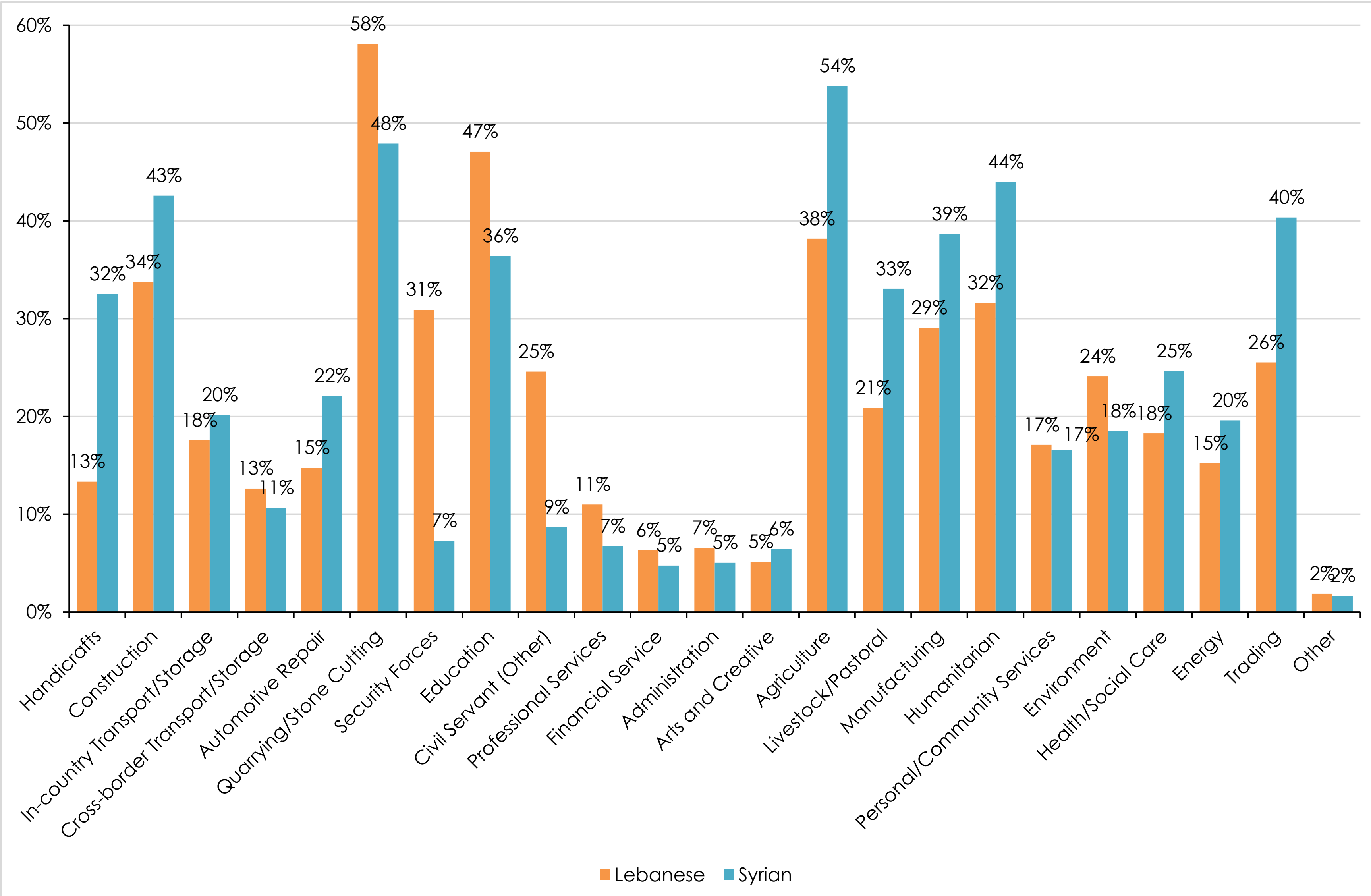

Figure 32: Potential jobs across sectors, Percentage of total respondents by nationality

Similar to the skills mismatch between market demand and labour supply, there are few indications that employers are hiring in sectors where Arsalis are searching for employment. From evidence available, employment opportunities are few or non-existent in the labour-intensive sectors (See Figure 32). Instead, non-traditional sectors such as energy (50%), humanitarian sector work (33%), and professional occupations (33%) appear to offer more opportunities, at least over the next six months (See Figure 32). Municipal leaders and farmers suggested that the fastest growing sector would be energy, to include private electricity generation as well as solar-powered irrigation and water pumping for agriculture. Residents feel that a wider development of the solar energy sector could be possible in Arsal, given the large plots of available land and renewable resources.

'What we need is solar energy to pump water, if feasible, as this would definitely cut the costs of production for agriculture.' – Municipal leader, Arsal

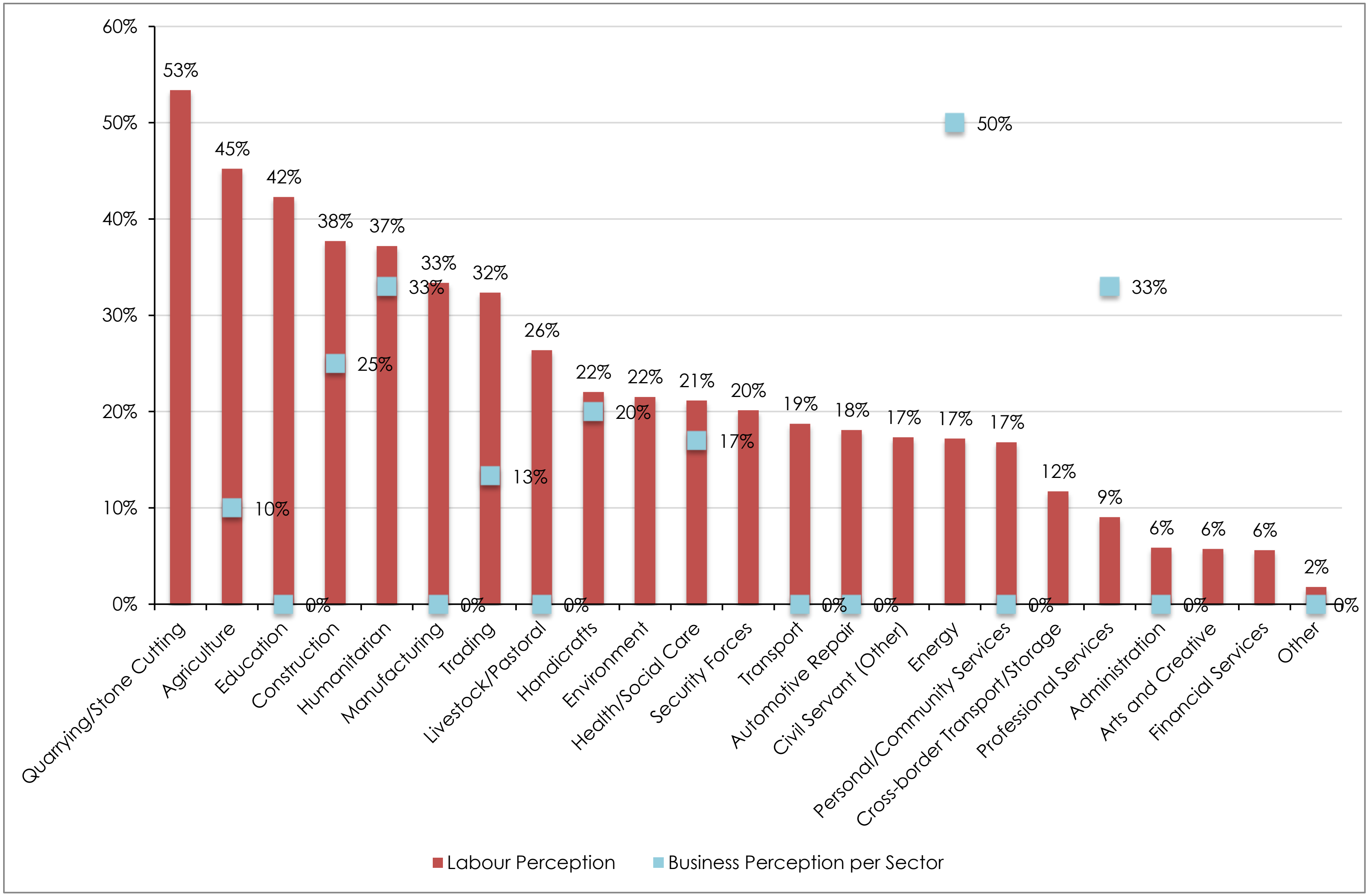

Figure 33: Potential jobs across sectors, Percentage of total respondents

While juxtaposing views of Arsal’s inhabitants with that of enterprise owners does provide some indication of where the economy currently stands, what's clear from the bulk of this research is that there is both willingness and opportunity among workers and businesses to return to Arsal’s productive sectors. That said, Arsalis would almost certainly be better off if the future economic transition is managed in a manner that promotes value chain development (VCD) in formalised sectors where Arsalis and refugees can work while avoiding informal unprotected low-wage and low-added value sectors, especially unregulated quarrying and stone cutting.

