Socio-Economic Survey of Palestinian Refugees in Lebanon

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ABBREVIATIONS AND ACRONYMS

AUB American University of Beirut
CBO Community Based Organizations

CLA Central Lebanon Area

DFLP Democratic Front for the Liberation of Palestine

DI Deprivation Index

FAO Food and Agriculture Organization

FSS Food Security Survey

HDI Human Development Index

HPI Human Poverty Index

ILO International Labor Organization

LPDC Lebanese-Palestinian Dialogue Committee

MENA Middle East and North Africa Region

MSA Modern Standard Arabic

NBRC Nahr El-Bared Reconstruction Commission

NGO Non-Government Organization

NLA North Lebanon Area

NSSF National Social Security Fund
PCA Principal Component Analysis

PFLP Popular Front for the Liberation of Palestine

PLO Palestinian Liberation Organization
PRCS Palestinian Red Crescent Society

RSS Relief and Social Services

SHAP Social Hardship Assistance Program

SHC Social Hardship Cases

SSN or SSNP Social Safety Net Program

UNHCR United Nations High Commissioner for Refugees

UNRWA United Nations Relief and Works Agency

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EXECUTIVE SUMMARY

Background

The fact that living conditions for most Palestine Refugees living in Lebanon are precarious, as this report shows, is widely observed, commented on and may hardly need restating. Why then this report? In fact, this is the first study to evaluate poverty among refugees in Lebanon in an academically sound and comprehensive way, and to suggest a poverty reduction strategy that is evidence-based. Commissioned by the United Nations Relief and Works Agency (UNRWA), this report profiles the socio-economic conditions and estimates the incidence of poverty among Palestine Refugees in Lebanon and links it to demographic, health, food security and other socio-economic markers. This report is based on a nationally representative household survey, covering over 2,600 households, interviewed face-to-face in late July and early August 2010 by a team of 60 data collectors supervised by the American University of Beirut (AUB). Households in camps as well as in gatherings were interviewed, in a total of 32 localities. To the best of our knowledge this is the first survey of this scale and geographical coverage in over 10 years.

The ambition of this report is not merely informative. It aims to guide UNRWA policy and develop policy recommendations based on data gathered through the household survey. Thus the added value of the present report, as compared to previous work on the same topic, stems from the scale of data it analyses and the scope of its ambition as directing and informing UNRWA policymaking in the country.

This report takes a multi-dimensional approach to poverty, taking it to be more than just the lack of income or assets but to include a household or individual's education, health, food security and other indicators. This approach is justified by the observation that in order to take advantage of their innate capabilities to participate productively in society, individuals require a certain degree of security and care in non-economic domains such as health or food security. The report has therefore been written by a multi-disciplinary expert team of AUB academics in the fields of Community Nutrition, Public Health, Sociology, Nutritional Epidemiology, and Applied Economics and Poverty Targeting.

Social Exclusion of Palestinian Refugees in Lebanon: An Overview

The Palestinian presence in Lebanon dates from the Nakba in 1948, the community is best described as one of protracted (long term) refugees rather than refugees fleeing from recent conflict. Despite their longstanding presence in Lebanon Palestine refugees remain excluded from key aspects of social, political and economic life in the country. Indeed they are barred from owning property or practicing in more than 30 professions, among which all liberal professions. Recent changes in labor regulations have yet done little to change this. In contrast Palestine refugees residing in Syria and Jordan can work in all professions and own property. In addition the Lebanese army controls access to Palestine refugee camps, restricting refugees' mobility.

This social exclusion physically extends to camps, the space inhabited by about two thirds of Palestine refugees. Camps are enclaves outside the authority of the Lebanese state. However, the surface area of the camps has not increased with population and many have become cramped shantytowns, offering little privacy to residents and exposing them to health hazards. Within camps UNRWA provides housing, water, and electricity. These services do not extend to gatherings and camp surroundings, mostly also inhabited by Palestinians, and which suffer from irregular waste disposal and water and electricity supply, which officially are the responsibility of the Lebanese Government. UNRWA also provides education, health care services as well as some additional welfare services to Palestinians living in camps as well as

gatherings. Although a total of 46 Arab organizations and 20 foreign NGOs assist Palestine refugees in Lebanon, the volume and scope of their assistance pales in comparison to services delivered by UNRWA.

While Palestinians demand inclusion in the labor and real estate markets as well as free movement, political inclusion and governance of the refugee community is a more contested topic. Neither Palestinians nor Lebanese want the complete assimilation, or *Tawteen* of refugees into the Lebanese State. The ideal case scenario would be one where 'citizen-refugees' enjoy civil and economic rights as well as the right to space and mobility, all the while contributing through their consumption and taxes to the Lebanese economy as a whole, until their final settlement with right to return.

Population demographics

Never was a census taken of Palestine refugees living in Lebanon. Only UNRWA's registration system gives some data but is inaccurate given the massive emigration of Palestinians. This survey allows for the first time to estimate accurately the total number of refugees living in Lebanon. Of the 425,000 refugees registered with UNRWA since 1948, only 260,000-280,000 currently reside in Lebanon. About a quarter live in Tyre, Saida and Beirut areas, one fifth in the North and 4% in the Beqaa. More than half of the refugee population live in camps (62%) as compared to 38% living in gatherings, mainly in camp vicinity.

Based on the household survey results, 53% of refugees are women and the Palestine refugee population is young, with an average age of 30 years, and **half of the population is younger than 25 year-old**. The average household size is 4.5 members, compared to 4.2 for Lebanese households.

Livelihoods

Many Palestinian workers are discouraged from working: 56% of refugees are jobless and only 37% of the working age population is employed. The Palestinian refugee labor force reaches 120,000, of which 53,000 are working. Joblessness among refugees has a strong gender dimension: Only 13% of women are employed compared to 65% of men. Those with a job are often in low status, casual and precarious employment. Our survey shows that 21% of employed refugees work in seasonal employment, and only 7% of those employed have a contract. Very few have a second job (3%) indicating the scarcity of even low quality employment. Most refugees have low qualifications: 6% of the Palestinian labor force has university training, compared to 20% for the Lebanese labor force.

Though employment differs little across regions, quality of employment does. The share of those employed in low status elementary occupations is highest in Tyre while the share of high status professionals and senior officials is highest in the North. Nearly a quarter of workers in Tyre are employed in the agricultural sector and 87% of all agricultural workers live in Tyre. People working in elementary occupations or the agricultural sector are more likely to belong to the working poor than those working in other professions.

Survey results show that **education can help refugees secure more and better jobs**. A refugee with a vocational or university degree is more likely to be employed than one holding a Brevet (official diploma qualifying entry into secondary) or lower. Moreover, of those with a university degree, 70% work as professionals or associated professionals, while those with a Brevet or less work mainly in crafts and elementary occupations. Employment rates for women who attended further education are also higher. Half of women with a university degree work and 43% of those with a vocational degree do.

Yet refugees till face many challenges in their educational attainment. Survey results show that 8% of those between 7 and 15 years old were not at school in 2010. In addition to this, two thirds of

Palestinians above the age of 15 do not have Brevet, compared to a Lebanese rate of 50%. Only 50% of youths in Secondary school age (16-18 years old) are enrolled in education. Half of those live in the South, though attendance varies significantly within regions. Education is central to improving livelihoods among refugees, as household heads with Brevet or more are less likely to have poor or food insecure households. As for higher education, only 13% of refugees older than 18 have the Baccalaureate or higher, compared to 17% for the Lebanese population.

Conceptul Approach: Three Ways to Measure Poverty

The main purpose of this report is to assess poverty. There are three main methods to estimate poverty. The most frequently used concept is money metric and assumes that the differences in individual welfare can be summarized by differences in income and expenditure. However, if used for policy targeting, there is a strong incentive for beneficiaries to give untruthful answers. A second, alternative approach is to measure poverty using observable income and expenditure correlates, such as physical assets of the households, which can be less easily misrepresented. However, these may be inaccurate since based on correlates rather than actual observation. Asset-based indicators sufficiently identify people that have been living in poverty for a long time, but they do not capture well short term changes in households' material circumstances.

Money metric and asset based approaches to poverty have been criticized for focusing on the economic status of a household or individual and ignoring enabling assets (or capabilities) such as basic education, health, access to water, sanitation and electricity, which support or prevent an individual's participation in social and economic life to the best of his or her capabilities. Hence, multi-dimensional measures have been proposed, such as, most famously the Human Development Index.

The present report assesses poverty along five dimensions: namely economic status, housing, health, food security and education. According to this framework, a Palestinian household is considered to be poor if its members are unemployed or in infrequent, unstable employment, live in bad housing conditions, are of poor health, suffer food insecurity and have had only few years of official schooling. Not all, but most of these characteristics define a poor Palestinian household. A major criticism of composite poverty indicators is that they tend to underestimate poverty when compared to money metric indicators. All three of the above methods are developed in the report.

2627 households were randomly selected from all camps and many gatherings across Lebanon. A questionnaire was designed covering the five poverty dimensions under assessment, namely economic status, housing, health, food security and education. Questionnaires were administered by UNRWA social workers who had been trained in interview techniques by AUB. The research design was approved as ethical by AUB's Institutional Review Board and data collection took place in early August 2010.

Poverty Profile of Palestine Refugees in Lebanon

Money Metric Poverty

The money metric poverty line used in this report represents a person's minimum daily needs in monetary terms. The poverty line stands at US\$ 6 a day, which allows to cover basic food and non-food requirements (such as rent, transport, utilities etc.) of an adult Palestine refugee. This poverty line is based on that used by the Lebanese household survey in 2004 and by UNRWA in 2008, adjusted for inflation. **Two thirds of Palestine refugees are poor, which equates to an estimated 160,000 individuals**. The poverty rate is higher in camps than in gatherings, nearly three quarters of camp residents are poor while slightly more than half of gathering residents are poor.

Poverty has also been estimated at the extreme spectrum of poverty. An extreme poverty threshold of US\$ 2.17 allows purchasing enough food to satisfy the daily basic food needs of an adult Palestine refugee. 6.6% of Palestine refugees spend less than the monetary equivalent necessary to cover their basic daily food needs. This amounts to 16,000 individuals. The extreme poverty rate in camps (7.9%) is almost twice of that observed in gatherings (4.2%).

The high poverty rate reflects overall low income, as proxied by expenditure, among Palestine Refugees. Indeed most refugees exist around the poverty line, and shocks may easily push households into poverty. Within our dataset no household reported spending more than US\$600. Saida and Tyre gather more than 81% of all extremely poor refugees, and a third of all poor live in Tyre. Though gatherings have generally lower poverty rates than camps, some gatherings in Tyre, such as Jal el Bahr or Qasmieyeh, have very high poverty rates, exceeding those of most camps. Considering that many Palestine refugees in Tyre work in agriculture and elementary professions, this indicates that these very poor gatherings are communities of agricultural labourers.

There are twice as many poor among Palestine refugees and occurrence of extreme poverty is four times higher as compared with the Lebanese population. Geographically, poverty rates among Palestinians are higher than those of their Lebanese neighbors; this differential is particularly strong in the Central Lebanon Area where poverty rates among Lebanese are less than half of those among Palestinians. A notable exception is the North where poverty rates among Lebanese and Palestinians are comparable. Indeed the distribution of poverty among Palestinians is inverse to that of the Lebanese, with higher poverty rates in the South as compared to the North. Although the North has suffered from a recent crisis in the Nahr El Bared Camp, the results do not show a significant effect; this can be explained by the many ongoing emergency projects taking place in that region. Survey evidence also shows that employment has a low impact on reducing overall poverty, but it has a significant impact on reducing extreme poverty, which drops from 9.3% to 5.1% when the household head's status changes from unemployed to employed. This is due to the precarious and low-pay nature of jobs that Palestine refugees typically hold in Lebanon.

Deprivation Index

To complement money metric poverty rates, a Deprivation Index based on components of welfare was developed. The components included: good health, food security, adequate education, access to stable employment, decent housing, and ownership of essential household assets. The Deprivation Index shows that 40% of Palestine Refugees living in Lebanon are deprived. This indicator correlates closely with money metric measures of poverty analyzed above. These results indicate that securing good health, food security, an adequate education, access to stable employment, decent housing, and the possession of essential household assets are an integral component of any long-term poverty reduction strategy for the Palestinian refugees in Lebanon.

Characteristics of Poverty

Poverty is higher among children and adolescents (6-19). Overall poverty increases with the number of children and the family size. However, extreme poverty decreases with the number of children in the family. This is due to the contribution of young family members to the livelihoods of the poor family, often through child labor. **All households that have a disabled household head (9% of the refugee population) are classified as extremely poor**. Poverty is also significantly higher when the household head has low education (primary and below). Poverty incidence drops to 60.5% when the household head has an above primary educational attainment, and extreme poverty is almost divided by two.

Food Security

Consistent with the multi-dimensional approach adopted in this report, we included an analysis of food security among Palestine Refugees. Food security is not understood to mean over-all food availability, but the ability of people to satisfy their nutritional needs through means available to them, that is to say earnings from work, welfare transfers or own production. Food security includes food quantity as well as quality indicators. Malnutrition, overweight as well as micronutrient deficiencies can be different manifestations of food insecurity.

Two thirds of Palestine refugees report dissatisfaction with their diet, more than half (58%) are vulnerable to food insecurity, a third are mildly food insecure, more than a quarter (28%) are moderately food insecure and 15% report severe food insecurity. Factors affecting food insecurity are similar to those affecting poverty. Camp residents are more likely to suffer from food insecurity than Palestine refugees living in gatherings. Regionally residents in the North are less likely to suffer food insecurity than residents in other areas, especially Tyre. Indeed two thirds of the food insecure live in the South (Tyre and Saida). Interestingly, Palestine refugees living in the Bekaa are most likely to experience severe food insecurity.

If the head of household has the Brevet this reduces the likelihood of food insecurity for the household. Employment only slightly reduces the likelihood of a household experiencing food insecurity, while occupational status, an indicator for quality of employment, has a more important impact on the likelihood of experiencing food insecurity. As was the case for extreme poverty, female-headed households are more likely to experience severe food insecurity. These observations, relating to education, employment and female-headed households, indicate that food insecurity and poverty vary with similar socio-economic markers. Indeed poverty and food insecurity are significantly correlated and most poor and extreme poor also experience some degree of food insecurity.

Manifestations of food insecurity in the diet include very low fresh food intake, as fresh fruit intake is remarkable low in the population as a whole: More than half of Palestinian refugees consume fruit less than once per day, and 46.5% of severely food insecure households consume fruit less than once per week. Other fresh foods, in particular meat, chicken and dairy intakes are also affected by food insecurity. These were also the most frequently cited foods households were unable to afford. Thus food insecure Palestine households suffer from low quality diets.

It is highly likely that approximately one third of the population are not meeting their micronutrient requirements. It is well known that micronutrient deficiencies cause stunting, poor cognitive and psychomotor development of children, putting the refugee population in Lebanon at considerable health risks. Moreover, survey evidence shows that 57% eat sweets and 68% consume sweetened drinks frequently. This is also worrying as food insecurity coupled with a diet high in sugar or fat and low in micronutrients increases the burden of chronic diseases (especially diabetes and cardiovascular diseases).

Health Conditions

A third of the Palestine refugee population is estimated to have chronic illness and 4% a functional disability. Hypertension is particularly prevalent, which is cause for concern considering changing eating habits outlined above. This strongly affects poverty. All households with a disabled head of household live in extreme poverty. A quarter of refugee households had an acute illness in the past six

months; a third of these had the flu or common cold or other respiratory tract illnesses. 20% had an acute gastro-intestinal tract illness. Acute illnesses pose a particular risk for the Palestine refugee population, most of which live around the poverty line, since they often lead to extra-ordinary expenses and periods out of work. Considering that 95% of the population are without insurance and most of them in precarious employment, they are unlikely to receive indemnities or sick leaves, thus a case of acute illness may push a household into poverty.

As for mental health, 21% stated that they experienced depression, anxiety or distress. Men reported better self-rated health scores than women. In general, women report a higher incidence of chronic and psychological disorders and lower self-rated health scores, while men are more likely to suffer functional disability. This is consistent with the international literature.

Similar to poverty and food security indicators, the North also reported the best health ratings, including self-reported health. The Central Lebanon Area reported the highest incidence of chronic and psychological problems, while the Bekaa reports a very high incidence of acute illnesses. Self-rated health shows little geographical variation.

UNRWA is the most frequently used health care provider: a third of patients with an acute illness visit an UNRWA health clinic, while a quarter consult with a private doctor and 10% visit the Palestinian Red Crescent. Unsurprisingly, average out of pocket health care expenditure is highest for hospitalisation. Households with a hospitalised family member spent on average US\$614 over the last 6 months. Those with a doctor's visits due to disability spent US\$262, households with an acutely ill family member not requiring hospitalisation spent US\$ 164 and those with a chronic illness case US\$137. Indeed the share of household expenditure on health jumps from 3% to 13% when a family member is chronically ill or disabled.

Housing and Living Conditions

Poor quality housing continues to be a problem in communities where most Palestinian refugees live in Lebanon. 40% of households have water leaking through their roof or walls, and 8% of households live in shelters where the roof and/or walls are made from corrugated iron, wood or asbestos. Restrictions on the living space have resulted in almost 8% of households reporting living in overcrowded conditions (more than three people live in one room). Bad housing is concentrated in the South, particularly Rashidiyeh and Ain el Helweh camps and gatherings throughout Tyre region. 9% of households in the survey reported having no water heater or fridge, compared to 3% among Lebanese households.

Weight of the Palestinian Presence in Lebanon

This study highlights how Palestine refugees in Lebanon are currently enduring harsh living conditions, mostly due to the widespread social exclusion they experience in the country. Yet their presence in Lebanon, although contested by a significant portion of the Lebanese population, imposes virtually no burden on the host country. In fact, refugees have very few alternatives to UNRWA in terms of securing their livelihoods and basic needs. At present, the survey shows that only 13% receive direct financial or in kind support other than that provided by UNRWA, and many of these are infrequent and irregular. UNRWA is also the main health care and education provider, with a network exceeding 100 schools and health care centers throughout the country. This heavy reliance on mostly free UNRWA services puts the organization in front of a difficult task, namely how to ensure decent living conditions for refugees and at the same time keep efficiency and cost-effectiveness during implementation. If

UNRWA was not present in Lebanon, overall poverty among refugees would increase by 14%, and extreme poverty would be multiplied by three.