What has become evident from during this research is that isolated interventions in certain sectors will not produce the kind of employment to promote decent work across different sectors. Instead, key informants, residents and refugees all stress that a value chain development approach is required in order to link productive capacity and decent jobs with demand in both internal and external markets.

Start from the Land

Takeaways:

- ***Experts feel that there are numerous opportunities in the agriculture sector, but that there should be a concerted effort to establish the technical and financial feasibility before value chain investments are made.***
- ***Fruit trees, shrubs, or vines are attractive options for value chain development, especially when paired with greenhouses.***
- ***Crops such as pluses and cereals that require relatively low levels of irrigation and can withstand harsh climates such as Arsal’s also hold potential for value chain development.***

Agriculture is at the heart of Arsal’s history and remains mainstay of the labour market. While quarrying/stone cutting is where most Arsalis feel there is job potential, the informal, dangerous and environmentally destructive nature of the sector does not make it the ideal candidate for value chain development. The agriculture sector, on the other hand, provides ample room to add value and ramp up decent employment for both Syrians and Lebanese.

Previous studies have found that residents and refugees in Lebanon can benefit from an upgrade of agricultural value chains, as they have long constituted the primary labour force in agriculture. Agriculture has been found to present opportunities for division of labour based on gender, as seasonal agricultural activities which require processing present significant opportunities for females, while men handle more physical tasks such as machine operation, greenhouse construction, and transport of crops.

Enhancing the agricultural value chains of Arsal will likely need to start at the input level, by selecting the most appropriate and feasible crops that can be produced in Arsal and sold in markets across Lebanon. Key informants agree that the agricultural sector in Arsal offers opportunities for the diversification of crops. Yet agricultural experts generally feel that a major impediment to the production of crop varieties is the availability of seeds. Indeed, they state that one of the main obstacles is the limited number of qualified institutions in Lebanon engaged in significant seed multiplication . That said, the Lebanese Agricultural Research Institute (LARI) has conducted seed multiplication for wheat and some barley varieties in the past, while the International Center for Agricultural Research in the Dry Areas (ICARDA) in Lebanon produces such varieties for testing.

Currently, the most prominent agricultural value chains in Arsal include the production of **cherries** and, to a lesser extent, **apricots**. As production of cherries and apricots has been successful in Arsal, a host of agricultural experts feel that other **fruit trees, shrubs, or vines** could also be tested and introduced. Among the crops suggested by these experts are varieties of berries, such as **mulberry** or **strawberries**. The first two to four years after the planting of such fruit trees and plants would be essential to understand viability, as these crops require considerable amounts of water for roots to settle into the soil. The required volume and consistency of irrigation is not currently present in Arsal, a reality which would need to be addressed, according to officials and agricultural experts. Agriculturalists also cautioned that during this stage consistent monitoring and record-keeping will be crucial, as the production viability of such trees can be seriously hampered by droughts, to which Lebanon is prone. They also stressed that fruit trees require workers to be trained on special techniques (such as pruning), associated with the care of a specific berry variety or type of fruit tree.

Greenhouses in particular have proven useful in increasing agricultural productivity and the diversification of crops in Arsal. According to farmers, previous development projects facilitated the construction and upkeep of around 100 greenhouses, which are used primarily to grow vegetables.

In fact, farmers say that such greenhouses allowed Arsal to become relatively self-sufficient in the production of vegetables, and that the town can now meet the local demand of both Syrian and Lebanese inhabitants. Farmers feel that another 150 or so greenhouses would allow the volume of their production to become sufficient enough to market their produce.

Similarly, **grapes** were suggested as a potentially viable option for value chain development in Arsal, as farmers have produced the crop in the past on a larger scale.[71] Farmers in Arsal say that, historically, the crop has been sold to surrounding villages and cities, many of which were Christian and employed the crop in the production of wine and *arak*, a Levantine alcoholic spirit in the anise drinks family. Agriculturalists and development experts also suggested that grapes could contribute to the production value chain for molasses. For a town that relies primarily on rain for water resources, some varieties of grapes may be economically preferable as the crop does not need to be watered continuously.

'We had a more important sector than cherries and apricots and this was the grapes. The white grapes, which is used for wine and *arak* mainly.' - Farmer, Arsal.

Investing in the value chain of the fruit and bud of the **caper** plant was also mentioned as a potentially viable activity by observers. While Arsali farmers are familiar with the caper plant and

[71] According to 2010 MOA agricultural census, Arsal grows around 325 ha of grapes.

its fruit, agriculturalists state that there is still only limited caper production in Arsal. For its part, ICARDA has also introduced capers in areas with drought conditions across the Bekaa region, something which speaks to the crop's viability in Arsal. VCD experts also mention that capers can be treated in ways which increase the crop's value added, such as allowing the fruit/caper berries to grow larger to become the size of a small pickle (cornichon), since the bigger capers grow, the less expensive they are to market. Accordingly, larger capers can be pickled like cornichons and offered to urban markets. It was noted that capers are already produced in this manner in Anfeh (North Lebanon) and sold in Beirut. Although capers can be grown in the region, VCD experts feel the capacity in Arsal for the production of capers is still limited by a lack of modern equipment and harvesting techniques.

Developing value chains for **chickpeas, barley, bread wheat, durum wheat, lentils** and **fava** beans have all been suggested as potentially feasible by agriculture and development experts. These crops were singled out by agriculturalists because they do not require consistent irrigation, and can grow with the relatively low rainfall Arsal receives during a normal year. In addition, planting different wheat varieties has potential added value, given the availability of land, the relatively low capital costs to harvesting and processing, and existing wheat subsidies offered by the government. Introducing new labour-intensive crops, such as bulgur, barley, wheat and freekeh (green durum wheat) was also identified as an activity which could generate employment for Syrian refugees with elementary agricultural skills.

Chickpea varieties that are tolerant to cold weather (winter chickpeas) were thought to be one of the most potentially suitable crops, as they can be grown during the winter season to facilitate crop rotation. Agriculturalists felt that delaying the harvesting season could even double the production of chickpeas, which can be planted in November and harvested in July. This was thought to increase yields, drawing on the benefit of higher volumes of rainfall during the winter.

Development work on some crops has been conducted in the past: **fava beans** (*foul*) and **lentils** have been previously tested for viability in Arsal. ICARDA has also worked to develop such crops to increase their tolerance to cold and snow. As a result, agricultural experts also recommend exploring the viability of wheat, barley, and lentil varieties in the area. Indeed, up until the 1960s, Arsal supplied the bulk of Lebanon's wheat market.

In terms of bolstering value chains, **barley** has the potential to contribute to more than one value chain in Arsal. According to agriculturalists, barley and its varieties can be used as animal feed as well as for human consumption: animals can be fed with unprocessed barley, and consumers can buy naked/peeled barley. Of course, barley can also be used to make flour or bread, or be sold to beer factories in Lebanon, as most local beer factories in Lebanon import barley because they cannot find malt barley varieties locally. Malting barley for beer production needs to be investigated further and thoughtfully. A project of the sort would require research to determine whether barley can grow in Arsal, what varieties of barley farmers are willing and able to produce, and what kind of markets farmers would like to target with this product. Once its feasibility has been established, local capacity could be built up around barley varieties identified as suitable to malting for beer production, if there is an opportunity for (and willingness among) farmers to engage in such an activity, particularly from cultural and religious perspectives. Although barley and other wheat varieties are suitable for areas at high altitudes and cold weather conditions, they still need significant volumes of water for irrigation, albeit less than most of the previously mentioned fruit varieties. Thus, adequate access to water resources will need to be secured before farmers can be provided with seeds, according to agriculturalists.

Saffron was also posited as a novel crop for value chain development in Arsal, as farmers in the Bekaa attest to the viability of crop production. However, saffron is perceived by rural development experts to be a challenging task for farmers who lack access to infrastructure as well as modern technology and methods. Saffron requires special cultivation techniques, skills, and treatment to become marketable. Agriculturalists cited similar opportunities and challenges with regard to other crops new to Arsal, such as **quinoa** and **aloe vera.**

The development of the **thyme** value chain as well as that of other herbs was seen as potentially feasible in Arsal, specifically due to both existing production and demand in the local/regional market. The development of the thyme value chain was seen to be particularly relevant to female employment in agro-processing, as the mixture of thyme sumac, sesame and salt produces *zaatar,* which can be processed by women in the home. According to officials, vegetables like cucumbers, cauliflower and carrots are also said to be suitable for pickling by women in Arsal.

The development of existing agro-processing value chains such as tomatoes, cherries and apricots also show promise in Arsal. Cherries and apricots already grow in relatively large quantities, while tomatoes are already being sold to producers higher up on the value chain, who dehydrate tomato crops to market pricier sun-dried tomatoes. Dehydrated crops were seen as feasible due to the fact that Arsal enjoys good amounts of sun throughout the year, according to officials.

While the development of agricultural value chains shows promise in many crops, links to markets outside of Arsal remain underdeveloped. Indeed, VCD experts argued that the potential profitability of any product depends on private sector market demand, which must be understood before VCD activities take place. Specifically, production levels need to be congruent with demand (volume and fluctuations) as well as meet the food safety standards of local and international markets. To do so, each crop would need to be considered based on its VCD aspects, including inputs, supply chains, price levels and competition dynamics. Tables 3 and 4 below display a summary of research findings pertaining to existing and novel crops alongside challenges, cultivation, and financial feasibility. Table 5 lays out the main bottlenecks which VCD identified in each crop sector, in addition to suggestions that might address these constrains.

Table 3: Existing Crops

Crop	Value Chain Development	Challenges

Apricots	Dried apricots, jam	Access to market; Financial feasibility; Enhanced seedlings.
Cherries	Jam, dried cherries, packaging	Access to market; Financial feasibility; .
Tomatoes	Sun-dried tomatoes	N/A
Vegetables (Carrots, cauliflower, cucumbers, etc.)	Pickles, makdous	Access to market; Financial feasibility
Thyme	Dried thyme, herbs and spices blend (zaatar)	Financial feasibility
Wheat	Traditional brown beaked bread	Access to markets

Table 4: Potential Crops

New Crop	**Value Chain**	**Cultivation Feasibility**	**Financial Feasibility**
Durum wheat	Green durum wheat (Freekeh); bulgur.	Yes	No
Chickpeas	Packaged hummus; balila 1 and 2 for roasted nuts industry.	Yes	No
Fava beans		No	No
Grapes	Table grapes.	Yes	No
Barley	Feeding livestock;	No	No

Vegetables	Pickled.	Yes	No
Quinoa	Packaged.	Yes	No
Saffron	Packaged.	No	No
Hazelnut	Roasted nuts industry.	No	No
Pistachio	Roasted nuts industry.	No	No
Lentils	Packaged.	No	No
Rose	Rose water; florists.	No	No
Aloe Vera	Consumption (drink); healthcare and cosmetics.	No	No

Table 5: Bottlenecks

Investment and access to credit	• Increased investment from government and donors; • Awareness-raising within the community; • Training and involvement of farmers in feasibility studies, project and financial proposals development.

Knowledge and training	• Providing training and know-how on irrigation and harvesting techniques, pest control, and activities such as grazing, pasture, ploughing, use of fertilizers, greenhouse processes.
Seeds and seedlings	• Partnering with and support to institutions involved in seed multiplication; • Promoting seed reproduction in larger quantities; • Making seeds available to farmers; • Training farmers on collecting seeds from crops to avoid shattering.
Access to markets	• Mapping of institutions: government institutions, private sector and organizations; • Encouraging contract farming. • Supporting new collective organization and active cooperatives. • Structural reform of the cooperatives system.

Livestock

Takeaways:

- ***The livestock/pastoral sector presents various opportunities to develop value chains, particularly in the dairy sector.***
- ***The livestock/pastoral sector presents opportunities to upgrade traditional practices by women in the household as well as Syrian refugees.***
- ***The most promising value chain development opportunities are in agro-processing, but challenges remain in terms of packaging as well as access to markets.***

The development of dairy product value chains was viewed by both development experts and local residents to be a promising sector for future employment generation. Pastoralists in Arsal believe that around 160 families in Arsal currently work in livestock and pastoral activities, mainly to produce meat and dairy products. Although the pastoral and livestock sector (sheep and goat raising, small ruminant sector) is already viable, it faces challenges similar to the rest of the Bekaa. According to rural development experts, farmers generally face a number of challenges in the sector, such as the use of non-sanitary and hazardous production facilities and utensils, non-existent or inefficient refrigeration capacity, as well as low quality, unhygienic packaging material. In addition, farmers and artisans lack sufficient material support, such as refrigerators, good quality feed, or food grade packaging materials, all of which are required to scale up operations. At the same time, rural development experts report that non-governmental support for farmers to upgrade the quality of their dairy products, coupled with improved prices of milk and increasing demand for milk and dairy products, have encouraged dairy farmers across Lebanon to expand their farms and increase herd numbers.

The development of livestock/pastoral value chains also has the potential to spur employment for females both home-based and at-large, according to officials. They suggest that women in Arsal are well-positioned to prepare yogurt, *labneh* (strained yogurt), goat cheese, ghee, *kishk* (powdery cereal of burghul fermented with milk and yogurt), and other dairy products. They also state that demand for goat cheese in Lebanon could be tapped by Arsal through existing or new goat herds.

While the production of goat cheese is not widely prevalent in the country, pastoralists in Arsal have already ventured into the production of **kishk** and have the capacity to expand operations, according to officials and agricultural experts. These experts note that current kishk production is not of commercial grade, and that the product is viewed as a traditional craft practiced mainly by women. However, demonstrated market potential exists: homemade/artisanal kishk has been sold at USD 18 per kilogramme, while commercial-grade kishk may be sold at USD 10 per kilogramme. Another advantage of kishk VCD is that the necessary equipment for homemade products does not generally require large investment upfront.

Kishk VCD also presents market challenges which need to be considered. Development experts feel that kishk is not as frequently consumed as are other dairy products but also suggest that there is untapped demand among the millions-strong global Lebanese diaspora, who purchase kishk year-round. In addition, development experts observe that while kishk is produced locally, packaging and hygiene standards are currenty inadequate, especially with regard to export markets. In order to address this, it was suggested that support from the government and NGOs could help with branding and packaging.

Tables 6 and 7 display current VCD opportunities and challenges in the livestock and pastoral sector, alongside the main gaps and potential measures to address them.

Table 6: Pastoral and Livestock Products

Product	Value Chain Development	Challenges	Opportunities
Milk	Cheese, labneh, yogurt	Access to market for milk and dairy products;	Encourage increased milk production

Yogurt	Green and kishk	Access to market; Financial feasibility.	Identify markets locally (region and population centres) and abroad (Lebanese diaspora).
Wool	Artisanal carpets.	Access to market; Financial feasibility.	Support wool production from existing cattle. Collaboration with designers.
Ghee	Organic artisanal, Ayurvedic medicine.	Access to market; Financial and production feasibility.	Not Applicable

Table 7: Pastoral and livestock value-chains

Main gaps	Potential to address gaps
Poor hygiene and working conditions; lack of equipment, utensils and appropriate packaging material.	• Provide capacity building, extension services, and trainings (including and/or distributing printed material, handouts, etc.), covering food quality standards, and health and hygiene aspects of the sector; • Support the improvement of equipment, production facilities, refrigeration, food grade packaging.
Lack of access to markets (Beirut and population centres). Absence of links between artisans and companies.	• Support from government institutions, organizations, private companies and cooperatives.
Politicized, ineffective, weak cooperatives.	• Identify authentic, functioning, and active cooperatives for partnership opportunity; • Train and support cooperatives to access local and international markets; • Support the establishment of new small cooperatives for women (per activity/product).

Training and equipment for producing home-made food products and handicrafts.	• Provide skills training for artisans; • Provide artisans access to necessary equipment, i.e. through microloans; • Assess the needs of artisans through direct involvement in feasibility studies and development of financial proposals.
Lack of incentives and income-generating opportunities for young workers and entrepreneurs to stay in the town	• Encourage investment from the government; • Provide technical and vocational training.

Value By Hand

<u>Takeaways:</u>

- ***The development of handicraft value chains could be viable, but links to artisanal vendors in urban centres would likely need to be established.***
- ***There are opportunities to develop livestock/pastoral and quarrying/stone cutting value chains by diversifying production into carpet weaving as well as traditional tiles, ceramics and mosaic tiles.***

If marketed appropriately, Arsal's population could develop value chains in the handicrafts sector, which would create targeted employment opportunities for women and Syrian refugees alike. However, VCD experts say developing the handicrafts value chain will require tailored investment and training. Due to relatively high costs of production, foreign competition, and low technical capacity, the handicrafts sector remains highly informal and undeveloped, officials say. That is why artisans may also require the establishment of partnerships with designers who can provide them with patterns and designs to differentiate Arsal's handicrafts from competitors in the market.

One handicraft suggested by development experts was **carpet weaving.** Arsalis already raise goats for wool production, as sheep are available in the town. As herd levels have fallen, Arsali farmers have abandoned fabric production and also lack equipment and instruments to treat the wool or colour fabrics, according to officials. Another area where there could be opportunities for VCD is processed stones which add higher value. Key informants felt that the production of **mosaic and traditional tiles** (which Syrians have existing skills producing), and even **artisanal ceramics,** could be possible in Arsal. Similar to carpets, however, these sectors also suffer from relatively high production costs and foreign competition. As such, in addition to significant investment in modern equipment and maintenance, producers would also need to be linked to artisanal vendors in urban markets to viably compete.