Moreover, we estimate that **Palestinian refugees in Lebanon spend about 340 million US\$ per year**, a considerable contribution to the local economy, especially rural areas where most Palestinians live and work. Moreover, the jobs Palestinians typically take can be seen as complimentary to those taken by the Lebanese, as **Palestinians residing in the country have a different skill set and thus would not pose a threat to the local job seekers**. This argument should be key in further convincing the Lebanese authorities to lift labor market restrictions on Palestinians.

CHAPTER 1: Social Exclusion of Palestinian Refugees in Lebanon: An Overview

1.1 CONCEPTUAL OVERVIEW:

The population under discussion is constituted of people that, for over 60 years, have been refugees and should be called more appropriately: protracted refugees. Their unenviable situation is caused by the effects of inaction both in their country of origin and their country of refuge. Protracted refugees in Lebanon are often deprived of their socio-economic or civil rights, such as the right to work, practice professions, run businesses, and own property. The majority is confined to camps or segregated settlements where they are partially dependent on humanitarian assistance and often live in dire socio-economic circumstances. This chapter is concerned with how the lack of rights and social exclusion of Palestine Refugees affects their living conditions.

There is a copious amount of literature on poverty alleviation. Recent scholarship has tried to broaden it from a static, distributional outcome to a more comprehensive approach, based on notions of social exclusion, defined as marginalization or detachment from a moral order, which is associated with a status hierarchy or a set of rights, duties and obligations. Social exclusion has evolved over time to include economic, social and, to some extent, political aspects. Referring to the European Commission, Bhalla & Lapeyre (1997) state that:

"(...) each citizen has the right to a certain basic standard of living and a right to participate in the major social and occupational institutions of the society: employment, housing, health care, education, and so on. (...) beyond the diversity of national situations, (social exclusion) is tending to establish within society a mechanism which excludes part of the population from economic and social life and from their share of the general prosperity. (...) The problem now is not one of disparity between the top and bottom of the social scale (up/down), but also between those comfortably placed within society and those on the fringe (in/out)"

(European Commission, 1992: 7 cited by Bhalla, & Lapeyre (1997): 415).

What is compelling in the Commission's conceptualization is that, firstly, it emphasizes the role of social exclusion as a structural problem (following the French tradition¹), and secondly, concerns populations living in Europe and not necessarily citizens. This latter point implies that social inclusion, as a remedy to exclusion, applies not only to citizens but also to migrants or refugees and is thus relevant to our study.

Berman & Phillips (2000) elaborate on some objective and subjective indicators concerning social inclusion, in their case by demographic variables including but not limited to age, sex, region, ethnicity and employment status:

- 1. Inclusion in the social security system: distribution of access to social security services indicated
- 2. Labor market inclusion: distribution of access to jobs, full-time and part-time employment

¹ In French Republican thought, it refers to a process of `social disqualification' leading to a breakdown of the relationship between society and the individual. In this sense, social exclusion is deeply rooted in the Republican tradition of solidarity in which the State plays a major role. (Bhalla, & Lapeyre 1997: 414)

- 3. Housing market inclusion: distribution of access to neighborhoods, subsidized and protected housing; homelessness etc.
- 4. Health service coverage: distribution of access to health services; mortality rates
- 5. Inclusion in education system and services: distribution of access to and discrimination in educational and cultural services
- 6. Political inclusion: restrictions on eligibility to stand as an elected representative or member of a government
- 7. Inclusion in community services: distribution of access to leisure facilities and neighborhood services:
- 8. Social status inclusion: equal opportunities and anti-discrimination legislation; distribution of access to social and leisure facilities

These indicate the role of society and the state in ensuring social inclusion. However, in addition to communities defined by demographic markers, society is also composed of ethnic communities. Berman & Phillips (2000) develop two additional social inclusion domains and indicators in the context of what Delanty (1998) calls ethnos communities, which apply to the current case of refugee communities. These two domains are:

- 1. Identification: membership and self-identification, common interests, feeling of belonging, language;
- 2. Participation: organizational affiliation, cultural and leisure activities, use of free time, friendship networks.

What is interesting in both the societal and community dimensions of social exclusion is that it is primarily concerned with the *processes* (rather than outcomes) by which individuals and their communities become polarized, socially differentiated and unequal (Phillips 2008).

Based on the Berman & Phillips (2000) model, this chapter will identify some domains of social exclusion of Palestinian refugees in Lebanon, a process that through restriction of access to major social and occupational institutions of society tremendously affects the living conditions of the refugee population. It is worth noting from the outset, that while this chapter argues strongly for certain aspects of social inclusion of Palestinians in Lebanese society, this does not apply to the political domain, as neither Palestinian refugees nor Lebanese people desire that. This issue will be discussed in more depth below under the heading of *tawteen*, or assimilation of Palestinians into the Lebanese state.

As for social inclusion along the domains of education, health and some community services, many of these are provided by UNRWA and will be discussed in other chapters in this report. Attention will be given to the camp as a form of urban exclusion, aggravating the existing legal discrimination against Palestinian refugees.

1.2 HISTORICAL OVERVIEW²

The story of the Palestinian presence in Lebanon is one of deep ethno-national divisions, political confrontation and, in the post-civil war years, ideological controversy. One hundred thousand people fled to Lebanon during the Israeli-Arab war in 1948. Many refugees interviewed by Hanafi and Long (2010) reported the brutality and oppressive nature of the control over the camps at that time by the police, army and *Deuxième Bureau* (Lebanese military intelligence). The majority of refugees gathered in camps and some of the camps (in the south) that acted as transit camps later became permanent (Sfeir 2001).

Palestinian nationalism grew quickly from 1965 onwards. After the PLO in Jordan was crushed in 1970 and its leadership relocated to Beirut, the Lebanon camps became the centre for Palestinian resistance against the Israeli state. While UNRWA had already been set up to cater for the Palestinian refugees, providing education, health and social services, a sizable number of Palestinian institutions, including nurseries, vocational training centers, health clinics and various industries (textile, leather goods, ironwork, furniture, handicrafts) were also established and expanded immensely in the 1970s following the arrival of the Palestinian leadership (Farsoun & Zacharia 2005). This allowed for the establishment of institutions and organizations to serve Palestinian refugees and camp committees and a number of other organizations engaged in health, education, culture, and sports in and around refugee camps. At one point the largest part of the Palestinian labor force, perhaps up to two-thirds, was employed by the PLO and the resistance movement, including in political offices and armed units (Sayigh 1995).

The Palestinian community in Lebanon took shape not only economically but also politically and spatially. The re-emergence of distinctly Palestinian nationalist politics in the mid-1960s followed the progress made by the scattered Palestinians in rebuilding their socio-political space. This progress, which was enhanced by the Palestinian resistance movement and the PLO, played a key role in promoting a collective political and national identity among the exiled Palestinians who until then had seen themselves merely as refugees. The camps played an important role, as the 1969 Cairo Agreement between the Lebanese government and the Palestinian resistance secured the Palestinians full control over the camps, which virtually became a state-within-a-state.⁴ To this day the camps make up enclaved space of exception that state deliberately has not wanted to extend the rule of law. Special arrangements with the prevailing local forces have been necessary to enforce some other laws.

The 1982 Israeli invasion, however, forced the PLO to leave Beirut, and with the Palestinian leadership gone, scores of social and economic institutions disappeared, along with employment and income. The expulsion of the PLO coincided with falling remittances in the 1980s, particularly from the Gulf monarchies. Later, the diversion of foreign aid from Palestinians in Lebanon to the Palestinian territory in the wake of the Oslo Accords made the situation worse. After 1982, with the exception of a few organizations such as the Palestine Red Crescent Society, almost all PLO-created organizations collapsed

² This section draws on work previously co-published by the author (Hanafi and Long, 2010).

³ Between 1958 and 1964, President Fu'ād Shihāb created an elaborate, ruthless secret-service network to monitor the Palestinian camps. N. Rosen, "Scapegoats in an Unwelcoming Land," *Washington Post*, 16 December 2007.

⁴ Art. 2 of the section 1 of the Agreement called for a reorganization of "the Palestinian presence" in Lebanon through "the foundation of local administrative committees in the refugee camps, composed of Palestinians, in order to defend the interests of the Palestinians residing in those camps, in collaboration with the local authorities and within the framework of Lebanese sovereignty".

and, as a result, the Palestinian refugees residing in the camps had only UNRWA to cater to their needs.⁵ But despite UNRWA's efforts, with the other organizations, the conditions of the Palestinian refugees have gone from bad to worse. Housing problems have become more acute, the economy has deteriorated, and the social environment has reached an alarmingly unhealthy level. This environment led many institutions to extend a helping hand to the refugees. To date, there are 46 Arab and 20 foreign NGOs who assist the Palestinian refugees in Lebanon. Some provide multiple services; others are specialized in one sector. The role of the foreign NGOs is primarily one of funding, with the exception of a few who are involved directly with refugees. Arab and Islamic NGOs are more involved in the actual provision of services (Ajial 2001). After the war, under the so-called "Pax Syriana" of 1990-2005, Palestinians fared little better than they had in the 1950s and 1960s. Syrian-Lebanese intelligence services reasserted their dominance over the camps and prevented the establishment of any united Palestinian authority. They did so in large part by keeping Fatah and the PLO out of northern Lebanon and by sponsoring groups such as Ahmed Jibril's PFLP-GC and al-Sa'iqa in northern Lebanon and al-Ahbash in 'Ayn al-Hilweh (Rougier 2007). Collectively, Palestinians began to refer to these pro-Syrian factions, including Hamas, as the "Alliance," or "al-Tahaluf." As Bernard Rougier has convincingly argued, the Syrian position vis-à-vis the Palestinians in Lebanon was one of systematically "encouraging inter-Palestinian rifts and blocking any possibility of direct negotiation between the Lebanese government and the (Palestinian Authority's) local representatives." (Rougier 2007): 11; cited in Hanafi & Long, 2010). Currently there are PLO factions and Coalition operating inside the camps. The PLO office is representing the Palestinians in Lebanon.

Hamas, in particular, expanded its activities in Lebanon during the years of Syrian hegemony. It and other Islamist groups gained strength at the expense of the more secular PLO, Fatah, and Leftist revolutionary groups like the PFLP and DFLP. Ultimately, as other historians of Lebanon and political scientists have argued, the "power vacuum" left by waning PLO influence paved the way for the establishment in the camps of some of the Middle East's most radical Islamist groups, such as Jund al-Sham, 'Usbat al-Ansar, and some years later, Fatah al-Islam.

Palestinian refugees in Lebanon can be categorized into three groups. Though demographic data will be discussed in depth in the next chapters, it is worth pointing out here that the majority of Palestinian Refugees is "registered" refugees by both UNRWA and the Lebanese authorities, and benefit from the services offered by UNRWA. The second category (35,000) consists of "non-registered" refugees, as estimated by NGOs operating in the camps in 2004. These refugees fall outside the UNRWA mandate because they left Palestine after 1948, and took refuge outside UNRWA's areas of operation. They were registered by the Lebanese government. UNRWA started to serve the non-registered population in January 2004. The third category (3,500) consists of the "non-identified" refugees, who are not registered with any agency in Lebanon or internationally and thus possess no valid documents. They have access to some of the UNRWA's services. They endure difficult socio-economic conditions as they lack stable income due to their ineligibility for work. They do not have access to health care, educational facilities, or other forms of humanitarian assistance, such as home refurbishment. Other local organizations, such as

⁵ Before 1982, the PLO and UNRWA were two major employers for Palestinian refugees in Lebanon. While the PLO recruited professionals of all categories, UNRWA employed professionals such as teachers, nurses, and doctors. The 1982 eviction of the PLO changed the situation dramatically, and the PLO was reduced mainly to one institution, that is, the Palestinian Red Crescent Society, which depends on the PLO. During the same time period, UNWRA has dramatically reduced its recruitment because of the extreme strain on its resources.

⁶ Danish Refugee Council, *Non-ID Palestinian Refugees in Lebanon*, Beirut: 2005.

the Palestinian Red Crescent Society (PRSC), provide health facilities accessible to non-ID refugees. However, in most cases they have to pay for these services. (Danish Refugee Council)⁷

1.3 PALESTINIANS IN CAMPS: AN URBAN EXCLUSION

Many factors may play a role in pushing the refugee community into poverty and social exclusion. What we argue here is that space is one of three chief factors contributing to creating social exclusion and endemic poverty in some Palestinian refugee communities. These factors are: first, living in a slum-like urban area, and second, being discriminated against in the labor market.

While differences between camp dwellers and refugee urban dwellers (off-camp dwellers) in Syria and to a lesser extent in Jordan are relatively minimal, the gap between camp (and gathering) and city refugees in Lebanon and in the occupied Palestinian territories is enormous. In Syria and Jordan, refugees enjoy access to free education, relatively egalitarian job opportunities, and can cross national borders for work abroad with relative ease. Camps in Jordan and Syria constitute, by and large, open spaces regulated by the host state, while in Lebanon they are set in closed spaces. "Open space" is defined as both urban and societal. Open urban space is regulated by the host country to look like any residential low-income neighborhood, allowing it to be connected with the surrounding cities and villages and having a governance body capable of dealing with the municipal issues inside the camps. From the societal point of view, camp dwellers are relatively integrated socially and economically into the surrounding neighborhood and labor market. A "closed space" does not meet at least one of these conditions; camps organized as "closed spaces" constitute urban enclaves or satellites located at the urban periphery, lacking in green spaces, and with poor access and poor housing.

As one can clearly see from Table 1-1, it is only in both Lebanon and the Palestinian territory (mainly the West Bank) that the poverty rate is higher compared to the local population, despite the fact that in the Palestinian territory there is no institutional discrimination in the labor market. This discrimination in the labor market certainly plays a partial role in the poverty rate as noticed in Lebanon. Therefore, the factor contributing to the production of a high poverty rate shared by refugees in Lebanon and the West Bank is the feature of "closed space". This demonstrates how salient such a space is, in regards not only to refugees' living conditions but also to their urban identity. This analysis by country does not in any manner suggest homogeneity inside each respective country, mostly because of the location of the camps. Some camps are located inside an urban context, while other camps are situated at the urban periphery, and a number of them are isolated camps within a rural setting. The differences between these camps are sometimes huge⁹.

⁷ Ibid. For more details see the Frontiers Center report, 2005.

⁸ What we are describing here is true on one level, but not on another. It holds when comparing the camp populations in Jordan and Palestinian territory to the country average. However, in both places there are large population groups with even poorer living conditions. See M. See (Khawaja & Tiltnes 2002).

⁹ Regarding this statement, for the typology of the refugee camps, see (Dorai 2006)

Table 1-1: Relation between the Poverty Rate, Type of Camp, and Discrimination in the Labor Market

Country/region	Discrimination in labor market	Governance body	Type of camp	Rate of pover local rate	ty compared to
Egypt	Yes		No camps	\Longrightarrow	Similar
Syria	No	State-centred and strong	Open space	\Longrightarrow	Similar
Jordan	No	State-centred and strong	Open space	\Longrightarrow	Similar
Gaza Strip	No	Strong	Semi closed space	\Longrightarrow	Slightly higher
West Bank	No	Relatively weak	Closed space	\Longrightarrow	Higher
Lebanon	Yes	Very weak	Closed space	\Longrightarrow	Higher

According to the various surveys conducted by Fafo in Jordan and Syria, the living conditions of Palestinian refugees outside the camps are not much different from that of the general population in the host country. The situation of refugees living in camps, however, is worse than that of those living outside camps, and this is true in every host country. This is confirmed by survey data presented in this report, which shows that camps are generally worse off than gatherings, in terms of poverty rates, food security or educational achievements (see chapters 3 and 4). However it is worth pointing out that living conditions outside camps vary significantly. Households living in gatherings such as Zahriyeh in the North, Tareeq el Jedide in CLA, Dalla'a and Hay Zuhhour in Saida or Saadnayel and Taalabaya in the Bekaa are on average better off than households living in the camps. However, some gatherings, in particular in agricultural areas in Tyre, have households living in significantly worse conditions than those found in camps.

1.4 LEGAL AND INSTITUTIONAL DISCRIMINATION

As mentioned in the conceptual overview, social inclusion implies a state responsibility to provide basic rights and services to the populations living within its borders. While UNRWA provides health care, education, some relief and social services as well as shelter and infrastructure services, in other domains Palestine refugees remain excluded, in particular with regards to access to the labor market, the social security system and real estate market, these will be discussed below. However, before going into detail on in which domains increased social inclusion is desirable; it is worth elaborating in more detail on the domain of political inclusion. Lebanese vehemently oppose the naturalization of Palestinians into Lebanese. Such *Tawteen* (naturalization) is also strongly rejected by the Palestinians, who insist on their right to return to Palestine. The Lebanese position on return to Palestine is sometimes used to justify discriminatory policies against the Palestinian refugees, and their legal status even after 60 years remains that of foreigners. This has resulted in restrictive policies with regard to the social, economic, and civil rights of the Palestinians (Hanafi & Tiltnes 2008).

¹⁰ See (Bhalla & Lapeyre 1997). Actually, the difference in living conditions of the Palestinian refugees between those who are camp dwellers and those who are not is more important than what is mentioned in the Fafo surveys. We are basing our estimation here on our anthropological observations as well as statistics from the Syrian and Palestinian Central Bureaus of Statistics. Fafo usually conducted its surveys in the refugee camps or in Palestinian gathering sites. However, Palestinian refugees also live in cities, where they integrate with the local population, and where it is usually very hard to identify them.

1.4.1 *Tawteen* as Scarecrow

Tawteen is the scarecrow that has been used within sections of Lebanese society to generate public phobia against according civil rights to Palestinians. Indeed through editorials in key Lebanese newspapers (al-Nahar, al-Safīr, and L'Orient-Le Jour), Lebanese political groups accuse each other of promoting Tawteen, an act tantamount to treason. For instance, the front-page headline of the Lebanese daily al-Akhbār, read on 2 July 2007 "The program of al-Barid Camp reconstruction is the beginning of Tawteen". Others (including religious authorities) consider the mere talk of the Palestinians' right to work as being the first step towards Tawteen. Any debate about civil and economic rights starts by affirming that the objective should not be Tawteen, to the point that initiatives on according long-term rights to Palestinians come to be substituted with short-term interventions on humanitarian or security grounds. We discuss below that the recent changes in labor regulations are no exception to this pattern. The only common ground between the various Lebanese political parties is the use of Tawteen as taboo.