Show the land

Takeaways:

- ***If Arsal can shed its reputation as a conflict zone, agro-tourism could be possible over the medium- to long-term.***

Other medium- and long-term value adding activities suggested by development experts to rebuild Arsal's economy include the development of the agro-tourism value chain. For instance, the UNDP's Sustainable Land Management in the Qaraoun Catchment Project's baseline assessment has identified rural tourism-related activities in West Bekaa, Rashaya, and Zahle which could potentially be replicated in Arsal. Value added activities could include integration with tour operators in neighbouring areas to provide trekking or horse riding components. Active cooperatives could also take part in these kinds of activities. In Rashaya, for instance, a cooperative has established a tourism division that specializes in food catering to tourists. Indeed, Arsalis and local authorities stated that these types of activities had once taken place in Arsal previous to the recent bout of instability.

In the medium-term, the establishment of bed and breakfast lodging and guest houses were suggested by development experts as a possibility to improve the Arsali tourism sector. Given Arsal's relative distance from other population centres, development experts suggested that Arsal could become an attractive destination for overnight stays by tourists visiting the Bekaa. They also noted that agro-tourism could be a suitable activity for the youth, given their ability to serve as facilitators and tour guides. For agro-tourism to be viable, however, the town's transport infrastructure would need to be improved and its reputation as a conflict zone would have to be dispelled.

6. Recommendations

6.1. Overarching Recommendations

Without a serious effort to enact structural reforms which address long-standing issues that plague Arsal's economy and labour market, programmatic interventions by government, humanitarian and development agencies can only produce limited effects on job creation. At the heart of these structural challenges is the need to develop viable value chains in key sectors, promote formality in the economy, provide local businesses with access to markets, and invest in associate verticals. At the same time, interventions in Arsal should be rooted in the development of the agriculture and agribusiness sectors and met with significant long-term investments.

Shift back to productive economic sectors

The adverse effects of the Syrian crisis and the ensuing siege on Arsal resulted in a closed economy that was prevented from implosion by continuous aid flows. Now that the Lebanese Armed Forces have removed militants from Arsal, development funds should be channelled to Arsal's legacy productive sectors in a manner which addresses both short-term needs and long-standing structural issues afflicting the economy.

This research has found an observable shift away from Arsal's historically productive primary sectors towards aid-dependent sectors such as education, and humanitarian aid. Now that Arsal's economy has started to shift back to its traditional sectors, the town risks a return to dependency on the informal and illicit quarrying and stone cutting sector. If that transpires, it will also constitute a return to the destruction of both land and productive agricultural assets, and the over-reliance on a sector that drives vulnerable and hazardous employment while crowding out more promising opportunities that produce added value and decent work in Arsal.

Instead, development agencies will need to focus efforts on decent work opportunities and value chain development that fall within a sustainable development paradigm. At the core of this paradigm is a focus on reviving the agricultural sector and developing agribusiness value chains. While other sectors should not be foregone completely, agriculture and agribusiness are the only sectors where there exists both public will and market demand to support the creation of decent jobs for both Lebanese residents and Syrian refugees alike.

Build economic and transport infrastructure

Years of conflict have left Arsal with even less economic infrastructure than it had previous to the refugee influx and subsequent siege. Arsal is still accessible only by a single underdeveloped road and internal transportation networks are crumbling. This lack of connectivity has resulted in economic bottlenecks which constitute a stranglehold on productivity, economic development, and job creation capacity. In the process, living standards falter and poverty deepens while informal, illicit, and hazardous work thrive.

Enhancing physical infrastructure (such as roads, ditches, sewage networks, and rainwater harvesting systems) would carry enormous benefits for Arsal and the Northern Bekaa in general. The ability of Arsalis to reach major cities such as Beirut, Homs, and Tripoli would decrease production costs and boost the competitiveness of all sectors. The sustainable upgrade of internal road networks connecting North Bekaa to the rest of the country would facilitate regional growth and raise the region's profile in the transport sector, particularly as Syria-bound trade routes reopen, along with access to global export markets. The core of such a transport upgrade will be the construction of the Baalbeck-Zamrani Highway to facilitate cross-border transport as well as the upgrade of the existing Aynata-Arz Road to increase access to markets across the country.

Promote formality

Labour informality in Arsal is essentially a governance issue related to ineffective public and social policies. The lack of trust in institutions and administrative procedures is rooted in the historical absence of state institutions from North Bekaa. Indeed, the state is seen as either absent or punitive, particularly given the recent effects of the LAF cordon on the economy. To begin the transition away from informality and toward decent work, both government and development actors would do well to focus on bridging interventions that incentivize local enterprises and entrepreneurs to formalise. These interventions should target the reduction of informal workers in Arsal by lowering the transition cost for informal enterprises that adopt formal structures, while also providing conditional incentives to farmers and rural businesses to formalise, such as access to finance, productive resources, credit programmes, and capacity-building.

Organize sectors and producers

Arsal, like most of Lebanon, is deficient in competent producer associations and cooperatives which can organize farmers, handicraft professionals, and agribusiness producers. Organizing workers into professional units is crucial to developing value chains and enhancing the overall quality of products. Moreover, such organizations could facilitate development agencies' ability to develop connections between targeted Arsali producers and potential partner companies, corporations, and distributors. If organized in this fashion, with help from government and development agencies, producers in Arsal could develop contracts with factories to process, package, and distribute products produced locally.

Historically, the lack of productive collective organization has resulted from politicization, lack of training and support, weak human resource capacity, and a dearth of financial resources. To reverse this trend (at least in the short-term), any future organization of labour must focus around organizing production to enter into contract farming schemes, rather than more political, less directly impactful lobbying efforts aimed at improving conditions or increasing assistance. In essence, such bodies (be they formal establishments, cooperatives, social enterprises or NGOs) would need to act as procurement vehicles for farmers and artisans to link up with value chains outside of Arsal or the North Bekaa.

Structural reforms in the agricultural sector are also required in order to develop its legal and financial infrastructure. Reforms would enable efficient collective organization, contract farming, and formalisation, and encourage extension services and development support. Like most Lebanese farmers, the majority of Arsal's farmers have small-scale operations not subjected to the national labour code. At present, only 25% of farmers' cooperatives in Lebanon are considered active and some 1.5 % receive public extension services.[72] Further, Lebanon still does not have a unified farmers' registry, preventing the ability of government and development agencies to target specific farmers with extension services. The farmers' registry is also essential in order to achieve traceability requirements, which are critical to developing the agricultural export sector.

Organize a development sector taskforce.

The UNDP-lead Social Stability Working Group already works to mitigate tensions resulting from

[72] UN ESCWA (May 2016): Strategic review of food and nutrition security in Lebanon. http://data.unhcr.org/syrianrefugees/download.php?id=12738

the impact of the Syrian crisis on local communities through targeted community support and basic services projects.[73] While this is a commendable effort, the working group does not include local cooperatives, farmers, and other national stakeholders that are crucial for developing value chains in local contexts. As such, it is recommended that a similar taskforce be established under the auspices of the recently formed National Economic and Social Council, tasked with value chain development in Arsal and North Bekaa. At a minimum, the working group should bring together representatives from the Ministry of Agriculture (MOA), the Lebanese Agricultural Research Institute (LARI), the International Centre for Agricultural Research in Dry Areas (ICARDA), Green Plan Lebanon, municipal councils, the United Nations Development Programme (UNDP), the United Nations High Commissioner for Refugees (UNHCR), and agro-processors, as well as Chambers of Commerce, Industry and Agriculture, the Ministry of Environment (MOE), and the Investment Development Authority of Lebanon (IDAL).

6.2. Value Chain Development in Key Sectors

Value chain development in Arsal should be rooted in agriculture and agribusiness. The agriculture and livestock sectors possess unique competitive advantages in relation to other sectors, due to the abundance of land and a relatively skilled agricultural labour force which is still connected and seeking to work in agricultural modes of production. Value chain development of various crops (See Section 4.5) should place farmers at the centre of the value chain and assist them in capturing market opportunities, obtaining fair deals, and producing higher-quality value-added products.

Value added feasibility studies and product testing

Potential crops and livestock products to be used in developing specific agricultural value chains must be tested for production and financial feasibility before they are mainstreamed and implemented in Arsal. Prioritization tables presented in this report (See Section 4.5) should be utilized to select and prioritize specific crops and develop them into value added products with viable markets. Subsequent to value chain selection, government and development agencies should support rigorous product testing to ensure product quality and quantity can meet market demand.

Small producers in Arsal face many obstacles in identifying crops and livestock products both suitable to their environment and marketable beyond Arsal. Therefore, it is recommended that several demonstration plots be installed in Arsal to test new crop varieties, in addition to production testing workshops to ensure both agriculture and livestock products are fit for market.

[73] UNHCR: Syria Regional Response, Inter-agency Information Sharing Portal. Retrieved from: http://data.unhcr.org/syrianrefugees/working_group.php?Page=Country&LocationId=122&Id=63

Suitable crop varieties would reduce production costs, while testing workshops would tailor final goods to meet market demand.

Financial feasibility

Products which are technically possible to produce should also be financially viable to sell. Accordingly, potential products should also be tested for financial feasibility by ranking them by supply chains costs (processing plants, availability of seeds, possibility of seed multiplication, grading, handling, cold storage, transport); income generating potential (product's local and international competitiveness, opportunity for value capture, scalability, and economies of scale); the impact of policy gaps; and access to markets.

Access to markets

Encouraging farmers to venture into new crops should be accompanied by a systemic effort to develop the enabling environment around key value chains sectors, particularly agriculture, livestock, and handicrafts. This can begin with the facilitation of access to national markets in population centres across the country. Interventions should ensure that private sector companies are programmatically engaged in sourcing products from formalised local farmers and incorporated organizations. Other government and non-governmental stakeholders should also be engaged in order to link Arsal with other initiatives in Bekaa and Lebanon.

Taken together, the following steps should be met in order to develop greater access to markets:

- Evaluate demand for specific products identified during feasibility studies (focusing on Beirut and population centres at the national level as well as export opportunities in international markets).
- Identify and establish links with national exporters, agro-processors, traders and retailers. Agricultural fairs that provide opportunities for Arsali farmers to engage in contract farming with relatively larger agro-businesses could prove crucial to developing agricultural value chains, bypassing wholesalers. (Also, links with local Lebanese interior design companies could promote traditional handicrafts such as mosaics, ceramics and tiles.)
- Establish local farmers' markets in major Lebanese cities for Arsali products.
- Develop and expand markets for handicrafts related to the quarrying/stone cutting sector, such as ceramics, traditional tiles, and mosaics.
- Develop synergies with other actors working to promote Lebanese agro-businesses such as chambers of commerce, Industry and Agriculture in Zahle and Bekaa, the Ministry of Economy, IDAL, and other international actors.
- Support and promote products which are proven to be of high quality and meet market demand with awareness-raising sessions to help producers develop a clear financial analysis and action plan. In turn, utilize microfinance loans (under USD 10,000) that embrace incentives-structures and conditionality to fund start-up operations.

6.3. Short-term Recommendations

Cash for work

The humanitarian crisis in Arsal requires nuanced responses that can address the challenges of limited sources of employment in the short- to medium-term. One innovative method that is being employed across the country could work well for Arsal: using cash for work to legally employ Syrian refugees to participate in community-based construction projects aimed at rehabilitating and/or maintain infrastructure services.

In particular, Syrians should be also hired to redevelop Arsal's agricultural land, damaged by years of instability and separation from functioning agricultural areas. Syrian refugees could also be employed in the rehabilitation of both Arsal's traditional pine and juniper forests, as well as the town's old quarries, improving the overall quality of life for Arsalis and repairing local environmental damage.

Compensation for farmers and rehabilitation of agricultural land

This report details how the agricultural sector in Arsal suffered considerably during military confrontations between 2014 and 2017. The majority of irrigated trees and around half of the non-irrigated fruit trees have withered. In addition, generators and water pumps which were used to irrigate orchards and groves were taken by militants. As a result, Arsal's farmers will require some form of compensation in order to begin to rebuild their livelihoods. Monetary compensation by the Higher Relief Council, for instance, could prove crucial to allowing local farmers to recapitalize, purchase seedlings, and begin the process of replanting orchards, groves and vineyards. Compensation should be coupled with technical support to rehabilitate the dilapidated highlands in cooperation with the Green Plan and MOA extension services, which would cut farmers' costs as well as enhance community resilience and local economic recovery.

Invest in greenhouses to give short-term support to agriculture.

Evidence suggests that recent projects which supplied Arsali farmers with greenhouses proved successful. Arsal was given around one hundred greenhouses which increased food sufficiency in the local market. Evidence suggests that Arsal could use 100 more greenhouses to secure local demand of vegetables.

Expand education activities, especially for women.

Research evidence suggests that the education sector is one of the main areas of employment for women in Arsal. Furthermore, given that thousands of Syrian refugees remain without formal education, it is strongly recommended that agencies continue to invest in second shift schools for Syrian refugees. They should supplement school expansion with initiatives that employ Syrian and Lebanese women in informal as well as remedial education for Syrian refugee children.

Support agribusinesses and small livelihood projects by funding farmers' markets in urban settings.

Given that market access remains a main impediment to farmers, pastoralists, and handicraft workers, development actors should focus on working to establish regular farmers' markets in urban centres to display and retail Arsali products (as well as those from other priority rural areas). In order for these projects to succeed, funds would need to be channelled towards establishing permanent agreements with urban municipalities to set aside space for regular farmers' markets, especially in touristic areas. Such projects would also need to be integrated with media campaigns that raise awareness of the need to assist rural economies in towns like Arsal.

Skills and training

Aid strategies for skills development should address the specific capabilities and capacities of Arsal's labour force as well as the barriers to sustainable livelihoods at both macro and micro levels. Thus, it is recommended that skill development programmes be installed and operated by local development actors in participation with local cooperatives and NGOs. These training programme should encompass:

- Skills training for farmers and artisans on water resource management and pesticides, irrigation techniques, planting and harvesting, seed collection, crop rotation, and/or pruning; as well as weaving, food dehydration and conservation. Syrian agricultural workers in Bekaa can be targeted for training in irrigation techniques, operation and maintenance of new agricultural machines, as well as rehabilitation of land, and the use of fertilizers, pesticides, and greenhouse processes.[74]
- Provide entrepreneurship and basic business skills (BBS) training for farmers and artisans to ensure full comprehension of feasibility and financial analyses, as well as profitability mechanisms for economic activities. Training sessions will need to focus on basic financial management and modern marketing approaches. These sessions should also include sector and sub-sector support that consists of legal and regulatory guidance. Once complete, potential beneficiaries should have an opportunity to submit business plans to compete for small grants.
- Enhance technical and vocational training and education in agriculture as well as agro-tourism training targeted to youth.
- Raise awareness about potentially available financial support and microfinance programmes through awareness sessions targeting specific workers and enterprises, such as farmers, artisans, women, and youth.

Humanitarian aid should not retreat from Arsal without an exit plan

[74] Save the Children, International Skills Gap Assessment, Executive Summary, Conducted in Tripoli Governorate and Bekaa, Lebanon, July 2013. Provided by Johnny Matta, Senior Enterprise Policy Officer - UNDP Project, Ministry of Economy and Trade, Lebanon.

Arsal is currently dependent on international aid and requires such assistance to stave off destitution. The employment market is rife with aid-dependent jobs that provide lifesaving assistance to Syrian refugees. Any uncalculated retreat of aid money or jobs from Arsal without a plan to create alternative employment opportunities could prove detrimental for local social stability and security alike.

[END OF REPORT]

7. Annexes.

Annex A: Additional Table(s)

Table 8: Daily income by type of work, Qualitative findings

Income by type of work	Daily rates, in USD	
	Lebanese	Syrian
Let apartments	$16	NA
Let ITS	$28	NA
Teacher	$52	NA
International NGO	$68	$9
Construction worker	$10	$5
Construction foreman	NA	$15

Stone	$30	$13
Trucking	$18	NA
Light industry worker	$15	NA
Light industry foreman	$21	NA
Retailing	NA	$1
Restaurant	NA	$3
Agriculture	NA	$10
Electrician	NA	$17
Bakery, women	$5	NA
Carpet making, women	$20	NA

Annex B: Research Tools

KII Questionnaire

I. **Economic activity and sectors in Arsal.**

   a. **Sectors:**

1. What are the primary sectors in Arsal's economy?
   a. Are there specific economic sectors dominated by women?
   b. Gendered problems of leaving the home?
      i. What are the main sectors that employ youth?
2. What are the primary sources of income in Arsal?
   a. Probe: formal and informal activities?
   b. Humanitarian assistance/remittances.
   c. Public sector jobs?
3. How did the Syrian crisis impact the local economy?
   a. What was the effect of Syrian crisis on wages? (for men and women)?
   b. What are the effects of the Syrian crisis on businesses? Did Lebanese businesses close? Did Syrians build new businesses? In which sectors?
4. What are the primary sectors for your micro-finance projects in Northern Bekaa, specifically Arsal?
   a. Which sectors do people take out loans for and which are working i.e. loans are being taken out, repaid in good time and then businesses are increased?
      i. Specific niches in the market?
5. Do you think there are sectors outside of the main city of Arsal which can be linked/integrated to Arsal?

6. When we are dealing with sectors that require investment or rental costs, how do you deal with this in Lebanon, especially when MF is below $10,000?