Throughout this debate the individual Palestinian is invisible. The deployment of bio-politics by humanitarian organizations (regarding Palestinians as bodies to be fed and sheltered without political existence) is one end of the spectrum and the *Tawteen* discourse is the other end. For those participating in such a discourse, the Palestinians are mere figures, demographic artifacts and a transient political mass waiting for return. Between humanitarian discourse in the zones of emergency on the one hand, and the *Tawteen* discourse on the other, the rights-based and entitlement approach for the Palestinians as individuals and collectives, as refugees but also as citizen-refugees with civil and economic rights, as well as the right to the city, is lost.

Accounts from Palestinian camp dwellers in Lebanon show that they refer to themselves as the "forgotten people", feeling that they live in a hostile environment where basic human rights, including the right to work, have no effective means of representation or protection.

1.5 CURRENT EMPLOYMENT SITUATION OF PALESTINIANS

Unemployment among Palestinians, in the strict sense of the ILO definition (i.e. the ratio of those actively looking for work over those in the labor force) reaches 8% among refugees. This rate is similar to that of the Lebanese population in recent years. However, this unemployment definition overlooks refugees who are discouraged workers, that is those who are not actively looking for a job. In fact, joblessness, defined as the ratio of persons of working age who are not studying, pregnant or ill, reaches 56% among refugees. Moreover, only 37% of the working age population (between 15 and 65 years old) is employed, which is very low by international standards. The employment rate does not differ significantly across regions. All of this implies a high prevalence of discouraged workers among refugees, mostly due to the lack of access to the local job market given the prevalent discrimination in the employment regulations.

Those with a job are often in low status, casual and precarious employment. Our survey shows that 21% of employed refugees work in seasonal employment, and only 7% of those employed have a contract. Very few have a second job (3%) indicating the scarcity of even low quality employment.

72% of Palestinian workers are occupied in the private services sector (excluding governmental, NGO, health and educational services). 17% work in construction, 7% in agriculture and 3% in industry. In Lebanon, 8% work in construction, 15% in industry, 6% in agriculture and 71% in services (LNHS 2007). Figure 1-1 shows the distribution of the Palestine Refugee workforce according to sector. It is noteworthy

that nearly a quarter of workers in Tyre are occupied in the agricultural sector. Indeed 87% of all agricultural workers live in Tyre. Construction on the other hand is an important sector in the North, employing a quarter of the workforce. As will be analyzed in chapter 3, Palestinians employed in agriculture are more likely to be poor than those employed in other sectors.

Figure 1-1: Employment Sector by Region

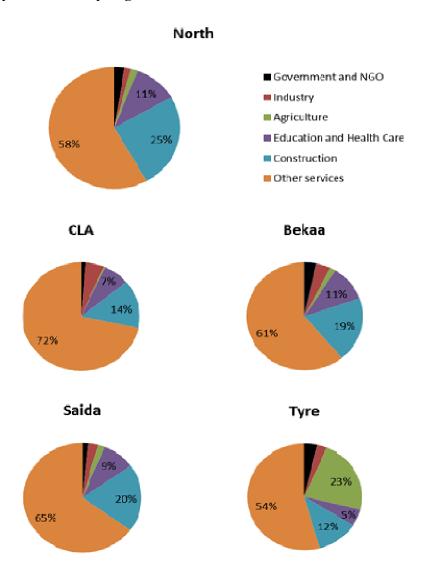


Table 1-2: Occupation by Region

	Professionals, senior officials and managers	Technician, associate professionals, clerks	Service workers sales workers	Craft and related trade workers; machine operators	Elementary occupations
North	15%	5%	16%	46%	19%
Beddawi Camp	10%	4%	19%	51%	16%
NBC	11%	2%	14%	48%	26%
Zahriyeh	36%	9%	17%	23%	15%
El Mina	12%	16%	12%	60%	0%
Jabal Beddawi & Beddawi Village	22%	6%	13%	41%	18%
CLA	13%	4%	20%	52%	11%
Dbayeh Camp	11%	0%	18%	57%	14%
Mar Elias Camp	0%	6%	6%	82%	6%
Shatila Camp	5%	0%	16%	55%	25%
B/B Camp	10%	6%	16%	58%	10%
Haret Hreik & Mreije	24%	0%	17%	51%	8%
B/B Village	20%	7%	25%	38%	11%
Jnah	5%	0%	20%	50%	25%
Sabra Shatila & Ard Jallul	9%	4%	23%	54%	10%
Tareeq el Jedide	28%	8%	25%	32%	6%
•	9%	5%	18%	50%	18%
Naameh & Haret Naameh					
Aramoun	0%	0%	42%	50%	8%
Saida	13%	4%	15%	49%	19%
Mia Mia Camp	12%	4%	8%	52%	24%
Ain el Helweh Camp	10%	4%	13%	54%	20%
Taameer & Villat	6%	0%	20%	49%	25%
Old Saida Town	7%	3%	20%	47%	22%
Dallaa, Hay Zuhour	30%	7%	14%	28%	20%
Al Barrad	27%	0%	23%	45%	5%
Wadi Zeineh	13%	6%	22%	51%	7%
Tyre	5%	5%	12%	37%	41%
Rashidiyeh Camp	5%	3%	12%	34%	46%
Burj el Shemali Camp	7%	5%	12%	40%	36%
Buss Camp	4%	13%	13%	48%	22%
Chabriha	2%	12%	15%	20%	51%
Jal el Bahr	0%	4%	17%	50%	29%
Qasmiyeh	5%	3%	5%	5%	83%
Burj el Shemali surr., Masaken	4%	4%	9%	50%	34%
Bekaa	15%	4%	18%	51%	13%
Wavel Camp	14% 9%	6% 0%	22%	45% 66%	14% 13%
Bar Elias Jalala, Taalabaya and Saadnayel	19%	4%	13% 15%	49%	13%
Total	11%	5%	15%	46%	23%

The sector of employment is closely related to occupational status, indeed 98% of agricultural workers work in elementary occupations. Similarly 94% and 98% of those employed in industry and construction respectively work as craft and related trade workers or machine operators. Conversely 73% of those employed in education or health care are working in higher status occupations as professionals, senior officials and managers. 76% of government or NGO employees work as technician, associate professionals or clerks. The 'other services' category is more mixed, with 43% or workers occupied in crafts or machine operation and 31% as service and sales workers (see the Appendix 1 for a list of professions included in each category).

Most Palestinians work as craft and related trade workers or machine operators (46%), a quarter works in elementary occupations, while 15% work as service and sales workers, 11% as senior professionals and managers and 5% as associate professionals and clerks. As for Lebanese 16% work as craft and trade workers, 8% work in elementary occupations, 12% work as service and sales staff, 22% as professionals and mangers and 17% as associate professionals and clerks (LNHS 2007). Note that these categories are not entirely comparable between Lebanese and Palestinian, therefore these data should constitute a guideline.

Mirroring the previous sectoral analysis, it is unsurprising that Tyre is the region with the highest share (41%) of workers in low status or elementary occupations. The proportion of workers in elementary occupations exceeds the national average in all locations, camps and gatherings, surveyed in Tyre region, except of Al Buss Camp. Half of all workers in elementary occupations live in Tyre and a third are concentrated in Rashidiyeh and Burj el Shemali Camps. In Qasmiyeh 83% of workers work in elementary occupations and 51% do in Chabriha. Rashidiyeh Camp is the camp with the highest proportion of workers in elementary occupations (46%). Outside Tyre, NBC in the North, Shatila Camp and Jnah in CLA as well as Taameer and Villat outside Ain el Helweh Camp in Saida all have more than a quarter of workers in elementary occupations.

The North and Bekaa have the highest share (15%) of high status employment, namely professionals, senior officials and managers, while in Tyre region only 5% of workers fall into that category. Indeed, gatherings in the North (Zahriyeh 36%), CLA (Tareeq el Jedide 28%) and Saida (Dallaa, Hay Zuhour 30%) have the largest share of workers in high status employment, while Wavel Camp (14%) is the camp with the highest share of professionals.

As will be shown in chapters 3 and 4, occupation, more than employment itself, has a strong impact on poverty and people working in elementary occupations are more likely to belong to the working poor than those working in other professions.

1.5.1 Employment and Gender

A key element in explaining the low employment rate is the fact that few women work. Indeed only 13% of women between the ages of 15 and 65 are employed compared to 65% of men. Indeed, women make up only about 18% of the currently employed workforce.

Table 1-3: Employment by Gender

	Distribution of men	Distribution of women	Women headcount
Professionals, legislators, senior officials and managers	8%	15%	38%
Technicians and associate professionals, clerks	3%	11%	53%
Service workers and shop and market sales workers Craft and related trade workers; plant and machine operators	16%	24%	33%
and assemblers	49%	27%	15%
Elementary occupations	24%	22%	23%
Total	100%	100%	24%
Agriculture	9%	8%	23%
Industry	4%	1%	11%
Construction	21%	6%	9%
Education and Health Care	5%	14%	50%
Government and NGOh	2%	2%	29%
Other services	59%	68%	28%
Total	100%	100%	24%

If women work, they generally do in high status employment. Indeed, slightly more than a quarter of working women do so as professionals, senior officials and managers or technicians, associate professionals and clerks (see Table 1-3). While only a little more than 10% of men work in these occupational categories. Conversely three quarters of men work in crafts, as related trade workers or machine operators as well as in elementary occupations while only slightly more than a quarter of women do. However, due to the fact that more men work than women, most occupational sectors are dominated by men. Exceptions are technical, associate professional or clerical occupations, where more than half of all workers are women. This may be due to the fact that these occupational categories are composed of feminized professions such as secretaries, care workers or school assistants. In contrast, women make up as little as 15% in crafts, related trade and plant operating professions, probably because these involve manual, physically strenuous work.

Similarly certain sectors of employment are feminized. More than two thirds (68%) of women work in 'other services' and 14% in health care and education, compared to 59% and 5% of men respectively. Half of the workforce in health care and education is female. Conversely very few women work in industry and construction. Interestingly the share of men and women working in agriculture is very similar (men: 9%, women: 8%).

1.5.2 Linking employment and education

Those with better education are more likely to be employed. Indeed around two thirds of those 23 and 65 years old with a vocational or university degree are employed. Compared to less than 40% for those with educational levels of Brevet or lower or 44% for those in that age group that only hold the Baccalaureate (see Table 1-4 first column). This indicates that continued education increases chances for employment. Passing the Brevet and Baccalaureate respectively opens access to further education which increases employment opportunities. As will be discussed below Baccalaureate pass rates are already good,

improving Brevet pass rates and facilitating access to university and vocational schools are likely to enhance the employment prospects of Palestine refugees in Lebanon.

Employment rates for women who attended further education is also higher, half of women with a university degree work and 43% of those with a vocational degree do.

Table 1-4: Employment and Education Level

	Employment rate (23-65 years)	Professionals and associate professionals	Service workers sales workers	Craft and related trade workers;	Elementary occupations
Never at school	39%	7%	16%	45%	32%
Completed primary	40%	12%	16%	47%	26%
Brevet	38%	13%	23%	49%	16%
Baccalaureate	44%	35%	20%	34%	11%
Vocational degree	70%	36%	22%	27%	15%
University degree	63%	70%	8%	12%	9%

Employment, in particular occupational status, is closely linked to education (see Table 1-4 last 4 columns). Better education is significantly linked to higher status employment. Of those with a university degree, 70% work as professionals or associated professionals. Those with a Brevet or less work mainly in crafts and elementary occupations. Table 1-4 shows that though vocational training increases the chances of employment, university degrees lead to higher status employment, explaining the observed preference of Palestinian students of academic inclinations for university courses rather than vocational training courses. However, many professions an academic education leads to are barred for Palestinians.

1.5.1 Small Step towards the Right to Work

On August 17, 2010, after a lot of hesitation and heated debate between different Lebanese political parties, the Lebanese parliament voted to approve a law, passed by parliament. This law constitutes the lowest common denominator by which all political parties were essentially given a veto, (Lamb 2010).

The amended text of article 59 states:

"foreign workers/laborers have the same rights as Lebanese laborers upon being discharged from their work, based on the conditions of reciprocity policy; they have to obtain a work permit from the Ministry of Labor. Palestinian refugees, who are registered based on accords, at the Ministry of Interior Affairs and Municipalities (Directorate of Political and Refugees Affairs) are exempted from the condition of reciprocity and the work permit fees issued by the Ministry of Labor.

Article 59, paragraph 3 of Article 9 of the Lebanese Labor Law issued on 23 September, 1964.

The amended text further states:

"Palestinian refugee workers are exempt from the condition of reciprocity as stated in the Labor Law and Social Security Law, so as to benefit from the contributions of end of service indemnity conditions which Lebanese workers benefits from. Hereby, the Administration of the Social Security Fund should ascertain

a separate independent account for the contributions belonging to Palestinian refugees' workers, that does not bear the Treasury or the National Social Security Fund any financial obligation. Beneficiaries covered by the provisions of this law, do not benefit from the contributions of Sickness, Maternity and Family Allowances Funds".

(PHRO 2010)

It is important to note that, among Arab countries, only Lebanon treats Palestinian refugees as foreigners in terms of the right to work and to own property.

This law does not address the problem faced by Palestinian refugees: to be allowed to practice liberal professions, such as medicine, law or engineering. In fact the amended law constitutes an institutionalization of discrimination, barring the Palestinians to exercise more than 30 syndicated professions. 11 The restricted professions to which Palestinian refugees still have no access to are classified in two categories: first, those that are subject to the reciprocity clause (medical doctors, pharmacists, travel agents, news editors, hospital owners, insurance and re-insurance agents, topographers, engineers and architects, nurses, drug warehouse and medical laboratory workers, certified accountants, dentists, veterinarians, dental laboratory workers, physiotherapists and teachers at all school levels); second, those that are restricted to Lebanese citizens (professions in the law, journalists, technicians, owners of tourist companies, managers of publishing companies, hairdressers, professions in currency exchange, real estate agents, taxi drivers or driving instructors, publishers and printing presses). According to UNRWA and ILO assessments, this is unlikely to change in the near future. A pilot advocacy plan with the order of nurses is being proposed. The Lebanese order of nurses has indicated an interest to change the by-laws of its order since Palestinians nurses, due to their illegal status, undercut Lebanese nurses. If this is successful, it may be worth approaching orders of other professions facing similar unwelcome competition from illegally practicing Palestinians.

Concerning the inclusion of the Palestinian employees into the social security system, a special account from the National Social Security Fund (NSSF) will be set up to cover end-of-service indemnities, but no person under this law may benefit from family, illness and maternity allowances. It is noteworthy that the exclusion of health insurance and family support were requests from both the Lebanese government and the Palestinians.

The law so far is a legal reproduction of Minister of Labor Trad Hmadeh's Ministerial Decree (2005), which represents no *de facto* change to Palestine refugees, as evidenced by the fact that the number of work permits issued has hardly changed (Table 1-5 below). In fact, Palestinian refugees are only eligible to obtain a work permit if they can provide a valid work contract. The work permit issued by the Ministry of Labor is thus linked to a pre-existing work contract and expires with the end of the work contract for which the permit has been granted. In addition, work insurance is required (often paid by the employee rather than the employer). There has been a verbal commitment by the minister of labor to issue a decree allowing a fast track for Palestinian work permits, making them no longer conditional on an

¹¹ These professional associations, orders or syndicates required either Lebanese nationality or policy of reciprocity. This policy means that "stateless" Palestinians cannot be employed like other foreigners who belong to recognized states that can offer similar benefits to the Lebanese.

¹² For comparison, the total number of given work permits to the foreign employees is 145,684 (2009)

employers' contract. ILO is currently lobbying for these decrees to be implemented. An information campaign is also under way, aimed at Palestinian workers as well as their employers (Palestinian and Lebanese).

Table 1-5: Work Permits Delivered to Palestinians in Lebanon¹³

	2003	2004	2005	2006	2007	2008	2009
First time					28	1	32
Renewal				225	113	220	67
Total	245	245	278	225	141	221	99

Source: Lebanese Central Administration of Statistics www.cas.gov.lb.

There are two reasons why employers are not interested in officially employing Palestinians and issuing a contract making them eligible for a work permit. Firstly, the employer needs to advertise in three newspapers to satisfy the Lebanese Labor office that Lebanese candidates have competed with the foreigner. Secondly, they will pay social security contributions without the employee being entitled to receive social security services (except in end of service indemnities according to the new law).

After this new law, Palestinian employees will remain dependent on ministerial decrees which can be reversed or amended. Consequently, the legal framework regulating Palestinian refugees' access to the Lebanese labor market lacks long-term certainty and predictability. The new law will fail to produce the desired impact of legalizing Palestinian refugee's access to the Lebanese labor market.

It is virtually impossible to statistically assess the impact these restrictions have on Palestinian refugees, since, as shown above, most of the better educated Palestinians who may face restriction are in employment the alternatives to which are difficult to assess. If fewer labor restrictions improve the quality of employment Palestinians have access to, they may have some impact on living conditions. However, these impacts are difficult to isolate and quantify since Palestinian households face restriction in addition to those affecting labor.

1.5.2 Right to Own Property

Until 2001, non-Lebanese, including Palestinians, had the right to own property up to certain size¹⁴ (LPDC 2010). However, since 2001 Palestinian refugees cannot acquire property.

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¹³ For comparison, **145,684 work permits** were issued in 2009 for Arab and foreign workers in Lebanon, including 45,619 new permits and 100,065 renewed ones. The number of domestic workers is estimated at 114,731, forming 79% of foreign workers. According to estimates, worker who have permits (excluding the Syrian workers) form 50%-60% of Arab and foreign workers actually working in Lebanon.

¹⁴ This consists of a maximum of 3,000 square meters in Beirut or 5,000 square meters throughout the rest of the country, based on a number of laws (decree 15740 of 11 March 1964, law 59 of 1 September 1966 and decree 11614 of June 4, 1969).

Lebanese parliament adopted an amendment (296 of 20 March 2001) to the existing presidential decree 11614, preventing Palestinians refugees from owning real estate in Lebanon. The amendment, originally made to encourage foreign investment, excludes individuals who do not have a recognized nationality. The new law also prevents Palestinian refugees from bequeathing real estate, even if the property was acquired legally before 2001¹⁵. (LPDC 2010)

In contrast to the Lebanese case, Jordan allows unlimited real estate ownership to Palestine refugees, while in Syria property ownership is restricted to one apartment and one economic asset.

1.5.3 Construction Materials

There are no legal restrictions in place regarding the transportation of construction materials into Palestinian refugee camps in Lebanon. Restrictions, when they exist, function on an administrative basis and only apply to camps in the south of the country and to Nahr el-Bared. Camp dwellers have to apply for a permit, to be granted by the Army. However, in some camps, it seems that smuggling of construction material is rife.

1.5.4 Mobility

The Lebanese Army has declared the Nahr el Bared refugee camp and adjacent area as military zones following the incidents in 2007. Visitors without Lebanese nationality are asked to apply for permits with the Lebanese Army. Visitors without Lebanese or Palestinian nationality are asked to apply for permits with the Lebanese Army before entering Palestinian refugee camps in southern Lebanon (Al-Buss, Al-Rashidiye, Bourj al-Shemali, Ein El- Helwe, and Mieh-Mieh camp) through the LPDC and UNRWA. Palestinians, as well as other foreigners, need to apply for permits with the Lebanese Army to cross into the area monitored by UNIFIL in the South (LPDC, 2010: 39). With the exception of Ain el Helweh, all these camps can be informally accessed without a permit. However, knowledge of side entrances and a certain familiarity with camps is necessary.

¹⁵ In practice Palestinians resort to informal legal arrangements to purchase and register property. In order to obtain or bequeath property Palestinian refugees register real estate via a power of attorney, a written authorization through which the Palestinian refugee gives permission to an agent (a Lebanese citizen or any other foreigner to whom the 2001 restrictions do not apply) to acquire property on his behalf. Many Palestinians who acquired property prior to 2001 have not registered it in order to avoid paying the additional taxes that non-Lebanese citizens were subject to when they purchase property in the country. (LPDC, 2010: 29)

CHAPTER 2: Conceptual Framework and Methodology

2.1 Introduction

There are numerous surveys carried out concerning the living conditions of Palestine refugees in Lebanon. The work of the Norwegian research institute Fafo over the last 10 years is particularly worth noting. Fafo carried out living condition surveys among Palestinian refugees in 2001 and 2003 (see Tiltnes 2005; Ugland 2003). More recently, the institute conducted a labor force study of Palestinian refugees in Lebanon through the use of both quantitative and qualitative research methods (see Hanafi and Tiltnes, 2008 and Tiltnes, 2007). The present survey is unique in that it combines economic indicators of poverty and vulnerability with food insecurity indicators and public health and housing observations. In addition, the present questionnaire captures educational attainment and precarious employment conditions that better show labour market exclusion than the more usual concept of unemployment.

This chapter describes and justifies the methods used to gather information on the more than 2600 households that participated in this survey. The aim of this study is to guide UNRWA policy reform. For these reforms to be successful, they need to be perceived as fair by the wider Palestine refugee population and the evidence gathered to inform policy reforms must be perceived as comprehensive and representative.

2.2 CONCEPTUAL FRAMEWORK TO APPROACH QUESTIONS

The most frequently used concepts of poverty are money metric poverty lines, based on income and expenditure. However, money metric measures of poverty assume that the differences in individual welfare can be summarised by differences in income and expenditure (François Bourguignon 2003). In addition, questions concerning income and to a lesser extent expenditure are sensitive and respondents may misrepresent their income and expenditures. Indeed, if used for targeting, there is a strong incentive to give untruthful answers. In addition income and expenditure flows do not capture assets such as land or other capital investments, making asset rich households appear poorer than they are.

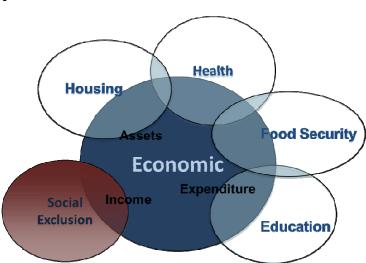
An alternative approach to measuring poverty is based on using observable income and expenditure correlates, such as physical assets, which can less easily be misrepresented. However, asset based indicators may be inaccurate since based on correlates rather than actual observations. Research indicates that although asset based indicators accurately identify people that have been living in poverty for a long time, it does not capture well short term changes in households' material circumstances, as may be caused by crises like sudden illness or unexpected shortfalls in income. Thus asset based indicators may identify poor households too late. In addition, assets are costly to replace and in the case of washing machines or refrigerators, fulfil vital functions that are labor saving and improve living conditions.

Following work by Sen (Sen, 1989) money metric and asset based approaches to poverty have been criticised for being one-dimensional and ignoring non-tangible assets that also directly impact household welfare such as transportation, basic education, health, access to water, sanitation and electricity. Specifically they do not adequately capture the conditions that support or prevent an individual from participating in social and economic life to the best of his or her capabilities. Hence a multi-dimensional approach to measuring poverty, that includes but is not limited to its economic dimension, has been

included. Adapting a framework proposed by Bourguignon (2006) we intend to measure poverty along two broad aspects, one pertaining to the households' endowments, that is to say education, health, availability nutrition as well as housing conditions and material wealth. The second aspect relates to the context, which conditions an individual's choices: that is to say exclusion or access to markets or public goods and services.

The previous chapter has addressed the exclusion of Palestine Refugees from Lebanese political and economic life. Social exclusion affects most Palestinian households to similar a degree. Hence, since this study targets Palestine Refugees as a whole we will use existing documents to explore their situation in Lebanon, rather than make social exclusion an explicit element of our data collection. The household endowments aspect is assessed along five dimensions: namely economic status, housing, health, food security and education. According to this framework, a poor Palestinian household is characterised by unemployment or precarious employment, bad housing conditions, poor health, food insecurity and few years of official schooling. A major criticism of these composite poverty indicators is that they tend to underestimate poverty when compared to money metric indicators. In our study we will use money metric poverty lines as a control to validate the accuracy of the combined indicator.





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¹⁶ This is not to say that all Palestine Refugees embody similar amounts of so called Social Capital, that is to say have equal access to employment, education, public office etc. As in all human societies, members of the elite or affluent social classes have privileged access to economic and educational opportunities, due to their connections and standing within society. These veiled social relations aim at restricting access to opportunity to those within a similar social network. However, the purpose of this study is to identify the poor among Palestine Refugees, rather than to reveal the mechanisms of social exclusion among Palestine Refugees.

2.3 THE QUESTIONNAIRE DESIGN

2.3.1 Proxy Respondents

Our key unit of analysis is the household. We used a structured questionnaire administered during face-to-face interviews with a proxy respondent from the household. The questionnaire structure followed the conceptual framework, with a section attributed to each endowment domain. That is to say, in addition to standard questions relating to the demography, education and employment status of household members, the questionnaire features sections on health, food, housing, household assets and expenditure.

Various drafts of the questionnaire were discussed with staff from the UNRWA Programme Support Office. Specifically, issues such as the prevalence of certain chronic or acute illnesses or the ins and outs of UNRWA health care services were discussed with a health management expert of the Health Department. Similarly, welfare programmes and the Social Hardship Cases Program were discussed with officials from the Relief and Social Services Department. In addition the survey project was presented to local staff from UNRWA area and camp offices. These conversations informed the final design of the questionnaire.

As for the choice of proxy respondent from the household, data collectors were trained to take responses from the person responsible for food preparation, presumably a senior female member of the household. This choice was motivated by survey results from the Tyre Mohafaza (Ghattas and Sahyoun, Forthcoming), which found that women answered food related questions more easily than men; men would often refer back to the women of the house to get answers. In the absence of a proxy respondent that fits this description, data collectors were instructed to gather information from any adult family member.

Our results show that, spouses of the head of household constituted more than half of proxy respondents (54 per cent), about a third (34 per cent) were the head of household, and 10 per cent children of the head of household, mainly daughters. In total, 82 per cent of proxy respondents were female. Conversations with data collectors indicated that respondents often chose to have the questionnaire administered in the presence of other family members; despite the fact that data collectors repeatedly asked if the respondent preferred to answer in private.

2.3.2 The Instrument

The basic structure of the instrument used in this study follows that of standard household questionnaires, such as used by MEASURE DHS (2003) and in Arabic translation in Lebanon (MEASURE DHS 2010) Khalidi, 2009).

Data collected on individuals living in the household include age, family status, relationship to the head of household, nationalities, educational attainment and, if currently enrolled, with which provider. Information was also collected on employment and employment status, if applicable, reasons for being out of work, regularity of work and payment as well as current occupation were taken down. The questionnaire addressed each household members' recent health history, in particular incidence and kind of disability, chronic, acute and symptoms of mental illness. With the exception of questions pertaining to

mental health and public service providers, all questions featured in the questionnaire have been validated internationally (MEASURE DHS 2010) as well as in Lebanon by Habib et al. (2010) and Khalidi (2009).

The household health section of the questionnaire aimed to capture basic health characteristics of the Palestinian refugee population in Lebanon. The survey also assessed the varying costs of primary, secondary and tertiary health care on a per household basis, as well as information on types of financial support to cover health care costs. Health expenditure information was collected per household on treatment or management of chronic and acute illnesses and disability.

In addtion, this section includes a variant of the General Health Questionnaire (Goldberg 1972), the five item the Mental Health Inventory (MIH5) (Veit & Ware 1983), to assess mental health. It assesses anxiety, depression, behavioural control and general distress (Stewart et al. 1988). The MIH-5 has been used and validated in Arabic. Another subjective health component of the questionnaire asked about self-reported general health status, which has been strongly correlated with actual health status (Jylha, 2009) and has been validated in Arabic. These last two questions were addressed solely to the proxy respondent participating in the survey.

The Food section of the present survey was designed to assess varying degrees of severity of household food insecurity and investigates perceptions of unacceptability, or un-sustainability of food supply in the household, a product of availability, access and utilisation of food. This section is modelled on the US food security survey module (Bickel et al. 2000) and the Yemen National Food Security Survey (Kabbani & Wehelie 2004). These direct measures of food security ask a set of questions that categorise responses based on degree of severity of food insecurity into (1) food secure, (2) vulnerable to food insecurity (3) mild food insecurity, (4) moderate food insecurity, (5) severe food insecurity. We have adapted the US and Yemeni questions to the context of Palestinian refugees living in Lebanon, and adapted questions regarding coping mechanisms based on the Food Security Assessment, West Bank and Gaza Strip (FAO, WFP, and UNRWA 2004). In addition, a 7-item household food frequency questionnaire was administered to add to the dimension of food quality and to assess the manifestations of food insecurity in the diet. Similar questions have been used in other food security assessments in Lebanon.

The housing section assesses housing quality and over-crowding as well as whether the household benefited from renovation or housing programs. Several indicators of housing quality were included, such as the kind of roof and wall construction materials. Respondents were also asked to report the presence of dampness or leaks and the type of fuel/appliances used to cook food in the home. A crowding index was calculated by dividing the number of people per household by the number of rooms. These questions were taken from existing UNRWA Shelter assessment forms (UNRWA-FECSD) and the UNRWA social study form

The asset, expenditure and income sections follow standard household questionnaires (DHS 2010, Habib et al. 2009, Lebanese Household Survey 2004). As is common practice, the most sensitive sections conclude the questionnaire. Detailed asset and expenditure items were compiled using previous surveys undertaken in Palestine refugee camps (UNRWA RSSD) as well as in focus groups with UNRWA social workers.

The first draft of the questionnaire was translated into colloquial Arabic. All subsequent amendments were made directly in Arabic. We chose colloquial rather than Modern Standard Arabic (MSA) since we felt that Modern Standard Arabic would sound too formal. However, we underestimated respondent and data collectors' facility to switch registers. In fact data collectors complained that colloquial Arabic was unfamiliar and difficult to read. Due to time constraints we were not able to transform the questionnaire from colloquial to Modern Standard Arabic. However, certain sensitive questions were formulated in MSA, since it has a wider variety of tone and sounds more respectful. Future surveys should use Modern Standard Arabic. The final version was re-translate into English for communication with UNRWA and record keeping.

All questions were discussed with informants from the Palestinian community and modified based on feedback received. The majority of the modifications we made were in sentence structure or vocabulary clarifications. For instance, in the food section, for an indicator of extreme food insecurity, we combined 'because there was not enough food' with 'or enough money to buy food' to clarify that the questions referred not only to running out of food which can occur in a busy household, but to running out of food and not having enough money to buy more food.

2.4 SAMPLING OF CLUSTERS

The survey covered 2627 households and was carried out in all 12 camps and in 20 gatherings in the five administrative areas: the North, Central Lebanon Area (CLA), Saida, Tyre and the Bekaa. We adopted a multi-stage sampling of clusters approach. Within clusters households were sampled randomly according to a protocol specified below.

All camps in each area were included in the survey. As for gatherings, we attempted to select as few distinct gatherings as possible while sampling from as many Palestinians living in gatherings as possible. Selecting few distinct gathering is motivated by logistical considerations as well as the fact that we sought to keep the number of households interviewed per cluster at 10 households or above.

UNRWA provided us with a list of gatherings for each area including estimates of households resident in each gathering. While the Bekaa and the North had with under 20 a comparatively small number of gatherings, the remaining areas featured in excess of 40 gatherings. The selection of gatherings in CLA, Saida and Tyre included therefore an additional stage. For the Bekaa and the North gatherings were selected from the list provided by UNRWA, the likelihood of a gathering being selected was proportional to the gathering's population. We sampled without replacement. Selection of gatherings continued until the sum of the population of selected gatherings is larger or equal than half the total population living in gatherings in that area.

For CLA, Saida and Tyre and additional stage was added to insure that cluster sizes would not drop below 10 households. UNRWA had grouped gatherings by location, such as the 'Coastal Road' for gatherings along the Coastal Road in the Tyre area or 'Saida Town' for gatherings within Sidon. These general locations were again listed and locations chosen with a probability proportional to their populations. Again selection continued until the sum of population in chosen locations covered more than half of total gathering population. Within the chosen locations, gatherings were selected according to the same protocol. In each case between three and seven gatherings were selected per area.

This sample itself is more than large enough to give estimates with a 95 per cent confidence interval. However, clustered designs are subject to larger standard errors, since clustering underestimates true population variance. This is due to the fact that another household sampled within a cluster will generate less new information than observations from a randomly selected household. There will be stronger or weaker intra-cluster correlation, depending on the variable, between households of the same cluster. Clustering underestimates true population variance. Sample size increases due to these Design Effects that arise within clusters.

Palestine refugees are not equally distributed across the five regions. Fewest Palestinians live in the Bekaa. We disproportionately over-sample within the Bekaa since the sample size proportionate to population would be too small to produce separate robust estimates. This implies that the survey is not self-weighting, but that a questionnaire filled in the Bekaa represents fewer people than one filled in Saida. We subsequently weigh down observations from the Bekaa to represent their correct population proportion, while increasing the weight of observation from the remaining four areas.

Stratification, clustering, and weighting all affect the standard error when compared to simple random sampling. The difference in precision between a simple random sample and our more complex, stratified, clustered and weighted design is called design effect, it varies between variables in the survey and may have a more or less significant effect depending on the variable (Sturgis 2004).

Within the selected camps and gatherings households were selected randomly according to a specified algorithm data collectors had been trained in. Table 2-1 summarises sample size and response rate for the surveyed clusters.

Table 2-1: Sample Size and Response Rate for Surveyed Clusters

	нн	Intended Sample Size	Actual sample	Non response	Not applicable	Effective Sample	Response rate
		Beka	aa				
Wavel	955	110	113	2	0	111	98.2
Bar Elias	285	50	54	0	4	54	100
Jalala, Taalabaya and Saadnayel	520	90	95	0	5	95	100
Total Gathering	805	140	149	0	9	149	100
		NL/	Ä				
Beddawi	4085	200	191	1	0	190	99.5
Nahr el Bared (surr.)	3352	164	164	0	0	164	100
Total Camp	7437	364	355	1	0	354	99.7
Zahriyeh	812	66	90	0	28	90	100
El Mina		25	34	0	8	34	100
Jabal El Baddawi and Beddawi Village	1170	95	122	0	0	122	100
Total Gathering	1982	186	246	0	36	246	100
		CLA	4				
Debayeh	493	20	21	1	1	20	95.2
Mar Elias	325	13	13	0	0	13	100
Shatila	1140	46	47	1	0	46	97.9
Burj el Barajneh	3600	145	150	3	1	147	98
Total Camp	5558	224	231	5	2	226	97.8
Haret Hureik and Mreije	717	72	75	2	1	73	97.3
Burj Barajneh Village	560	56	62	3	1	59	95.2
Jnah	204	20	20	0	0	20	100
Sabra and Chatila and Ard Jallul	1152	64	65	0	3	65	100
Tareeq Jdeedeh	1421	78	99	2	16	97	98
Aramoun	145	12	10	0	0	10	100
Naameh and Haret Naameh	286	24	31	3	6	28	90.3
Total Gathering	4485	526	362	10	27	352	97.3
		Said	la				
Mia Mia	625	24	24	0	0	24	100
E/Helweh	8737	333	339	7	2	332	97.9
Total Camp	9362	357	363	7	2	356	99
Taameer (Lower), Taameer (Upper) and Villat	371	46	43	0	0	43	100
Old Town	345	43	65	3	15	62	95.4
Dalla'a and Hay Zuhhour, Dakerman and Haj Hafez and Hay Njasa	704	89	80	0	1	80	100
Al Barrad	118	15	15	0	0	15	100
Wadi Zeineh	485	50	52	2	1	50	96.2
Total Gathering	2023	243	255	5	17	250	98.3
		Sou	r				
Rashidieh	6869	250	250	1	0	249	99.6
B/Shemali	3047	111	111	1	0	110	99.1
Buss	1800	66	67	0	0	67	100

	НН	Intended Sample Size	Actual sample	Non response	Not applicable	Effective Sample	Response rate
Total Camp	11716	427	428	2	0	426	99.6
Chabriha and Jal el Bahr	499	42	43	0	0	43	100
Qasmiyeh	319	27	26	0	0	26	100
Burj Shamali surr., Masaken, Machouk	556	53	55	1	0	54	98.2
Total Gathering	1374	123	124	1	0	123	99.4
						•	
Total Sample	45697	2500	2626	33	93	2593	98.7

2.5 ENUMERATION AND DATA ENTRY

Data collection took place simultaneously in all five areas. Questionnaires were administered by UNRWA social workers and students from Sibline vocational school. Data collectors were trained by AUB in interview techniques. To insure data quality and consistency, filled questionnaires were reviewed on site by specially trained supervisor selected from among the social workers. Questionnaires were reviewed for a second time by field coordinators, each of whom coordinated data collection in the South, composed of Saida and Tyre, North, CLA and the Bekaa. Filled questionnaires were transferred to AUB for data entry. The data was analysed using Stata10.

Prior to data collection, the research design was approved by the Institutional Review Board of the American University of Beirut.