II. Employment/ self-employment trends and practices of Syrian refugees and Lebanese

a. **Employment opportunities:**

7. What are the sectors that employ the majority of Arsal people?
    a. Probe: construction, mining, agriculture, army, and small crafts.
    b. What is the remuneration per sector? What is the average wage in each of these sectors?
    c. Are there sectors that are considered self-employment?
    d. What is the level of informality in the economy?
8. How many of the Lebanese in Arsal are in the work force?
    a. Youth?
    b. Females?
    c. Males?
9. What are the main differences between Labour participation between Lebanese and Syrians?
    a. Are there specific sectors that are dominated by Syrians?
    b. What is the average remuneration for Syrian workers per sector?

b. **Entrepreneurship:**

10. How much do are people taking out loans to establish businesses as opposed to supporting existing enterprises?
11. In the case where loans are below $10,000 what kind of businesses are appropriate?
12. Do you think collective microfinance options can be applicable in this context? If so what form should they take and should they include mechanisms such as mandatory savings and collective decision making?
13. What kind of considerations or weight on decision would you put on an entrepreneurial loan that is intended to build on an existing asset and on that starts from scratch?
14. How often do you find that entrepreneurship loans that are less than 10,000 fail/succeed, especially when they do not build a business idea on existing assets?
15. How do you measure up business plan proposals in a context where very little capacity to have a real feasibility study?

III. Barriers to employment/ self-employment

16. What are the barriers to finding a job in Arsal?
    a. Syrians?
    b. Lebanese?
    c. Women/men?
17. **Impediments:** What are the main impediments for people to take out loans in the Arsal area?
    i. Access to finance?
    ii. Problems with interest in principle?
    iii. Issues with collateral?
    iv. Lack of awareness of market opportunities?
    v. Lack of business assets?
18. **Barriers:** What do you feel are the main barriers to generating employment?

    a. Legal and regulatory?
    b. Sector specific capacity?
    c. Supply demand mismatch?
    d. Intercommunity tensions?
19. **Capacity building:** What are their specific skills that employers need that are hard to be found?
    a. In which sectors?
20. What are the main growth opportunities in Arsal?
    a. Are there specific opportunities related to the agricultural sector?
    b. What are the main opportunities in the tourism sector?
    c. What are the main opportunities in the craft sector (cutting hair, food stuff, cellphone shops, any other…).
    d. What are the main opportunities related to the trade sector?
    e. Are youth open to more general entrepreneurial initiatives?
        i. Do you think there is a preference for an age group in micro-finance projects? From your experience do you think the youth have a higher success rate?
21. **Interest/Competition:** What is the typical interest rate on a micro-finance loan given by your institution?
    a. Many beneficiaries and key informants say that the interest of 10-12 percent is too high?
    b. How can one compete with institutions like Qard al Hassan which does not take interest but only collateral?
22. **Existing data:** Have you done any market assessment in Arsal?
    a. Do you know anyone who has done that?
    b. How do you think is the best way to assess the main market opportunities? Who do we talk to?
    c. Do you think there are specific geographic locations which can be more successful than other in Arsal? Why?

Focus Group Discussion Guide

1. Are you pessimistic or optimistic about the economic situation in Arsal? Why?
2. What are the primary sources of income for your families? Arsal in general?
    a. Probe: formal and informal activities.
    b. Humanitarian assistance/remittances.
    c. Public sector jobs.
3. What are the sectors that employ the majority of your families?
    a. Probe: construction, mining, agriculture, army and small crafts.
    b. What is the remuneration per sector? What is the average wage in each of these sectors?
4. How long have they been without work? Why?
5. Are there specific segments of people who are more unemployed than others?
    a. Probe: women/men, Syrians/Lebanese, youth.
    b. Probe: skilled/unskilled or specific job profiles.
6. How did the Syrian crisis impact local economy in Arsal?
    a. What was the effect of Syrian crisis on wages? (for men and women)?
    b. What are the effects of the Syrian crisis on your businesses? Did Lebanese businesses close? Did Syrians build new businesses? In which sectors?

7. What are the main differences between labour participation between Lebanese and Syrians?
    a. Are there specific sectors that are dominated by Syrians?
    b. What is the average remunerations for Syrian workers per sector?
8. Do you think there are sectors outside of the main city of Arsal which can be linked/integrated to Arsal's economy?
9. In your opinion, what are the barriers to finding a job in Arsal? Probe:
    a. Differences between Lebanese, Syrians, women and men.
10. What do you feel are the main barriers stopping people from getting jobs?
    a. Legal and regulatory?
    b. Sectors specific capacity?
    c. Supply demand mismatch?
    d. Intercommunity tensions?
11. What are the main specific skills that employers need that are hard to be found?
    a. In which sectors?
12. Are you willing to undergo vocational training to enhance your chances of getting employed? In which sectors?
13. What are the main growth opportunities in Arsal?
    a. Are there specific opportunities related the agricultural sector?
    b. What are the main opportunities in the tourism sector?
    c. What are the main opportunities related to retail sector?
    d. What are the main opportunities related queries and construction sector?
    e. What are the main opportunities related to the handicraft sector?
    f. What are the main opportunities related to transport and smuggling?

Arsal Labour Assessment Survey

A. Household information			
1.	Team Number	1. Team A 2. Team B 3. Team C 4. Team D 5. Team E	Ring one
2.	Have you been living in Arsal for over a month?	1. Yes 2. No	Ring one
3.	Household number	[Insert value]	Insert number- designated by field coordinator

4.	Nationality	1. Lebanese 2. Syrian 3. Other:…	Ring single
4.1	If other Nationality is selected, please specify	[Insert Value]	Insert value [Skip logic: if Q4 “3. Other”]
5.	Marital status	1. Single 2. Married 3. Divorced 4. Widowed	Ring single
6.	Are you the head of the household?	1. Yes 2. No	Choose single
6.1	Phone number:	[Insert value]	Insert value [Skip Logic: if Q6 “1. Yes”]
6.2	What type of dwelling?	1. Tent/hand-made shelter 2. Unfinished/abandoned building/Garage Car Garag 3. Public/religious building 4. Collective shelter 5. A private apartment/House. 6. No Shelter 7. Other	Ring one [Skip Logic: if Q6 “1. Yes”]
6.2.1	If “other”, please specify	[Insert value]	Insert value [Skip Logic: if Q6.2 “7. Other”]
6.3	Ownership Status of household?	1. Rent 2. Property/ownership 3. Donated residence 4. Rent for work 5. Other	Ring one [Skip Logic: if Q6 “1. Yes”]
6.3.1	If “other”, please specify	[Insert value]	Insert value [Skip Logic: if Q6.3 “Other”]
6.3.2	If “rent” or “rent for work” is selected, how much per month	[Insert value and currency]	Insert value [Skip logic: if Q.6.3 “1. Rent” or “4. Rent for Work”]

			Hint: if rent for work let them estimate
6.4	Number of rooms in HH?	[Insert value]	Insert value [Skip logic: if Q6 “1. Yes”]
1.	If Q5 yes, which of the following items does your HH have access to?	1. TV 2. Heater 3. AC 4. Cable TV 5. Electric fan 6. Washing machine 7. Landline telephone 8. Mobile phone Personal computer	Choose multiple
6.5	Which of the following HH items do you have access to?	1. TV 2. Heater 3. AC 4. Cable TV 5. Electric fan. 6. Washing machine 7. Landline telephone 8. Mobile phone 9. PC	Ring multiple [Skip logic: if Q6 “1. Yes”]
6.6.	Which of the following HH services do you have access to?	1. Potable water 2. Sewage/plumbing 3. Electricity/EDL 4. Generators 5. Solid waste collection 6. Internet connection 7. Health services 8. Alternative (Solar) power	Ring multiple [Skip logic: if Q6 “1. Yes”]
6.7	If a HH member becomes ill, do you have the means to treat them?	1. Yes 2. No	Ring single [Skip logic: if Q6 “1. Yes”]

6.8	What are your private means of transportation?	1. Private car 2. Truck 3. Motorcycle 4. Bicycle 5. Others 6. None	Ring multiple [Skip logic: if Q6 "1. Yes"]
6.8.1	If "other", please specify	[Insert value]	Insert value [Skip Logic: if Q6.8 "5. Other"]
6.9	In the past three months, what were your household's three main sources of income?	1. Casual labour 2. Part-time labour 3. Fulltime labour 4. Living on savings 5. Humanitarian assistance (foo vouchers, cash assistance, e 6. Illegal activities (e.g. smuggling…etc) 7. Support from community organizations (faith based, community groups etc.) 8. Borrowing Money 9. Income from rent 10. Remittances from family mer 11. Pension 12. Not willing to answer 13. Other 14. Nothing	Ring multiple [Skip logic: if Q6 "1. Yes"]
6.9.1	If "other", please specify	[Insert value]	Insert value [Skip logic: if Q 6.9 "13. Other"]

6.9.2	If "humanitarian assistance", please specify	1. NPTP 2. Food vouchers 3. Winter assistance 4. Unconditional assistance 5. Other	Ring multiple [Skip logic: If Q6.9 "5. Humanitarian assistance"]
6.9.2.1	If "other", please specify	[Insert value]	Insert value [Skip logic: If Q6.9.2 "5. Other"]]
6.10	From all these sources, what is the total monthly income of the household?	[Insert value]	Insert value [Skip logic: if Q6 "1. Yes"]
6.11	How many people currently live in the HH in a fulltime basis?	[insert value]	Insert value [Skip logic: if Q6 "1. Yes"]
6.12	How many people are above the age of 15 and are currently living in	[Insert value]	Insert value [Skip logic: if Q6 "1. Yes"]