CHAPTER 3: Poverty Profile of Palestine Refugees in Lebanon

3.1 OVERALL CHARACTERISTICS OF THE PALESTINE REFUGEE POPULATION IN 2010

At present there are in excess of 425,640 Palestinian refugees registered with UNRWA in Lebanon¹⁷. However, according to our survey figures, it is estimated that only between 260,000 and 280,000 are residents in the country, with a margin of error of ±5%. 62% of refugees live in the 12 camps across Lebanon, and the remaining 38% live in gatherings mostly in the vicinity of these camps. Resident refugees are mostly concentrated in the South (55% in Saida and Tyre), then in the Central Lebanon Area (22%), followed by the North (19%) and the Bekaa (4%). Some refugees were "naturalized" and have been granted Lebanese citizenship¹⁸. Some 200,000 Palestinian refugees have left Lebanon, many to Europe, particularly the Scandinavian countries and Germany (Dorai 2003), especially after the 1982 Israeli invasion and the "War of the Camps," fleeing the conflict but also rampant social exclusion in more recent years.

Based on the household survey results, the demographic characteristics of the resident refugee population in Lebanon could be summarized as follows: 53% of refugees are females; the average age is 30.3, with 50% of the population below 25 years of age. The average household size is 4.5 members, with the median refugee household having 4 adults (more than 15 years of age) and 1 child (under 15). 49% of refugees above 18 years of age are married, 34% are single and 8% are widowed. 10% of refugees aged 15 or above never attended school. 7% of resident refugees hold another nationality, mostly Lebanese or from another Arab country, and 22% of refugees have a member of their immediate family who emigrated abroad.

3.2 DEFINITION OF POVERTY CONCEPTS USED

3.2.1 Money-metric Poverty and the Poverty Line

Money-metric (or income-based) poverty is mainly measured through the design of poverty lines or thresholds that refer to a certain minimum level of income or consumption required for the satisfaction of certain basic needs. This type of poverty measurement uses information gathered from the household consumption and expenditure surveys to construct a welfare indicator for the household, which is benchmarked against the poverty line to estimate the incidence of poverty among refugees (El Laithy et al. 2008).

Welfare Indicator 3.2.1.1

Consumption expenditure is used as the welfare indicator in the estimation of the poverty line and in making poverty assessments. It includes the consumption expenditure of households as reported in the

¹⁷ http://www.un.org/unrwa/publications/index.html (figures as of Jan. 2010).

¹⁸ There were supposedly at least 25,000 Palestinians, the majority Christian, among those who received Lebanese citizenship in 1994. S. Haddad, "Sectarian Attitudes as a Function of the Palestinian Presence in Lebanon," Arab Studies Quarterly 22 (2000), pp.81-100..

survey, adjusted to a monthly US\$ aggregate. Consumption is preferred to income as welfare aggregate mainly because income is more difficult to measure, especially among persons who operate their own business, and because respondents may be more willing to reveal their consumption patterns rather than their income. As the majority of refugees inside camps do not pay rent for the houses they live in, a rental value for these houses was imputed for the entire sample based on a hedonic regression on the sample of households who paid rent¹⁹.

3.2.1.2 Poverty Line

We have adopted 2 poverty lines: the first one is the extreme poverty line, set at 2.17 US\$/person/day, equivalent to 66 US\$/person/month (monthly equals daily times 30.43). The extreme poverty line reflects the cost of basic food needs. The other threshold is the poverty line, set at 6 US\$/person/day, or 182.6 US\$/person/month, which reflects the cost of minimal food and non-food livelihood requirements²⁰. These lines were computed based on UNRWA's SSNP abject and absolute poverty lines for 2008 (respectively 1.92 and 5.3 US\$/person/day)²¹, which in turn are based on the inflation adjusted measures of the Lebanese household survey of 2004 (Lebanese Republic 2004). In the present report, the 2008 SSN lines have been adjusted upwards to control for inflation between 2008 and 2010 (about 13% cumulative increase in prices), which would make the poverty lines at 2.17\$/day (abject) and 6\$/day (absolute).

¹⁹ Our welfare aggregate does not include a "rental equivalent" for durables, as we do not have information on the current prices, age and condition of durable goods owned by households. Moreover, the imputed expenditure value of owned cars was not included in the expenditure aggregate, as only 10% of refugee households reported owning a car. The household consumption expenditure was adjusted to include equivalence scales when converting to per capita consumption. The following formula was used:

$$AE = (\alpha C + A + \beta E)^{\theta}$$

where C is the number of children, A – number of adults, and E - number of elderly in the household. Then adjusted consumption per equivalent adult would be

$$X^* = \frac{X}{(\alpha C + A + \beta E)^{\theta}} \frac{(\alpha C_0 + A_0 + \beta E_0)^{\theta}}{\alpha C_0 + A_0 + \beta E_0}$$
 (normalized by the reference household)

For the reference levels we took values for a "typical refugee household" containing 1 child, 4 adults and 0 elderly. We chose the following values for our parameters: $\alpha = 0.9$, $\beta = 1.0$, and $\theta = 0.85$.

²⁰ This specification follows the common practice of defining poverty lines (Ravallion 2004). This approach identifies the cost of basic nutritional needs, taking into account different age-sex composition, household size, and prevailing prices in each region. The nutritional needs are specified in line with minimum caloric intake, using tables from the World Health Organization. These reflect different age groups, gender, and whether the individual lives in a rural or urban area. The cost of caloric intake is calculated for different regions on the basis of the consumption patterns of the population. Given individuals' specific caloric needs, and region-specific caloric costs, the cost of meeting the nutritional needs is calculated for each household. The cost of non-nutritional needs is calculated on the basis of the non-food share in household expenditure for those whose total expenditure is equal to merely the cost of nutritional basic needs.

²¹ Mentioned on p.14 of the report Assistance to the most vulnerable: State of play and the way forward, UNRWA-Lebanon, September 2009 (UNRWA 2009)

3.2.1.3 Poverty Measures

There are three aspects to measuring poverty: incidence, depth, and severity, and these are captured by three standard aggregate poverty measures (Foster et al. 1984). The incidence of poverty is measured by the headcount index (P0). It estimates the percentage of the population that is poor.

The depth of poverty is measured by the poverty-gap index (P1), defined by the mean distance below the poverty line as a proportion of that line, where the mean is formed over the entire population, counting the non-poor as having zero poverty gap. Thus the sum of poverty gaps aggregated across all individuals reflects the minimum amount of consumption that needs to be transferred to pull all the poor up to the poverty line.

The severity-of-poverty index (P2) represents the mean of the squared proportionate poverty gaps. Unlike the headcount ratio and the poverty-gap ratio, it takes into account inequality among the poor. The severity-of-poverty index is sensitive to the distribution of consumption among the poor, in that heavier weights are given to those whose consumption falls far below the poverty line. This index is thus more sensitive to changes in welfare of the ultra-poor (those with extremely low consumption below the poverty line) than it is to those just below the poverty line.

The poverty measures are defined as follows:

$$P0 = \frac{q}{n} \qquad P1 = \frac{1}{n} \sum_{i \in Q} \frac{\left(z - y_i\right)^2}{z} \qquad P2 = \frac{1}{n} \sum_{i \in Q} \frac{\left(z - y_i\right)^2}{z^2}$$

where *n* represents the total population and *q* represents the number of individual with consumption y_i less than the poverty line z.

3.2.2 Multi-dimensional Poverty and the Deprivation Index

The previous definition of poverty as income focuses on the flow of material goods and services. An alternative is to examine the stock of resources a household controls. This may be measured in terms of physical or monetary assets (land, assets, cash), or in terms of social capital (social contacts, networks, reciprocal relationships, community membership). Input measures of poverty refer to income poverty, where they look at the input to an individual's capability generated from their level of income. In fact, recent poverty studies suggest that income is not the sole determinant of well-being. There are other non-material factors and values which when lacking, cause poverty and deprivation. The conceptual and philosophical ideas behind this multi-dimensional approach to human development were first introduced by Amartya Sen whose writings on human capabilities helped in framing the current definition and dynamics of human deprivation and development (Sen 1989). Sen's contributions presented the idea that human development is not merely related to increasing the level of income; in fact human development is more concerned with the improvement of people's ability to function as active members of society (Fukuda-Parr 2003).

Based on this, indicators such as the Human Development Index (HDI), and the Human Poverty Index (HPI) were developed to measure people's ability to lead decent lives and be able to achieve their goals. Sen suggests that this required people to be to be healthy, to have a certain level of education, and to be

able to participate in community life. Consequently, the HPI was designed to measure to what extent these criteria are achieved in both the developing and developed world (Fukuda-Parr 2003).

Deprivation is closely related to poverty. Absolute deprivation stems from Sen's capabilities approach, where absolutely deprived individuals lack the basic capabilities essential for their existence. On the other hand, relative deprivation is defined within a social context where individuals are unable to live according to the normal standards of their society and enjoy the commodities and services which the average members of society enjoy (Duclos & Gregoire 2003).

In this chapter, we begin by studying the money-metric poverty incidence for Palestinian refugees in Lebanon, and subsequently devise a multi-dimensional poverty assessment framework inspired by Sen's conceptualization. Both of these measures will be used to evaluate the level of deprivation among refugees.

3.3 POVERTY INCIDENCE AMONG PALESTINE REFUGEES

3.3.1 Overall Incidence

66.4% of Palestine refugees in Lebanon were poor in 2010, and 6.6% were extremely poor (Table 3-1). This indicates that almost 160,000 refugees could not meet their basic food and non-food needs, and 16,000 refugees found to be extremely poor did not meet their essential food requirements. Poverty in its two forms (general and extreme) was higher for refugees living inside the camps than those in gatherings: the poverty headcount reached 73.2% in the camps, compared to 55% in gatherings, while the extreme poverty rate within camps was almost double that of surrounding areas (7.9% compared to 4.2%).

Table 3-1: Overall Poverty

	Poverty Headcount Rate (P0)	Poverty Gap (P1)	Squared Poverty Gap (P2)
Poverty line = 182.6\$/person/month			
Camps	73.2	27.8	13.5
Gatherings	55.0	17.7	7.9
Total	66.4	24.1	11.4
Extreme Poverty line = 66\$/person/month			
Camps	7.9	1.6	0.6
Gatherings	4.2	1.0	0.4
Total	6.6	1.4	0.5

While overall poverty is found to be relatively deep, especially inside the camps (as indicated by large figures for the Poverty Gap (P1) ratio), extreme poverty seems to be shallow. Moreover, severity (as measured by the Squared Poverty Gap P2) is higher for poverty than extreme poverty, with camps experiencing more severe poverty rates.

High poverty rates among Palestine refugees is a reflection of their low income overall. Taking consumption expenditure (which includes imputed rents, as per the above description) as a proxy for income, we find that each refugee spends on average 170 US\$ per month (almost 5.6 US\$/day), which is quite low. A typical refugee family would spend on average 780 US\$/month. Consumption expenditure is lower in camps than in gatherings (Table 3-2), and is the lowest in the Tyre region and highest in the Central Lebanon Area. Expenditure of the poorest quintile (poorest 20% of the refugee population) is around 72\$/person/month, and the richest 20% spend about 325\$/person/month (Table 3-2). The fact that consumption expenditure is low for most refugees translates into high poverty rates.

Table 3-2: Mean Monthly Expenditure for Different Groups

	US\$/person
Camps	151.6
Gatherings	201.2
UNRWA Regions	
North	170.8
Central Lebanon Area	202.2
Saida	173.4
Tyre	140.5
Bekaa	186.0
Expenditure Quintiles	
Lowest quintile	72.3
2	111.4
3	147.0
4	194.6
Highest quintile	324.8
Total	170.1

A visual examination of the distribution of per capita consumption expenditure shows that most refugees spend around the overall poverty line (in red in Figure 3-1), and that consumption expenditure of refugees below the poverty line has large variation, rendering the poor quite vulnerable to economic shocks. Note also that all refugees spend below 600\$/person/month, indicating the absence of any wealth concentration among them.

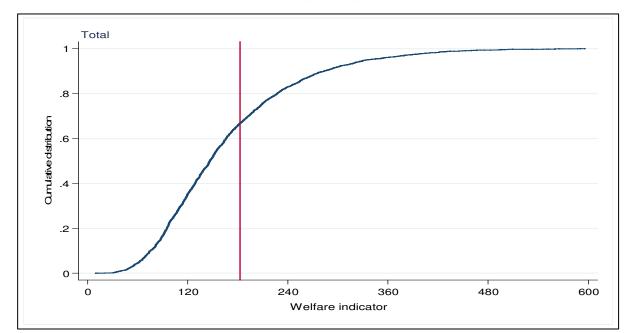


Figure 3-1: Cumulative Distribution of Per Capita Expenditure

3.3.2 Geographic Differences

Poverty rates among Palestine refugees vary considerably among geographic locations in Lebanon. Poverty incidence is highest in Tyre (79%) and lowest in Central Lebanon Area (53%), with the Tyre region alone accounting for more than 34% of all the poor (Table 3-3). Extreme poverty is significantly higher in Saida and Tyre than in other regions (reaching almost 10%), and Saida and Tyre together are hosts to more than 81% of all extremely poor refugees.

Table 3-3: Poverty by Geographic Regions

	Poverty Headcount Rate	Distribution of the Poor	Distribution of Population
Poverty			•
North	65.1	18.7	19.1
Central Lebanon Area	53.1	17.1	21.4
Saida	65.2	26.6	27.1
Tyre	79.2	34.2	28.7
Bekaa	58.6	3.3	3.8
Total	66.4	100.0	100.0
Extreme Poverty			
North	3.5	10.3	19.1
Central Lebanon Area	1.6	5.3	21.4
Saida	9.8	40.6	27.1
Tyre	9.5	41.3	28.7
Bekaa	4.4	2.5	3.8
Total	6.6	100.0	100.0

3.3.3 Comparison of Poverty Incidence between the Palestinian and Lebanese Population

Palestine refugees in Lebanon suffer from a significant difference in livelihoods when compared to Lebanese nationals. This is evidenced by the large differences in poverty rates among the two groups. Poverty incidence among Palestine refugees is 89% higher than that of the Lebanese population (66.4% compared to a Lebanese poverty headcount rate of 35.1% in 2010²²). Extreme poverty is also much higher among refugees, who are 4 times more likely to be extremely poor then their Lebanese counterparts (Table 3-4). Poverty among refugees is also significantly higher than that among Lebanese in all geographic areas, except the North, which was the poorest Lebanese region in 2010.

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²² The Lebanese poverty headcount rate is computed by relying on the Multi-Purpose Household Survey Data of Lebanese Households (2004/2005), using the same poverty lines as those applied for refugees, and adjusting consumption expenditure in 2005 to update it to a 2010 welfare level. This is done by applying the real growth rate of aggregate household consumption expenditures between 2005 and 2010 taken from Lebanon's national accounts, evaluated at 13% over this period.

Table 3-4: Comparison of Poverty Rates

	Palestine Refugees	Lebanese Population	Difference
Poverty			
North	65.1	69.5	-6%
Central Lebanon Area	53.1	19.9	167%
Saida	65.2	56	16%
Tyre	79.2	46.1	72%
Bekaa	58.6	36.9	59%
Total	66.4	35.1	89%
Extreme Poverty			
North	3.5	7.7	-55%
Central Lebanon Area	1.6	0.6	167%
Saida	9.8	1.4	600%
Tyre	9.5	1.4	579%
Bekaa	4.4	0.9	389%
Total	6.6	1.7	288%

These large differences in poverty rates are a reflection of the social exclusion that Palestine refugees are experiencing in Lebanon, which renders their economic activity more constrained when compared to the rest of the resident population in Lebanon. Palestine refugees have a lower margin of action to cope with their poor livelihoods, as exclusion from the labor and housing markets is imposing a heavy burden on them. As will be discussed below, employment, in particular decent employment, is key to poverty alleviation. Furthermore, access to housing not only improves living conditions, but also facilitates access to finance as real estate assets can be used as collateral. Real estate is also for intergenerational wealth transfer.

3.4 MAJOR CHARACTERISTICS OF POVERTY AMONG REFUGEES

3.4.1 Age/Gender Distribution

Poverty in its two forms (general and extreme) affects young refugees more than other age groups (Table 3-5). 70% of children and adolescents (6-19) live in poverty, and 9% live in extreme poverty; rates that are much higher than poverty incidence ones for the overall population. This is due to two factors: 1) the Palestine refugee population is a young population, so the risk that young refugees fall into poverty is higher; and 2) youth have a more difficult time securing their livelihoods, and often poor families would have a larger number of young people.

Table 3-5: Poverty by Age Groups

	Poverty Headcount Rate	Distribution of the Poor	Distribution of Population	
Poverty				
Age				
0-5	67.4	8.9	8.7	
6-14	71.4	18.9	17.6	
15-19	72.9	12.9	11.7	
20-24	68.8	11.1	10.7	
25-29	64.5	6.5	6.7	
30-34	62.0	5.7	6.1	
35-39	69.4	6.4	6.1	
40-44	68.7	7.3	7.1	
45-49	67.3	6.2	6.1	
50-54	62.1	4.3	4.6	
55-59	58.2	2.7	3.1	
60-64	56.0	2.9	3.4	
65+	51.6	6.3	8.1	
Total	66.4	100.0	100.0	
Extreme Poverty				
Age				
0-5	4.0	5.4	8.7	
6-14	6.6	17.9	17.6	
15-19	9.0	16.2	11.7	
20-24	8.0	13.2	10.7	
25-29	6.4	6.6	6.7	
30-34	4.9	4.6	6.1	
35-39	6.2	5.8	6.1	
40-44	7.3	7.9	7.1	
45-49	7.2	6.7	6.1	
50-54	5.4	3.8	4.6	
55-59	5.6	2.6	3.1	
60-64	5.7	3.0	3.4	
65+	5.3	6.6	8.1	
Total	6.6	100.0	100.0	

Figure 3-2 compiles an age pyramid which includes a comparison of the total and poor population for each age/gender group. Note that poverty is not differentiated on a gender basis, but seems to affect more the younger than the old generation.