	HH on a fulltime basis?		
6.12.1	How many members of your household are registered with UNHCR?	1. None 2. One 3. More than one 4. Al	Ring single [Skip logic: if Q6 “1. Yes” and Q4 “2. Syrian”]
6.12.2.	How many members of your household have established legal residency?	1. None 2. One 3. More than one 4. All	Ring single Skip logic: if Q6 “1. Yes” and Q4 “2. Syrian”]
7.	What is your relationship to the head of HH?	1. Spouse 2. Son/daughter 3. Daughter-/son-in-law 4. Brother/sister 5. Niece/nephew 6. Grand child 7. Grandfather/-mother 8. Father/mother 9. other	Ring single
7.1	If “other”, please specify	[Insert value]	Insert value Skip logic: if Q7 “9. Other”]
8.	Gender	1. Male 2. Female	Ring single
9.	Age	1. 15-18 2. 19-25 3. 26-35 4. 36-64 5. 65 and above	Ring single
10.	Education attainment	1. Illiterate 2. Write and read 3. Primary 4. Intermediate 5. Secondary 6. University 7. Post University 8. Vocational 9. Other	Ring single

10.0.1	If "other", please specify	[Insert value]	Insert value Skip logic: if Q10 "9. Other"]
10.1	If vocational, please define level	1. CAP: Certificat D'Aptitude Professionelle 2. L.T.: License Technique 3. T.S.: Technicien Supérieu 4. B.T.: Baccalaureat Technique 5. F.P.M.: Formation Professionnelle de Maitrise 6. B.P.: Brevet Professionnel 7. Informal vocational training	Ring single
10.2	What type of vocational certification/degree do you possess?	1. Agriculture and Veterinary Medicine 2. Applied and Pure Sciences 3. Architecture and Construction 4. Business and Management 5. Computer Science and IT 6. Creative Arts and Design 7. Education and Training 8. Engineering 9. Health and Medicine 10. Humanities 11. Law 12. Personal Care and Fitness 13. Social Studies and Media 14. Travel and Hospitality 15. Other	Ring multiple
10.2.1	If "other", please specify	[Insert value]	Insert value [Skip logic: if Q10.2 "15. Other"]

10.3	What type of university degree do you possess?	1. Economics and Business Administration 2. Languages and Literatures 3. ICT 4. Law 5. Agriculture 6. Engineering/Construction 7. Medicine 8. Applied and Pure Sciences 9. Social Sciences 10. Tourism/Hospitality 11. Theology 12. Nursing 13. Military 14. Academic 15. Arts and Handicrafts 16. Other	Ring multiple [Skip logic: if Q10 “6. University” or “7. Post University”]
10.3.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: if Q10.3 “16. Other”]
11.	Are you currently enrolled in some form of education?	1. Yes 2. No	Ring single
12.	Are you currently doing some form of internship/apprenticeship?	1. Yes 2. No	Ring single
13.	Are you currently getting a pension?	1. Yes 2. No	Ring single
14.	Did you work for at least one hour in the past week for money or family gain?[75] (primary activity)	1. Yes 2. No	Ring single
14.1	Location of employment?	1. Local market	Ring single

[75] ILO definition of unemployment.

		2. Surrounding markets (neighboring villages) 3. National markets 4. ITS 5. Other	[Skip logic: If Q14 “1. Yes”]
14.1.1	If “other”, please specify	[Insert value]	Insert Value [Skip logic: If Q14.1 “5. Other”]
14.2	Stability in your main business?	1. Permanent 2. Temporary 3. Seasonal 4. Sometimes	Ring single [Skip logic: If Q14 “1. Yes”]
14.3	In which sector did you work?	1. Handicrafts 2. Construction Labour 3. In-country transport and storage (e.g. taxi, van, warehousing). 4. Cross-border transport and storage (e.g. smuggling or import/export) 5. Automotive Repair 6. Mining and quarrying 7. Security forces 8. Education 9. Civil Servant (other) 10. Professional Services (e.g. Management, legal, accounting, science, architect) 11. Financial Service 12. Administrative (e.g. Office admin, secretary). 13. Arts and creative (e.g. Graphic design) 14. Agricultural Labour 15. Cattle and pastoral 16. Manufacturing 17. Humanitarian and Development (e.g. NGO) 18. Personal & (local) community services	Ring single [Skip logic: If Q14 “1. Yes”]

		19. Environment (e.g. solid waste, sewage, water transport). 20. Health and social care (including dentistry) 21. Energy (e.g. AC, generators, electrician, gas) 22. Trading 23. Other	
14.3.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: If Q14.3 “23. Other”]
14.4	Select one of these categories to describe your work?	1. Part-Time (formal) 2. Full-time (formal) 3. Business owner (formal) 4. Own account (formal) 5. Unpaid family labour 6. Other	Ring single [Skip logic: If Q14 “1. Yes”]
14.4.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: If Q14.4 “6. Other”]
14.5	Select work skill-sets of your job	1. Managerial 2. Professional (Scientific concepts and theories) 3. Technical work (Application of research, theories and occupational methods) 4. Clerical work 5. Services and sales work 6. Skilled Agricultural and Pastoral 7. Craft and related trades work 8. Plant and machine operation and Assembly 9. Elementary Occupations (Routine tasks, considerable effort) 10. Security forces	Ring single [Skip logic: If Q14 “1. Yes”]

		11. Other	
14.5.1	If "other", please specify	[Insert value]	Insert value [Skip logic: If Q14.5.1 "11. Other"]
14.6	Are you working in an organization?	1. Yes 2. No	Ring single [Skip logic: If Q14 "1. Yes"]
14.6.1	How many are working in your organization?	1. 1-4 2. 5-9 3. 10-24 4. 25-49 5. 50-99 (MISSING!!) 6. 100 and above 7. I don't know	Ring single [Skip logic: If Q14.6 "1. Yes"]
14.7	Is it formal (نظامي مصرح به)	1. Yes 2. No	Ring single [Skip logic: If Q14 "1. Yes"]
14.8	Do you get social security with your work?	1. Yes 2. No	Ring single [Skip logic: If Q14 "1. Yes"]
14.9	Do you get health insurance with your work?	1. Yes 2. No	Ring single [Skip logic: If Q14 "1. Yes"]
14.10	How do you get paid?	1. Daily 2. Monthly	Ring single [Skip logic: If Q14 "1. Yes"]
14.10.1	If daily, choose daily rate	1. 1,000-10,000 L.L. 2. 11,000-15,000 L.L. 3. 16,000-25,000 L.L. 4. 26,000-50,000 L.L. 5. 51,000-75,000 L.L. 6. more than 75,000 L.L.	Ring single [Skip logic: If Q14.10 "1. Daily"]
14.10.2	If monthly, choose monthly rate	1. 100-300 USD 2. 301-500 USD 3. 501-700 USD 4. 701-1,000 USD	Ring single [Skip logic: If Q14.10 "2. Monthly"]

		5. 1,001-1,500 USD 6. 1,501 USD and more	
14.11	Did you perform a secondary activity for money or family gain for at least one hour last week?	1. Yes 2. No	Ring single [Skip logic: If Q14 “1. Yes”]
14.11.1	Location of employment?	1. Local market 2. Surrounding markets (neighboring villages) 3. National markets 4. ITS 5. Other	Ring single [Skip logic: If Q14.11 “1. Yes”]
14.11.1.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: If Q14.11.1 “5. Other”]
14.11.2	Stability in your main business?	1. Permanent 2. Temporary 3. Seasonal 4. Sometimes	Ring single [Skip logic: If Q14.11 “1. Yes”]
14.11.3	In which sector did you work?	1. Handicrafts 2. Construction Labour 3. In-country transport and storage (e.g. taxi, van, warehousing). 4. Cross-border transport and storage (e.g. smuggling or import/export) 5. Automotive Repair 6. Mining and quarrying 7. Security forces 8. Education 9. Civil Servant (other) 10. Professional Services (e.g. Management, legal, accounting, science, architect) 11. Financial Service	Ring single [Skip logic: If Q14.11 “1. Yes”]

		12. Administrative (e.g. Office admin, secretary). 13. Arts and creative (e.g. Graphic design) 14. Agricultural Labour 15. Cattle and pastoral 16. Manufacturing 17. Humanitarian and Development (e.g. NGO) 18. Personal & (local) community services 19. Environment (e.g. solid waste, sewage, water transport). 20. Health and social care (including dentistry) 21. Energy (e.g. AC, generators, electrician, gas) 22. Trading 23. Other	
14.11.4	If "other", please specify	[Insert value]	Insert value [Skip logic: If Q14.11.3 "23. Other"]
14.11.5	Select one of these categories to describe your work?	1. Part-Time (formal) 2. Full-time (formal) 3. Business owner (formal) 4. Own account (formal) 5. Unpaid family labour 6. Other	Ring single [Skip logic: If Q14.11 "1. Yes"]
14.11.5 .1	If "other", please specify	[Insert value]	Insert value [Skip logic: If Q14.11.5 "6. Other"]
14.11.6	Select work skill-sets of your job	1. Managerial 2. Professional (Scientific concepts and theories) 3. Technical work (Application of research, theories and occupational methods) 4. Clerical work 5. Services and sales work	Ring single [Skip logic: If Q14.11 "1. Yes"]