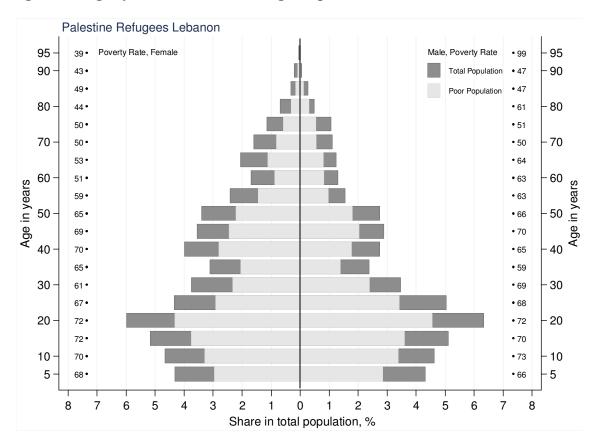


Figure 3-2: Age Pyramid of Palestine Refugee Population in Lebanon

3.4.2 Demographic Composition of Households and Poverty

Overall poverty, as is the case in most countries, increases with the number of children and the family size (Table 3-6). However, extreme poverty decreases with the number of children in the family. This is due to the contribution of young family members to the livelihoods of the poor family, often through child labor.

Table 3-6: Poverty by Demographic Composition

	Poverty Headcount Rate	Distribution of the Poor	Distribution of Population	
Poverty				
no children	63.7	57.9	60.3	
1	69.7	25.0	23.8	
2	71.6	13.1	12.2	
3 or more children	71.7	4.0	3.7	
Household size				
1	28.4	0.7	1.6	
2	38.3	4.1	7.1	
3	46.3	5.9	8.4	
4	55.8	11.8	14.1	
5	68.4	17.9	17.4	
6	72.4	23.0	21.1	
7 or more	80.1	36.7	30.4	
Total	66.4	100.0	100.0	
Extreme Poverty				
no children	7.5	69.0	60.3	
1	6.0	21.6	23.8	
2	4.6	8.6	12.2	
3 or more children	1.3	0.8	3.7	
Household size				
1	2.8	0.7	1.6	
2	1.1	1.2	7.1	
3	3.7	4.7	8.4	
4	3.7	7.9	14.1	
5	5.2	13.6	17.4	
6	7.0	22.6	21.1	
7 or more	10.6	49.3	30.4	
Total	6.6	100.0	100.0	

Poverty is higher for individuals living within male-headed households, while extreme poverty is higher for female headed-ones (Table 3-7). Although most refugee households (85%) have a male head, it seems that female household heads would fare better in reducing the overall poverty situation of their families, but not when faced with extreme poverty. The survey data reveals that female-headed households have a much higher likelihood of having immediate emigrant relatives than male-headed ones. These relatives send out remittances which improve the livelihoods of the recipient households, more so for female headed ones. However, this does not seem to work for extremely poor female-headed households, who

experience a higher risk of falling into extreme poverty. This is due to the fact that households in extreme poverty have a larger family size than other types of households, thus increasing their poverty risk.

Table 3-7: Poverty by Household Head's Gender

	Poverty Headcount Rate	Headcount of the Poor		
Poverty				
Male	67.4	86.4	85.3	
Female	61.7	13.6	14.7	
Total	66.4	100.0	100.0	
Extreme Poverty				
Male	6.3	81.2	85.3	
Female	8.5	18.8	14.7	
Total	6.6	100.0	100.0	

3.4.3 Impact of Disability on Poverty

Poverty in its two forms is higher when the household head is disabled (Table 3-8). What is more worrying is that all households that have a disabled household head (9% of the refugee population) are classified as extremely poor, and this needs an urgent attention as disability acts as a further hindrance to the socio-economic inclusion of refugees in the local economy.

Table 3-8: Poverty by Disability Status of the Household Head

	Poverty Headcount Rate	Distribution of the Poor	Distribution of Population
Poverty			
Not Disabled Disabled	65.9 72.6	90.1 9.9	90.9 9.1
Total	66.4	100.0	100.0
Extreme Poverty			
Not Disabled	6.5	89.5	90.9
Disabled	7.6	10.5	9.1
Total	6.6	100.0	100.0

3.4.4 Education and Poverty

Education is another important determinant of poverty among refugees, as is the case in other communities globally. The poverty headcount rate is significantly higher when the household head has low education (primary and below), reaching 73% for overall poverty and 8.6% for extreme poverty (Table 3-9). Poverty incidence drops to 60.5% when the household head has an above primary educational attainment, and extreme poverty is almost divided by two. This underscores the importance of educational achievement and human capital investments in lifting refugees out of poverty.

Table 3-9: Poverty by Household Head's Education Level

	Poverty Headcount Rate	Distribution of the Poor	Distribution of Population
Poverty			
Primary and below	73.0	51.7	47.0
Above primary	60.5	48.3	53.0
Total	66.4	100.0	100.0
Extreme Poverty			
Primary and below	8.6	61.5	47.0
Above primary	4.8	38.5	53.0
Total	6.6	100.0	100.0

Given the importance of educational investments in lifting refugees out of poverty, it is worth examining the current characteristics of the education sector for refugees in the country.

3.4.4.1 Enrolment Rates

Enrolment rates were estimated for elementary, preparatory and secondary schools. The elementary (primary) school age bracket was taken to be between 7 and 12 years, the preparatory school age bracket between 13 and 15 years and the secondary school age bracket those aged between 16 and 18 years. In general girls' enrolment rates are higher than that of boys.

Table 3-10: Elementary School Enrolment Rates for 2009-2010

Enrolled	North	Central Area	Saida	Tyre	Bekaa	Total
Total	96.13%	95.59%	93.54%	93.71%	97.94%	94.72%
Boys	94.31%	94.50%	92.42%	90.16%	96.49%	92.81%
Girls	97.73%	96.78%	94.54%	97.30%	100%	96.62%

At elementary school level 95% of children aged 7-12 years attend school. The highest enrolment rates are in the Bekaa area with 98% of elementary school aged children attending school. As expected in most developing communities where older children tend to drop out more than younger ones, in preparatory (middle) school, enrolment rates drop. The Bekaa still has the highest enrolment rates and Tyre has the lowest (Table 3-10). Interestingly only two thirds of boys in the relevant age group in Tyre are enrolled in elementary school, while 92% of girls between 13 and 15 years old go to school in Tyre.

Nearly half of youths out of school live in Ain el Helweh (13%), Rashidieyeh (13%) and gatherings in Saida (12%) and Tyre (11%). The weight of these areas is due to their large populations. Moreover, a higher proportion of children from extreme poor families are out of school (16%) than children from non-extreme poor families (7%). Children of extreme poor families that are not in school are concentrated in Saida and Tyre.

Table 3-11: Preparatory School Enrolment Rates for 2009-2010

Enrolled	North	Central Area	Saida	Tyre	Bekaa	Total
Total	82.64%	87.80%	82.93%	80.45%	88.94%	83.31%
Boys	78.67%	82.28%	78.36%	67.06%	86.68%	76.09%
Girls	87.89%	92.76%	86.45%	92.24%	91.75%	89.96%

Secondary school has the lowest enrolment rates (Table 3-12). We expect that many students drop out before taking Brevet, the Lebanese government exam taken on completion of middle school and enables students to enter secondary school.

Table 3-12: Secondary School Enrolment Rates for 2009-2010

Enrolled	North	Central Area	Saida	Tyre	Bekaa	Total
Total	57.92%	51.06%	51.46%	44.19%	70.08%	51.09%
Boys	53.95%	48.08%	43.95%	31.53%	60.73%	42.92%
Girls	60.90%	53.77%	58.57%	60.53%	77.73%	59.23%

8% of those between 7 and 15 years old were not at school in 2010, they are on average 13 years old. However, among those aged between 7 and 18, 19 per cent are not in school. Approximately 39% of 16 year olds did not attend school in 2009-2010. This is particularly alarming, since our findings show that a household is less likely to be food insecure if the household head has completed Brevet, and that household heads with higher education levels tend to have higher status jobs. High status employment is linked to lower poverty.

3.4.4.2 School Achievement

Two thirds of Palestinians above the age of 15 do not have Brevet, compared to 50% of the Lebanese for the same age group. 10% of them never went to school, it is noteworthy though that the average age of these is 60.

Comparing Palestinian educational attainment data to those Lebanese, 29% of Lebanese completed primary education compared to 40% of Palestinians, 26% of Lebanese completed intermediary education compared to 12% of Palestinians, 13% of Lebanese completed secondary school compared to 5% of Palestinians. 9 of Lebanese have a university degree compared to 5% of Palestinians, this applies to all residents above three years old and not at school (LNHS 2007)

In terms of educational achievements again, the Tyre region performs worse than others in Lebanon.

Table 3-13: Highest Education Achievement Levels

						Total
	North	CLA	Saida	Tyre	Bekaa	Lebanon
never went	7.6%	11.1%	9.5%	12.3%	8.2%	10.2%
elementary w/o degree	22.4%	26.9%	22.0%	19.3%	21.6%	22.4%
middle w/o degree	33.4%	28.7%	32.3%	39.9%	36.0%	33.9%
Brevet or vocational	21.4%	20.1%	21.3%	18.4%	21.2%	20.3%
Bac or higher						
education	15.1%	12.9%	14.3%	9.8%	13.0%	12.9%

Among those above 18 years old, 14% have the Baccalaureate, compared to 17% among the Lebanese population (very slightly more men than women do). 6% have a vocational degree (9% of men and 4% of women). Among those above 25 years old 5% have a university degree (7% of men and 4% of women).

3.4.5 Employment and Poverty

Exploring the impact of employment on poverty among refugees reveals two interesting patterns. First, having an employed household head reduces overall poverty incidence by a small margin, from 68% headcount rate to 66% for individuals living in households with employed heads (Table 3-14). Second, employment has a significant impact on reducing extreme poverty, which drops from 9.3% to 5.1%. The reason behind this difference in impacts of employment (low on poverty and high on extreme poverty) lies in the precarious and low-pay nature of jobs that Palestine refugees typically hold in Lebanon. These jobs are not enough to reduce overall poverty, but can play a role in reducing extreme poverty. The last chapter of this report provides some concrete recommendations on how to address extreme poverty through employment promotion among refugees.

Table 3-14: Poverty by Household Head's Status of Employment

	Poverty Headcount Rate	Distribution of the Poor	Distribution of Population
Poverty			
Not employed	67.9	36.4	35.6
Employed	65.7	63.6	64.4
Total	66.4	100.0	100.0
Extreme Poverty			
Not employed	9.3	50.1	35.6
Employed	5.1	49.9	64.4
Total	6.6	100.0	100.0

The above argument is further confirmed when one examines the incidence of poverty by the status of employment (using the ILO's International Standard Classification of Occupations).

Table 3-15: Occupation Level by Area

	North %	CLA %	Saida %	Tyre %	Bekaa %	Total Lebanon %
Professionals, legislators, senior officials and managers	15.3	13.4	12.4	4.9	14.6	11.0
Technicians and associate professionals, clerks	4.8	4.0	3.9	5.2	4.2	4.5
Service workers and shop and market sales workers	15.2	19.8	15.3	11.0	17.6	15.1
Skilled agricultural and fishery workers	0.0	0.2	0.3	0.8	0.0	0.4
Craft and related trade workers; plant and machine operators and assemblers	44.0	50.4	48.6	34.8	50.2	44.2
Elementary occupations	18.0	11.4	18.3	38.9	12.6	22.5
Armed forces	0.2	0.4	0.5	0.7	0.0	0.4
Total	2.5	0.5	0.8	3.8	0.8	1.9

The poverty headcount rate is much higher for refugees working in elementary occupations (77.5% poverty and 8% extreme poverty). Elementary occupations typically include street vendors, building caretakers, garbage collectors, etc. Most of the poor refugee population works as craft and related trade workers, and plant and machine operators and assemblers (between 44-50%), except for Tyre were elementary occupations constitute the largest employment category (39%) (Table 3-15). Educational achievement and occupation are significantly and moderately correlated (weighted correlation coefficient 0.4).

Table 3-16: Poverty by the Status of Employment

			Poverty	Extreme Poverty
	Poverty Hea	dcount Rate	Distribution of	of the Poor
Professionals, legislators, senior officials and managers	39.0	6.4	Poverty Headcount Rate	Distribution of the Poor
Technicians and associate professionals, clerks	48.1	3.3	0.0	0.0
Service workers and shop and market sales workers	60.1	14.0	5.0	4.0
Skilled agricultural and fishery workers	49.6	0.3	5.7	15.8
Craft and related trade workers; plant and machine operators and assemblers	66.6	45.8	0.0	0.0
Elementary occupations	77.5	27.5	5.4	43.9
Armed forces	63.4	0.4	8.0	33.8
Total	66.4	100.0	0.0	0.0

The sector of occupation equally plays an important role in quality of work. Most Palestine refugees work in the service sector. It is noteworthy that a quarter of those employed in Tyre work in the agricultural sector (Table 3-16). Poverty among Lebanese citizens exhbits similar trends although with lower magnitudes. Agriculture and construction exhibit the largest shares of extremely poor Lebanese workers. Extremely poor Lebanese workers are over-represented in agricultural activities by more than 12 percentage points and over-represented in construction by about nine percentage points. In the North governorate, one out of four Lebanese workers in agriculture and one out of five in construction are likely to be poor (UNDP, 2008).

In fact, poverty is also significantly present for refugees working in the agricultural sector, with overall and extreme poverty rates reaching 85% and 7% respectively (Table 3-17). This is not surprising, as agricultural employment for Palestine refugees is mostly seasonal, informal and precarious.

Table 3-17: Poverty by Sector of Employment

	Pov	erty	Extreme Poverty		
	Poverty Incidence (%)	Distribution of the Poor	Poverty Incidence (%)	Distribution of the Poor	
Agriculture	85.4	9.8	7.1	9.7	
Industry	61.1	3.1	3.0	1.8	
Construction	68.7	18.8	4.1	13.4	
Educational and health services	40.5	5.1	0.5	0.7	
Government and non- government institutions	42.9	1.5	0.4	0.1	
Other services	62.3	61.6	6.1	74.3	
Total	66.4	100.0	6.6	100.0	

3.5 PROFILING THE EXTREME POOR

It is important to examine in more details the characteristics of the extremely poor Palestinian refugees, as this will enable better interventions targeting their livelihoods. Table 3-18 below provides summary statistics for a set of indicators, comparing them among the extremely poor and the overall refugee population. Extremely poor persons are slightly more likely to be chronically ill, but have a hospitalization incidence much higher than the overall population (27% compared to 19%). The extreme poor are more likely to experience bad living conditions (through water leakages in their houses), and they are more likely to have a below primary education. More importantly, the incidence of severe food insecurity is almost double among the extreme poor, reaching almost 30%.

Table 3-18: Profile of the Extreme Poor

	Extreme poor	Overall refugee population
Chronic illness incidence	34%	31%
Hospitalization incidence	27%	19%
Share shelters with leakage	59%	43%
Below primary education	44%	38%
Severe food insecurity incidence	27%	15%

3.6 DEPRIVATION INDEX RESULTS FOR PALESTINE REFUGEES

Having discussed the level and correlates of money-metric poverty attributes for the Palestine refugee population in Lebanon, we now turn to the discussion of the multi-dimensional Deprivation Index which was specially devised based on the unique characteristics of the refugee community.

3.6.1 Overall Components of Deprivation

The Deprivation Index we use is based on 6 components of welfare that are deemed essential for a decent living: Good health, food security, adequate education, access to stable employment, decent housing, and possession of essential household assets. For each dimension of welfare we identify a set of indicators that most directly link to that particular dimension (Table 3-20). The choice of indicators is based on common multidimensional poverty indicators found in the literature (Alkire and Santos, 2010; (Vu & Baulch 2010); (Noble et al. 2010); (Berman & Phillips 2000), and in line with what our household survey instrument included. Moreover, indicators were prioritized based on related research on marginalized communities in Lebanon (Habib et al. 2009); (UNDP 2008), in addition to previous research on the Palestine refugees' living standards in the country (Tiltnes 2006); (Khalidi & Tabbarah 2009).

Data for the selected indicators on the household level reveals a gloomy picture of the deprivation of Palestine refugees in Lebanon. 72% of households report having one or more chronic illness, 15% have at least one disability and 41% at least one chronic depression case (Table 3-19). 19% of households have members with no adequate schooling (in the sense that not all children of schooling age in the family attend school), and 46% of households have adult members who did not complete more than primary education. Turning to employment, 7% of household heads are jobless (not working and not studying), and 17% of households have their working members occupying seasonal and non-permanent jobs. More than half of Palestine refugees lack a sufficient living place, as 55% of households has more than 2 persons sleeping in the same room. Housing conditions are also very bad, as 39% of households report water leakages in their houses. Finally, 9% of refugee families do not own a fridge, a washing machine and a water heater in the house, compared to 3% among Lebanese households.

All of the above indicators are combined into a synthetic deprivation index using the non-parametric Principal Components Analysis (PCA) statistical technique. PCA aims at reducing the multiple dimensions of the various indicators into a single dimension that could aggregate all components and could rank individuals in a consistent manner with regards to the devised overall Deprivation Index. Details of how PCA is devised and implemented could be found in Vyas and Kumaranayake (2006).

Table 3-19: Deprivation Index Composition

Deprivation dimension	Indicators description	Incidence (% of households)	Social exclusion dimension
Health	Household has at least one chronic illness	72%	Health service coverage
	Household has at least one disability	15%	
	Household has at least one chronic depression case	41%	
Food	Food is insufficient (household did not have enough food to eat in the past week)	6%	Low income
	Hunger is felt in the house all the time	5%	
Education	Household members do not have adequate schooling (not all children ages 6 to 18 attend school)	19%	Distribution of access to and discrimination in educational and cultural services
	Adults members of working age do not have good education (primary and below)	46%	
Employment	Household head is jobless	7%	Labor market inclusion
	Household workers have precarious (seasonal/non-permanent) jobs	17%	
Housing	Lack of sufficient living space: more than 2 persons sleep in the same room	55%	Distribution of access to neighborhoods
	Poor housing conditions: water leaking from walls and ceiling	39%	
Essential assets	Fridge/Washing machine lacking within house	9%	Low income
	No heater in house	9%	

3.6.2 Deprivation and Poverty

The average value of the derived Deprivation Index (DI) is -0.026, which could be viewed as a proxy for a multidimensional value of actual deprivation. Camps have an average DI value of -0.149, compared to -0.166 for gatherings (Table 3-20). This indicates that camps are substantially more deprived than gatherings, but with differences among camps and gatherings nation-wide. Moreover, by grouping households into quintiles along the DI, one notices that the average DI score increases as one moves from a lower quintile to a higher one. The 40% most deprived of refugee households have negative DI scores, indicating that 40% of Palestine refugee families currently residing in Lebanon could be classified as deprived.

Table 3-20: Mean Deprivation Index Score

Quintiles	Mean	Std. Err.	[95% Conf.	Interval]
Most deprived	-1.498	0.026	-1.548	-1.448
2	-0.486	0.008	-0.503	-0.470
3	0.109	0.008	0.093	0.124
4	0.631	0.008	0.616	0.646
Least deprived	1.325	0.010	1.305	1.345
Gatherings	0.166	0.029	0.110	0.223
Camps	-0.149	0.025	-0.199	-0.099
Overall	-0.026	0.019	-0.064	0.012

Next we examine the correlation between the money-metric poverty rate and the deprivation index. Poverty in its two forms (overall and extreme) decreases as we move from the most deprived quintile of the refugee population to the least deprived (Table 3-21). This indicates a very good correlation between our two measures of poverty. Moreover, 72% of the extreme poor identified using the money-metric poverty line are in the bottom two most deprived quintiles as ranked by the deprivation index (or 40% if the population identified as deprived coincides with 72% of the money-metric poor). 61% of the poor are also located in the most deprived two quintiles. These results validate the use of the absolute money-metric poverty line, as it correlates well with multidimensional deprivation characteristics.

Table 3-21: Relationship between Money-Metric Poverty and Deprivation Index

	Quintile of Deprivation Index					
	Most deprived	2	3	4	Least deprived	Overall
Extreme Poverty incidence	11%	6%	4%	3%	2%	7%
Distribution of extreme poor	50%	22%	15%	9%	4%	100%
Poverty incidence	84%	72%	59%	51%	32%	66%
Distribution of poor	36%	25%	19%	14%	6%	100%

These results show that actions aimed at reducing refugees' deprivation in terms of their essential needs have a direct impact on lifting them out of poverty. Securing good health, food security, an adequate education, access to stable employment, decent housing, and the possession of essential household assets are an integral component of any long-term poverty reduction strategy for the Palestinian refugees in Lebanon.

CHAPTER 4: Food Security of Palestinian Refugees Living in Lebanon

4.1 POVERTY AND FOOD SECURITY

Poverty reduction and improvement of food security are currently high on the global development agenda with the first UN Millennium Development Goal aiming to reduce "poverty, hunger and malnutrition" by half by 2015 (UN, 2005).

The concepts of poverty and hunger are invariably linked; according to Amartya Sen, "the most obvious manifestation [of poverty] is starvation and malnutrition" (Sen 1983):159). However, Sen argues that poverty or relative deprivation can exist without leading to hunger and starvation (Sen 1981):39) and that low income households have differential vulnerability to food poverty depending on the diversity of their sources of entitlement (DeRose et al. 1998).

A person's "entitlement" being the range of goods and services that he or she can acquire by converting his or her assets, resources and labour - in this case into food. The entitlement approach to the prevention of hunger and malnutrition focuses on people's ability to acquire food through legal means such as food production, food trade, working for food and food transfers (i.e. being given food by others). Hunger therefore occurs when a person's entitlements do not provide them with sufficient food for subsistence. According to Sen, hunger, or food insecurity is hence defined by people's inability to access sufficient amounts of adequate food, regardless of food availability (Devereux 2001).

Sen's concept of entitlement and ability to acquire or access food has been integrated into recent definitions of food security. The FAO defines food security as existing "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." (FIVIMS 2004) In addition to food availability and access, components of current food security definitions include social acceptability of the means employed to access food, and adequate food utilisation²³.

4.1.1 Measuring Food Security

4.1.1.1 Household Income and Food Expenditure

Food security is often measured using money-metric poverty lines which classify the extreme poor as food poor according to likelihood that based on reported income or expenditure; they would be unable to purchase sufficient food to meet their caloric requirements.

Recent evidence from developed countries confirms that although there are strong correlations between measures of poverty and food insecurity, poverty does not necessarily lead to food insecurity and food insecurity can occur in households classified as non-poor (M. Nord et al. 2005).

²³ The ability of an individual to utilise food adequately depends on multiple factors including food safety and the hygiene and sanitation infrastructure available; the health status of the individual which may affect his/her ability to absorb nutrients from food; knowledge regarding healthy eating practices etc.

Therefore although many poor may be food insecure, there are limitations to equating poverty with food insecurity. Other measures are often used in combination with poverty lines to identify those vulnerable to food insecurity and these are described below.

4.1.1.2 Nutritional Status Assessment

The ultimate outcomes of extreme food insecurity are hunger and malnutrition; it can therefore be argued that measurement of the nutritional status of household members, including body-mass indices, dietary intake, and subclinical nutrient deficiencies would be effective measurements of the impact of long-term food insecurity.

Even though extreme poverty and food insecurity are often associated with hunger and malnutrition in developing countries; overweight and micronutrient deficiencies are other manifestations of poverty and food insecurity. This may frequently be the outcome of globalisation of food markets and the availability of cheap, energy-dense, micronutrient-poor foods on markets. This is emerging not only within populations but also within households and in individuals. In fact, reports of stunted overweight children are commonly cited from countries undergoing a nutrition transition including several countries from the MENA region (Fernald & Neufeld 2007); (Labadarios et al. 2005); (Popkin et al. 1996). Such a situation may result from two possible scenarios; (1) where energy requirements may be met, but micronutrient deficiencies persist, referred to as hidden hunger, (2) where periods of chronic energy deficiency are followed by periods of abundant energy consumption, referred to as binge-bust eating habits. In the Arab world, stunted children are on average 2-4 times more likely to be overweight than children with adequate height-for-age (El Taguri et al. 2009).

Malnutrition therefore results not only from inadequate nutritional intake in terms of quantity but also in nutritional quality. This implies that micronutrient content of food needs to be taken into consideration alongside caloric content. Micronutrient deficiencies are associated with stunting and poor cognitive and psychomotor development of children, as well as with reduced productivity and work capacity in adults. Poor food quality can therefore impair the ability of subgroups of the population to achieve their genetic potential, not only in terms of height, but also in terms of cognitive development and potential for economic productivity. This population is also at higher risk of developing chronic diseases and disability leading to a drain on medical resources.

Both quantity and quality of food are therefore critical for the maintenance of food security making it essential to combine several measures of nutritional status in order to obtain an adequate understanding of the impact on food insecurity.

4.1.1.3 Direct Measurement of Food Security

One alternative set of measures that were first developed by Radimer et al (1990) to assess the adequacy of food quality and quantity at household level are direct or subjective measurements of food insecurity. Direct measures have since been validated in the US and several developing countries (Kendall et al. 1995); (Coates et al. 2003); ref) and have been found to be correlated with nutritional status and health outcomes (Alaimo, 2001; (Bhattacharya et al. 2004).

These measures ask a series of questions related to food quantity and quality as well as psychological and social dimensions related to worry about food access by the household and satisfaction of food in the household (Coates et al. 2003). The Radimer-Cornell food security scale (Radimer et al. 1990) initially developed the questions based on statements made by women describing their experience of food insecurity. Threshold questions have been developed and validated to classify households according to ranges of severity of food insecurity.

The advantages of direct measures of food security are that they include quantitative, qualitative, psychological and social dimensions of food security as well as being cost-effective tools for the measurement of food insecurity.

4.2 FOOD SECURITY OF PALESTINIAN REFUGEES LIVING IN LEBANON

Assessments of food security in Palestinian refugees living in Lebanon have previously been limited to post-conflict assessment based on studies of food availability, access and utilisation of food and focusing on market conditions, (WFP 2008).

The Food section of the present survey was designed to assess varying degrees of severity of household food insecurity and investigates perceptions of unacceptability, or un-sustainability of food supply in the household, a product of availability, access and utilisation of food. This will provide a representative assessment of the food security situation of Palestinian refugees in Lebanon in a non-emergency situation. This section is modelled on the US food security survey module (Bickel et al. 2000) and the Yemen National Food Security Survey (Kabbani & Wehelie 2004). These direct measures of food security ask a set of questions that categorise responses based on degree of severity of food insecurity. We have adapted the US and Yemeni questions to the context of Palestinian refugees living in Lebanon, and adapted questions regarding coping mechanisms based on the Food Security Assessment, West Bank and Gaza Strip (FAO, WFP, UNRWA 2004). In addition, a 7-item household food frequency questionnaire was administered to add to the dimension of food quality and to assess the manifestations of food insecurity in the diet. Similar questions have been used in other food security assessments in Lebanon (Ghattas & Sahyoun). The questions were tested on key informants from the Palestinian community and modified based on feedback received.

Thresholds for severity of food insecurity were based on questions adapted from Kabbani & Wehelie (2004) in the Yemen Food Security Survey (FSS). Nomenclature has been changed based on recent recommendations from the US Department of Agriculture to remove the term 'hunger' from labels of food insecurity categories, as hunger is a physiological manifestation of food insecurity at an individual level which is not what food security measures assess (Mark Nord & USDA Economic Research Service 2009). The following definitions were therefore used Table 4-1.

Table 4-1: Nomenclature and Definitions of Measures of Food Security

Nomenclature used in Yemen FSS	Definition	Nomenclature used in the present report
Subjectively food insecure	A household which reported that in the previous 6 months, family members could not afford to buy more food when food was insufficient.	Vulnerable to food insecurity
Food Insecure without Hunger	A household which reported that during the previous 6 months, one or more household members reduced the size of a meal because there was not enough food or money to buy food.	Mild food insecurity
Food Insecure with Moderate Hunger	A household which reported that during the previous 6 months, one or more household members skipped a meal in a day because there was not enough food or money to buy food.	Moderate food insecurity
Food Insecure with Severe Hunger	A household which reported that during the previous 6 months, one or more household members did not eat for an entire day or went to sleep hungry because there was not enough food or money to buy food.	Severe food insecurity

4.2.1 Distribution of Food Insecurity

When direct measures of food insecurity were assessed, only 37.3% of respondents expressed satisfaction with both quantity and quality of food available to the household. 61.5% of the Palestinian refugee population in Lebanon describe dissatisfaction with food available in the household (Table 4-2). 55.7% of households are considered vulnerable to food insecurity; reporting inability to afford more food when food was insufficient. 34.6% of households report at least one member of the household reducing meal size (classified as mild food insecurity), 28.2% report a member skipping meals (classified as moderate food insecurity), and 14.9% report a member going without eating for a whole day in at least 2-3 of the last 6 months (classified as severe food insecurity).

Table 4-2: Percentage of Households Reporting Food Insecurity

	%				
Satisfaction with food quantity and quality					
Don't know	1.2				
Most of the time quantity not enough	6.5				
Sometimes not enough quantity Enough but not varied	15.5 39.5				
Quality and quantity are enough	37.3				
Vulnerable to food insecurity					
Most of the time	14.3				
Sometimes	41.4				
Never	44.2				
Mild food insecurity					
Almost every month	11.4				
In some months	16.3				
In only 2-3 months	7.0				
Never	65.4				
Moderate food insecurity					
Almost every month	9.0				
In some months	13.6				
In only 2-3 months	5.6				
Never	71.8				
Severe food insecurity					
Almost every month	5.7				
In some months	6.5				
In only 2-3 months	2.7				
Never	85.1				

4.2.2 Socio-Demographic Susceptibility to Food Insecurity

The Palestinian population living in Lebanon was divided into socio-demographic categories to investigate differential susceptibility to food insecurity. In univariate analyses there were significant differences in reports of food insecurity by head of household gender, whether households resided in camps, geographic area of residence, head of household education and employment, number of children residing in the household and whether the household included at least one person with chronic disease or disability (Tables 4-3 and 4-6). There was no significant difference in reporting of varying levels of food insecurity by age of head of household.

4.2.2.1 Place of Residence and Food Insecurity

A significantly higher percentage of residents of camps report food insecurity at all levels of food insecurity, indicating that camp dwellers experience food insecurity more commonly than those who live in gatherings (Table 4-3). 71% of those reporting severe food insecurity reside in camps.

The highest proportions of food insecure households are in the Bekaa and Tyre regions, and those living in the North are less likely to be food insecure than those in any of the other regions of Lebanon (Table 4-3). Severe food insecurity is most commonly reported in the Bekaa; 19.8% of Palestinians living in the Bekaa report severe food insecurity, whereas all other levels of food insecurity are most common in Tyre followed by Saida. Of those who report severe food insecurity, 34% reside in Tyre, followed by 31% in Saida indicating that 65% of the most food insecure Palestinians reside in South Lebanon.

Table 4-3: Percentage of those Residing in Camps and Gatherings in Different Geographical Areas that Report Varying Degrees of Food Insecurity

	Food secure	Vulnerable	Mild food insecure	Moderate food insecure	Severe food insecure
	%	%	%	%	%
Camp residence					
Camp	40.8	59.2	39.4	32.3	16.9
Gathering	49.3	50.7	27.6	21.8	12.0
	(***)	(***)	(***)	(***)	(**)
Geographic area of residence	, ,	. ,	, ,	, ,	,
North	58.2	41.8	27	21.8	7
CLA	43.5	56.5	31.7	23.5	13.7
Saida	46.5	53.5	34.1	30.4	17.4
Tyre	32.4	67.6	43.5	35	19
Bekaa	39.6	60.4	39.6	34.8	19.8
	(***)	(***)	(***)	(***)	(***)

Pearson's χ^2 to test differences between socio-demographic subgroups reporting each level of food insecurity; *** p<0.001, ** p<0.01, * p<0.05; NS indicates no significant trend.

4.2.2.2 Gender of Head of Household

Female headed households are significantly more likely to report severe food insecurity (Table 4-4). 19.2% of female-headed households experienced severe food insecurity and 30% of households reporting severe food insecurity are female headed households (whereas female headed households comprise 22.3% of the total population).

Table 4-4: Percentage of Socio-demographic Subgroups Reporting Varying Degrees of Food Insecurity

	Food secure	Vulnerable	Mild food insecure	Moderate food insecure	Severe food insecure
	%	%	%	%	%
Head of household (HH) gender					
Male	44.2	55.8	34.6	28.1	13.8
Female	43.3	56.7	36.3	30.3	19.2
	NS	NS	NS	NS	(**)
HH education level					()
Does not have Brevet	41.5	58.5	37.8	30.9	16.8
Does have Brevet	50.4	49.6	27.5	22.5	10.5
	(***)	(***)	(***)	(***)	(***)
HH employment status	()	()	()	()	()
Employed	46.1	53.9	32.5	26.6	13.5
Jobless	41.3	58.7	38.1	31.1	17.1
	(*)	(*)	(**)	(*)	(*)
HH employment type	(/	()	()	()	()
Professional & Senior Officials	70.7	29.3	12.3	8.2	2.2
Associate Professionals & Technicians	56.6	43.4	20.9	13.8	2.5
Service & Sales Workers	52.1	47.9	26.1	18	9.4
Craft- and Tradesmen, Plant Operators &	45.9	54	33	27.3	13.3
Elementary Occupations	33.2	66.8	44.5	38.3	23.1
	(***)	(***)	(***)	(***)	(***)
Number of children <15yo in household					
≤2	48.2	51.8	33.2	27.9	14.6
3-4	43.0	57.0	34.3	27.9	14.7
5-6	37.3	62.7	39.9	31.1	16.1
>6	36.9	63.1	36.4	29.4	18.4
	(***)	(***)	NS	NS	NS
≥1 member of household has chronic disease	()	()	СИ	INO	ОИ
No	57.7	42.3	24.8	20.7	9.8
Yes	40.2	59.8	37.8	30.7	16.5
	(***)	(***)	(***)	(***)	(***)

Pearson's $\chi 2$ to test differences between socio-demographic subgroups reporting each level of food insecurity; *** p<0.001, *p<0.01, *p<0.05; NS indicates no significant trend.

4.2.2.3 Head of Household Education and Employment

Head of household education and employment also differentiated households into food insecurity categories. Holding a brevet (official middle-school education certificate) was found to significantly protect against food insecurity at all levels of food insecurity. 80% of households reporting severe food insecurity are households where the head does not hold a brevet.

Employment of head of household also protects from all levels of food insecurity, with food insecurity increasing as level of skill required in employment decreases. Professionals and senior officials have the lowest prevalence of food insecurity with 71% reporting that their households are food secure. Associate professionals and technicians also have very low rates of severe food insecurity but rates of vulnerability and mild food insecurity increase significantly as compared to professionals. Palestinians employed in elementary occupations such as labourers (including agriculture and fisheries), street vendors, cleaners,

porters and doorkeepers have the highest prevalence of food insecurity (in terms of vulnerability and severity) with 23.1% reporting severe food insecurity and 66.8% being vulnerable to food insecurity.

This very clear association between food security and both education and employment implies that decreasing school drop-out rates, increasing educational attainment and improving employment opportunities would have a large direct impact on improving food security in the population as a whole. Potential strategies are discussed in Chapter 7.

4.2.2.4 Household Size and Number of Children in a Household

Average household size is higher in more food insecure households, but this difference is not significant across varying levels of food insecurity. When number of children aged less than 15 is considered, there is a trend towards increasing food insecurity with increasing number of children; however, having greater than 6 children in the household appears to somewhat stabilize that trend with regards to severe, moderate, and mild food insecurity but not with respect to vulnerability to food insecurity. These data again show similarities with the poverty data; it appears that having more than 6 children in the household increases the chances of a household being poor and vulnerable to food insecurity, but protects from more severe food insecurity and extreme poverty. This may result from children resorting to working to generate income in large multi-child households.

In fact children aged 7-15 years who come from severely food insecure households are twice less likely to have been enrolled in school in the year 2010 than those from non-severe food insecure households. 13.6% of children from severe food insecure households were not in school versus 6.9% of children from non-severe food insecure households. Over 25% of children not in school are from severe food insecure households.

The fact that as number of children in a household increases, vulnerability to food insecurity increases, implies that reaching children with food aid through schools has the potential to impact positively on multi-child households that are vulnerable to food insecurity. School meals that aim to replace a household meal could reduce the burden of "extra mouths to feed" that multi-child households experience. In addition this could provide an incentive for children from severe food insecure households to remain in schools, therefore also reducing school drop-out rates, which has a long-term impact on food security (as evidenced by data on head of household holding brevet discussed above).

4.2.3 Chronic Disease or Disability in a Household

Households where at least one member of the household has a chronic illness or disability are almost twice as likely to be severely food insecure, and significantly more likely to be vulnerable to food insecurity than households where no members suffer from chronic disease or disability (Table 4-5). Approximately 85% of food insecure households at varying levels of food insecurity also have a member that has a chronic disease or disability, and food insecure households are also more likely to include an ill person than food secure households.