		6. Skilled Agricultural and Pastoral 7. Craft and related trades work 8. Plant and machine operation and Assembly 9. Elementary Occupations (Routine tasks, considerable effort) 10. Security forces 11. Other	
14.11.6.1	If "other", please specify	[Insert value]	Insert value [Skip logic: If Q14.11.6 "11. Other"]
14.11.7	Are you working in an organization?	1. Yes 2. No	Ring single [Skip logic: If Q14.11 "1. Yes"]
14.11.8	How many are working in your organization?	1. 1-4 2. 5-9 3. 10-24 4. 25-49 5. 50-99 (MISSING!!) 6. 100 and above 7. I don't know	Ring single [Skip logic: If Q14.11.7 "1. Yes"]
14.11.9	Is it formal (نظامي مصرح به)	1. Yes 2. No	Ring single [Skip logic: If Q14.11 "1. Yes"]
14.11.10	Do you get social security with your work?	1. Yes 2. No	Ring single [Skip logic: If Q14.11 "1. Yes"]
14.11.11	Do you get health insurance with your work?	1. Yes 2. No	Ring single [Skip logic: If Q14.11 "1. Yes"]
14.11.12	How do you get paid?	1. Daily 2. Monthly	Ring single [Skip logic: If Q14.11 "1. Yes"]
14.11.13	If daily, choose daily rate	1. 1,000-10,000 L.L. 2. 11,000-15,000 L.L. 3. 16,000-25,000 L.L.	Ring single [Skip logic: If Q14.11.12 "1. Daily"]

		4. 26,000-50,000 L.L. 5. 51,000-75,000 L.L. 6. more than 75,000 L.L.	
14.11.14	If monthly, choose monthly rate	1. 100-300 USD 2. 301-500 USD 3. 501-700 USD 4. 701-1,000 USD 5. 1,001-1,500 USD 6. 1,501 USD and more	Ring single [Skip logic: If Q14.11.12 “2. Monthly”]
14.12	On average, how many hours do you work per day?	[Insert value]	Insert value [Skip logic: If Q14 “1. Yes”]
B.	[Skip logic: If A) Q14: “2. No”]		
1.	Are you ready to start work within two weeks from today?[76]	1. Yes 2. No	Ring single
2.	Have you actively sought employment at some time in the past four weeks?[77]	1. Yes 2. No	Ring single
2.1	If yes, 28 54 and 30: What steps did you take to find work during the past 3 months?[78]	1. Apply to employer directly 2. Contacted employers? 3. Waiting in a gathering place. 4. Contact an authority figure (wasta). 5. Try to obtain equipment or land to establish your own business?	Ring multiple [Skip logic: If Q2 “1. Yes”]

[76] According to Eurostat definition.
[77] Ibid.
[78] Probing methods to garner employment.

		6. Referral (التوصاية) 7. Apply for financial resources to establish your own Business? 8. Others	
2.1.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: If Q2.1 “8. Other”]
2.2	Why didn’t you seek a job during the past four weeks?	1. Attending educational institution 2. Performing HH duties 3. Retired 4. Disability or impairment 5. Believe no work is available 6. Tired from seeking job 7. Don’t know the affective way to find a job 8. Not qualified 9. Don’t want/No need to work 10. Family objection 11. Illegal to work 12. Other	Ring multiple [Skip logic: If Q2 “2. No”]
2.2.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: If Q2.2 “12. Other”]
3.	In which sector?	1. Handicrafts 2. Construction Labour 3. In-country transport and storage (e.g. taxi, van, warehousing). 4. Cross-border transport and storage (e.g. smuggling or import/export) 5. Automotive Repair 6. Mining and quarrying 7. Security forces 8. Education 9. Civil Servant (other)	Ring single. [Skip logic: Not, if Q2.2 “9. Don’t want/No need to work”]

		10. Professional Services (e.g. Management, legal, accounting, science, architect) 11. Financial Service 12. Administrative (e.g. Office admin, secretary). 13. Arts and creative (e.g. Graphic design) 14. Agricultural Labour 15. Cattle and pastoral 16. Manufacturing 17. Humanitarian and Development (e.g. NGO) 18. Personal & (local) community services 19. Environment (e.g. solid waste, sewage, water transport). 20. Health and social care (including dentistry) 21. Energy (e.g. AC, generators, electrician, gas) 22. Trading 23. Other	
3.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: If Q3. “23. Other”]

4.	What kind of jobs?	1. Managerial 2. Professional (Scientific concepts and theories) 3. Technical work (Application of research, theories and occupational methods) 4. Clerical work 5. Services and sales work 6. Skilled Agricultural and Pastoral 7. Craft and related trades work 8. Plant and machine operation and Assembly 9. Elementary Occupations (Routine tasks, considerable effort) 10. Security forces 11. Other	Ring single. [Skip logic: Not, if Q2.2 "9. Don't want/No need to work"]
4.1	If "other", please specify	[Insert value]	Insert value [Skip logic: If Q4. "11. Other"]
5.	In which year did you leave the labour market?[79]	[Insert value]	Insert value
C. Skills and Training			
1	What type skills do you have?	1. Managerial 2. Professional (Scientific concepts and theories) 3. Technical work (Application of research, theories and occupational methods) 4. Clerical work 5. Services and sales work 6. Skilled Agricultural and Pastoral	Ring single Hint: Chief Executives, Senior Officials and Legislators Administrative and Commercial Managers Production and Specialized Services Managers

[79] To understand long-term or short-term unemployment.

		7. Craft and related trades work 8. Plant and machine operation and Assembly 9. Elementary Occupations (Routine tasks, considerable effort) 10. Security forces 11. Other	Hospitality, Retail and Other Services Managers
1.1	If "other", please specify	[Insert value]	Insert value [Skip logic: If Q1. "11. Other"]
2.	What kind of skills would you like to improve to better your employment prospects?	1. Managerial 2. Professional (Scientific concepts and theories) 3. Technical work (Application of research, theories and occupational methods) 4. Clerical work 5. Services and sales work 6. Skilled Agricultural and Pastoral 7. Craft and related trades work 8. Plant and machine operation and Assembly 9. Elementary Occupations (Routine tasks, considerable effort) 10. Security forces 11. Other 12. None 13. Doesn't know.	Ring multiple
3.	If "other", please specify	[Insert value]	Insert value [Skip logic: If Q1. "11. Other"]
1. D. Livelihoods and Entrepreneurship Local economic opportunities			

1.	Among these sectors, which ones do you think would work in Arsal? generate jobs and income in Arsal?	1. Handicrafts 2. Construction Labour 3. In-country transport and storage (e.g. taxi, van, warehousing). 4. Cross-border transport and storage (e.g. smuggling or import/export) 5. Automotive Repair 6. Mining and quarrying 7. Security forces 8. Education 9. Civil Servant (other) 10. Professional Services (e.g. Management, legal, accounting, science, architect) 11. Financial Service 12. Administrative (e.g. Office admin, secretary). 13. Arts and creative (e.g. Graphic design) 14. Agricultural Labour 15. Cattle and pastoral 16. Manufacturing 17. Humanitarian and Development (e.g. NGO) 18. Personal & (local) community services 19. Environment (e.g. solid waste, sewage, water transport). 20. Health and social care (including dentistry) 21. Energy (e.g. AC, generators, electrician, gas) 22. Trading 23. Other	Ring multiple

1.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: If Q1. “23. Other”]
2.	Do you possess any non-financial assets that you feel could help you to build your own enterprise?	1. Yes 2. No	Ring single
2.1	What are these assets?	1. Machinery 2. Real estate 3. Street Cart 4. Tools 5. Land 6. Other	Ring multiple [Skip logic: If Q2. “1. Yes”]
2.1.1	If “other”, please specify	[Insert value]	Insert value

			[Skip logic: If Q2.1 “6. Other”]
3.	Do you possess any financial assets that you feel could help you to build your own enterprise?	1. Yes 2. No	Ring single
3.1	What is the total monetary value of these assets that you are willing to invest to build your own business?	[Insert value and currency]	Insert value [Skip logic: If Q3. “1. Yes”]
4.	Are you willing to build/start your own enterprise	1. Yes 2. No	Ring single
4.1	What are the services he would like to see available to help him in establishing or expanding his enterprise	1. Access to finance 2. Access to technology 3. Access to markets 4. Business and management skills 5. Legal assistance. 6. Other	Ring multiple [Skip logic: If Q4. “1. Yes”]
4.1.1	If “other”, please specify	[Insert value]	Insert value [Skip logic: If Q4.1 “6. Other”]

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