Several factors contribute to the onset of chronic disease. These include inadequate living conditions, poor dietary intake, inadequate access to preventive health care, low educational attainment and poor

physical activity. A large proportion of the Palestinian refugees are exposed to these negative conditions as seen from this report. Additionally, many chronic health conditions require controlled dietary intake to prevent deterioration of their health status. The results of this survey indicates that chronic illness is associated with food insecurity, particularly with severe food insecurity; There are several possible scenarios linking ill health to food insecurity including:

- Food insecure households consume poor quality diets which increases their risk of chronic disease
- Households with individuals with chronic illness prioritise health expenditure over food expenditure therefore becoming vulnerable to food insecurity
- The factors underlying poor health and food insecurity are similar, and include poverty, low educational and employment status,

The implications of such a finding are that improvements in either health care, food security or their underlying factors may prevent or delay the onset of disease or prevent further deterioration in health. A multi-sectoral approach to food insecurity may be an effective way to indirectly improve food security.

Table 4-5: Food Insecurity and Chronic Disease or Disability in a Household

	Food security headcount rate	Distribution of the food insecure	Distribution of the population
Vulnerable			
No chronic illness	42.3	16.2	21.5
≥ 1member with illness	59.8	83.8	78.5
Mild food insecure			
No chronic illness	24.8	15.3	21.5
≥ 1member with illness	37.8	84.7	78.5
Moderate food insecure			
No chronic illness	20.7	15.6	21.5
≥ 1member with illness	30.7	84.4	78.5
Severe food insecure			
No chronic illness	9.8	14	21.5
≥ 1member with illness	16.5	86	78.5

4.2.4 Characteristics of the Severely Food Insecure

Approximately 15% of households have been categorised as severely food insecure, in that they report that in the last six months, one member of the household has spent a whole day without food or gone to sleep hungry due to lack of food or insufficient money to buy food. This is a population at particular risk of spiralling into severe malnutrition and needs priority food assistance.

71% of these households reside in camps, 34% in the Tyre area and 31% in the Saida area. More specifically, 22.1% of severe food insecure households are in Rashidiyeh camp and 19.8% in Ain el Helweh camp. 30% are female-headed households, 80% have heads of households who do not hold a brevet, and 80% hold elementary or craft/tradesmen occupations. 86% of severely food insecure households have a member with a chronic illness.

The majority of these households are working poor and these characteristics can be used to prioritise food aid to those subgroups of the population most likely to experience severe food insecurity.

4.2.5 Economic Susceptibility to Food Insecurity

In order to investigate whether poverty and food insecurity coincide in households and to better understand if the poor can benefit from food aid, relationships between different measures of poverty and measures of food insecurity have been analysed.

Using the poverty lines defined in Chapter 3 of this report, households were categorised into non-poor, poor and extreme poor and proportions of each of these groups reporting food insecurity were investigated.

There is a strong correlation between poverty (as defined by poverty lines) and food insecurity. However, although poverty is an underlying cause of food insecurity Most but not all of the poor and extreme poor experience food insecurity and also, a segment of the non-poor report food insecurity as well.

76% of the extreme poor are vulnerable to food insecurity, 62% of the poor report experiencing some degree of food insecurity in the last 6 months, however, a significant proportion (45%) of non-poor experience some vulnerability to food insecurity (Table 4-6).

Table 4-6: Percentage of the Poor and Extreme Poor Reporting Varying Degrees of Food Insecurity

	Food secure	Vulnerable	Mild food insecure	Moderate food insecure	Severe food insecure
	%	%	%	%	%
Poverty line category					
Non-poor	54.5	45.5	25.9	21.2	10.8
Poor	37.7	62.3	39.8	32.1	17.3
Extreme poor	23.8	76.2	57.9	52.8	28.6
	(***)	(***)	(***)	(***)	(***)

Pearson's χ^2 to test differences between poverty subgroups reporting each level of food insecurity; *** p<0.001, ** p<0.01, * p<0.05

Similar results have been reported by other surveys (Kabbani & Wehelie 2004); (M. Nord et al. 2005); (Bhattacharya et al. 2004). The discrepancies between objective (poverty-line based) and subjective measures of food insecurity may derive from the potential temporary nature of food insecurity; a non-poor household may experience a sudden stress that leads to temporary cash flow problems which may force household members to reduce food consumption during a certain period of time leading to reports of

vulnerability to food insecurity (Kabbani & Wehelie 2004). Similarly, a poor household may develop coping mechanisms that allow members to avoid hunger, therefore keeping households above certain food insecurity thresholds.

Irrespective of some discrepancies, food insecurity increases with increasing poverty in this population. Severe and moderate food insecurity is more often reported by the extreme poor hence confirming the internal validity of the questions used. Data show that a large majority (76%) of extreme poor experience some degree of food insecurity indicating that the poor and extreme poor would potentially derive significant benefit from food aid.

4.2.6 Household Food Frequency

In order to explore the dietary manifestations of food insecurity in this population, a 7-item household food frequency questionnaire was administered to all households asking about usual intake of 7 different food groups (included based on previous findings in Lebanese surveys of food groups that were affected by food insecurity). Food group consumption was recorded as number of times per week that a household consumes a certain type of food. Log food group consumption was calculated because the distribution of consumption was non-linear. We used tertiles of log food group consumption to group households into low-third, medium-third and high-third intake which resulted in the following categories of consumption (Table 4-7).

In general, as the categories in Table 4-7 are tertiles of consumption rather than tertiles of the population, these categories are relative rather than absolute categories. Fruit intakes are markedly low in this population in general with even those classified in the medium-third of intake having extremely low fruit intakes; i.e. 58% of the population is consuming fruit less than once per day.

The food groups most affected by food insecurity are fruit, meat/chicken and dairy which are severely reduced with every level of increase in food insecurity; 62% of food secure households consume fruit more than once per day, versus only 14% of severely food insecure households. Conversely, 46% of severely food insecure households eat fruit less than one time per week versus 11.3% of food secure households.

What is interesting is that the stepwise decrease in fresh fruit and meat/chicken consumption is more significant with vulnerability to food insecurity than the stepwise decrease in sweet consumption with increasing food insecurity. This may imply that fresh foods (particularly fruit and meat) are sacrificed from a household's diet first, whereas sweets continue to be consumed in small quantities when vulnerability to food insecurity occurs.

In comparison to foods that provide essential micronutrients such as fruits, dairy, meat and chicken, sweets and sodas provide "empty" calories; they are high in sugar and have negligible amounts of vitamins and minerals essential for the maintenance of health. Although on average intakes of sweets and sweetened beverages are not high, a total of 54% of Palestinian refugees report eating sweets on a daily or weekly basis and 64% consume sweetened bottled or carbonated drinks on a daily or weekly basis.

Table 4-7: Categories of Food Group Consumption and Percentage of Households Consuming these Amounts per Week

Food group	Category	Frequency	% households
Dairy	low-third	up to 1 x per week	11.1
	med-third	1-7 x per week	76.2
	high-third	7-49 x per week	12.7
Fruit	low-third	up to 1 x per week	24.5
	med-third	1-5 x per week	33.2
	high-third	5-28 x per week	42.3
Vegetables	low-third	up to 1 x per week	5.6
	med-third	1-7 x per week	85.9
	high-third	7-42 x per week	8.6
Pulses	low-third	up to 1 x per week	29.3
	med-third	1-6 x per week	56.4
	high-third	6-35 x per week	14.3
Meat/Chicken	low-third	up to 1 x per week	40.6
	med-third	1-4 x per week	51.0
	high-third	4-21 x per week	8.4
Sweets	low-third	up to 1 x per week	46.2
	med-third	1-7 x per week	47.5
	high-third	7-49 x per week	6.3
Sweetened Beverages	low-third	up to 1 x per week	35.7
	med-third	1-7 x per week	59.0
	high-third	7-42 x per week	5.3

If, like in reports from the US, these habits (low fruit and high sweet and sweetened beverage intake) coincide within households then it is likely that food insecurity is manifesting as diets high in sugar and low in micronutrient density with a potentially significant contribution to increases in the burden of chronic disease in this population. This was examined in households reporting food insecurity in this population and not found to be the case (Table 4-10). Consumption of all food groups increased with increasing levels of food security, except for pulses which showed the opposite trend – with food insecure having much higher consumption of pulses than food secure households. It is likely that staple cereal intake would have the same trend as pulses although this was not examined in this survey.

The survey also asked households reporting food insecurity to enumerate foods that the household is unable to afford; the most highly cited items were meat, chicken and fish, and fruit which correspond to the results in Table 4-8.

Table 4-8: Proportions of Food Insecure Households Consuming Low- third, Medium- third, and High-third Amounts of Food Groups

	Food secure	Vulnerable	Mild food insecure	Moderate food insecure	Severe food insecure
	%	%	%	%	%
Fruit-category					
low-third	11.3	34.9	38.3	39.6	46.5
med-third	26.5	38.6	40.5	41.3	39.5
high-third	62.2	26.5	21.2	19.1	14.0
	(***)	(***)	(***)	(***)	(***)
Dairy-category					
low-third	6.3	14.9	17.0	19.9	24.5
med-third	79.1	74.0	71.6	70.1	66.2
high-third	14.6	11.1	11.4	10.0	9.3
÷	(***)	(***)	(***)	(***)	(***)
Vegetables-category	. ,	. ,	. ,	. ,	, ,
low-third	2.5	8.0	9.2	10.5	15.7
med-third	89.5	83.2	83.2	81.3	77.5
high-third	8.0	8.8	7.6	7.6	6.8
v	(***)	(***)	(***)	(***)	(***)
Pulses-category	,	. ,	,	, ,	, ,
low-third	32.6	26.6	24.5	23.4	18.7
med-third	50.5	61.1	63.2	63.4	64.1
high-third	16.9	12.3	12.3	13.2	17.2
Ğ	(***)	(***)	(***)	(***)	(***)
Meat/chicken-category	(,	,	()	()
low-third	23.6	54.1	59.7	63.8	68.3
med-third	60.8	43.3	38.0	34.9	30.6
high-third	15.6	2.6	2.3	1.3	1.1
·	(***)	(***)	(***)	(***)	(***)
Sweets-category	, ,	. ,	, ,	, ,	, ,
low-third	42.6	49.3	47.6	50.2	55.3
med-third	49.7	45.6	48.0	45.1	40.1
high-third	7.7	5.1	4.4	4.8	4.6
Ŭ	(***)	(***)	(***)	(***)	(***)
Sweetened beverages-category	. /	` '	` '	` '	,
low-third	29.2	40.9	42.7	43.3	42.6
med-third	63.6	55.4	54.8	53	55.7
high-third	7.2	3.7	2.5	2.8	1.7
ŭ	(***)	(***)	(***)	(***)	(***)

Different levels of food insecurity are therefore manifesting as changes in diets with severely food insecure households reducing both quantity and diversity of foods, particularly of fresh foods. Households classified as vulnerable to food insecurity therefore reduce fruit, vegetables, meat and dairy consumption.

There is evidence from previous reports (UNRWA 2009) that dietary diversity of SHAP households is relatively high both prior to and after receiving the UNRWA staple food ration, and that the ration

improves dietary diversity of those with the lowest dietary diversity scores. In spite of these improvements, some SHAP families remain food insecure and report relying on as few as four staple food items in their diets. This is consistent with our findings that food insecure households have low quality diets and are likely to have lower than average dietary diversity placing them at risk of micronutrient deficiencies.

4.2.7 Food Aid and Provision of Rations

56% of Palestinian refugees in Lebanon are vulnerable to food insecurity; the majority of these households resort to buying cheaper food and to decreasing the amount of food they eat. 27% cope by borrowing money; 36% sacrifice on food quality.

SHAP status and receiving help from other organisations is associated with severe food insecurity; this is likely due to the fact that SHAP and other aid is received by the most food insecure. Interestingly, in those vulnerable to food insecurity (but not food insecure), getting help is associated with being more food secure (data not shown) indicating that at this threshold, aid may be effective at lifting households out of food insecurity. It is likely that food aid received through SHAP and from other groups is sufficient to keep part of the vulnerable to food insecurity out of food insecurity, but is not enough to lift households out of mild, moderate and severe food insecurity.

The fact that food insecurity is a significant problem in this population implies that targeting food aid to the most food insecure will continue to be an essential part of UNRWA's programmes, alongside other potential interventions to improve food security (discussed below and in Chapter 7).

4.2.7.1 Composition and Adequacy of Food Rations

38.6% of surveyed households were SHAP beneficiaries; the food received through the programme lasts a household on average 40 days, and only 10% of SHAP recipients find the food aid to be sufficient. The ration aims to cover 30% of caloric needs for a quarter (90 days). The fact that it lasts 40 days indicates an almost total reliance of households on the ration for shorter periods of time.

The ration currently provides food commodities as detailed in Table 4-9:

Table 4-9: Food Commodities Provided to SHAP Households

SHAP	Ration Commodity Content	Quarterly ration /person (kg or L)	Daily ration (g or ml/person/day)
	Sugar	3	33
	Rice	3	33
	Sunflower oil, unfortified	3	33
	Milk powder, whole, unfortified	1.5	16
	Lentils	1.5	16
	Canned chickpeas	0.8	9

Assuming a daily per capita requirement of 2100 Kcal/day, this provides 34% of energy requirements. However, as discussed above, micronutrient content of food (food quality) is an essential prerequisite for food security. Currently, the SHAP food ration provides 24% of protein requirements, 95% of fat requirements and proportions of micronutrient requirements (Recommended Dietary Allowances - RDA) as detailed in Table 4-10.

Table 4-10: Percentage of Nutritional Requirements Met by SHAP Food Ration

	34%
Protein (g)	24%
Fat (g)	95%
Calcium (mg)	15%
Iron (mg)	24%
lodine (μg)	0%
Vitamin A (μg RE)	6%
Thiamine (mg)	17%
Riboflavin (mg)	22%
Niacin (mg NE)	29%
Vitamin C (mg)	1%

Considering that fresh food intake is low in this population making households vulnerable to micronutrient deficiencies, some changes to the ration contents could increase the proportion of micronutrient requirements provided by the ration. It is also important to note that as rates of chronic disease in this population are high, particularly in food insecure households, it would be recommended to reduce fat and sugar content of the ration and replace these calories with more micronutrient dense options.

Currently, the ration provides almost 100% of fat requirements, but only 6% Vitamin A, 15% calcium, 1% of vitamin C and 0% of iodine requirements. For iodine, it may be sufficient to ensure that all sources of salt available on the market are iodised, or alternatively providing iodised salt as part of the ration. For the remaining micronutrients, there are several modifications and food ration options that could be considered, one is presented here. By decreasing the amount of sugar, replacing unfortified oil with WFP specification fortified oil (fortified with Vitamins A and D), replacing whole milk with skim milk, replacing 1/3 of the oil with a more micronutrient dense source of fat (tahina), and replacing canned pulses with canned vegetables (spinach or other green leafy vegetable and tomatoes), micronutrient density of the ration can be increased significantly, diversity improved, and "empty" calories from fat and sugar reduced (Table 4-11 and Table 4-12).

Table 4-11 Suggested Composition of Food Ration to Improve Micronutrient Content of Ration Provided by UNRWA

Alternative to SHAP	Ration Commodity Content	Quarterly ration /person (kg or L)	Daily ration (g or ml/person/day)
	Sugar	1.5	16
	Rice	3	33
	Sunflower oil, fortified WFP specs	2	22
	Milk powder, skim, fortified	1.5	16
	Pulses	3	33
	Tomatoes, canned	1.5	16
	Spinach/green leafy vegetables, canned	3	33
	Tahina	1	11

Table 4-12 Percentage of Nutritional Requirements Met by Modified Food Ration

Energy (kcal)	31%
Protein (g)	36%
Fat (g)	85%
Calcium (mg)	24%
Iron (mg)	42%
lodine (μg)	0%
Vitamin A (μg RE)	81%
Thiamine (mg)	34%
Riboflavin (mg)	36%
Niacin (mg NE)	42%
Vitamin C (mg)	11%

The resulting ration would therefore cover a much higher proportion of micronutrient needs, and would help to prevent micronutrient deficiencies arising in food insecure households that reduce consumption of fresh foods. This can be considered in addition to alternative methods of providing fresh food through vouchers or school programmes.

CHAPTER 5: Health of Palestinian Refugees in Camps and Gatherings in Lebanon

5.1 Introduction

Health is a fundamental individual right and valuable to every community. Safeguarding health enables people to work and live fruitfully, providing both individual needs and broader societal goals of financial and social stability. In disadvantaged and vulnerable communities, health is a commodity that is often inaccessible—and is neither a guarantee nor a basic right.

Refugee communities are among the most vulnerable populations in the world. In many developing countries, legal frameworks are not developed to protect refugees as residents or workers, and material resources may also be unavailable to them. Health services are often unguaranteed to refugees. Resource strapped nations are hard pressed to support health care initiatives for refugee populations, especially when they are unable to fully address their own national health needs. Palestinian refugees have experienced these barriers—and others—while living in Lebanon.

The public health literature has explored the many interactions between socioeconomic status and health. Research has characterized how differences in income, educational achievement, and occupation may lead to large disparities in health (Anderson et al. 1997). This association is one that carries on throughout people's lives, affecting their health status, morbidity, and mortality (CSDH 2008). Although disparities in health are observable across the socioeconomic spectrum, the difference is intensified among individuals living in poverty (Fiscella & Williams 2004). As detailed in chapter 3, poverty is an everyday reality for many Palestinian refugees, and not only disadvantages them in terms of financial security, but also negatively impacts the health of their communities.

This chapter discusses the health of Palestinian refugees living in camps and gatherings across Lebanon. It reports the prevalence of various diseases and compares them to that of Lebanon As will be discussed in subsequent sections, poverty plays a powerful role in shaping the distribution of illness; conversely, illnesses—and their related personal and financial costs—are an important determinant of economic instability in Palestinian communities.

5.1.1 The Health Survey

The present survey sought to determine the health issues most prominently affecting Palestinian refugees in Lebanon. The survey gathered information on a variety of health indicators—chronic and acute illness, functional disability, and psychological distress—while also exploring social and financial elements of the provision of health care. In addition to questions regarding health, the questionnaire addressed types of insurance, health care utilization, cost of health care services, income, and housing quality.

5.2 HEALTH INDICATORS

5.2.1 Chronic Illness and Functional Disabilities

Rates of chronic illness and functional disability are meaningful indicators of the health status of communities. Both are prolonged health issues that often persist for the remainder of an individual's lifecycle and guarantee ongoing costs for treatment. Moreover, these illnesses are concentrated among the most vulnerable populations—those who have lived through conflict, struggled with poverty, or worked or lived in unsafe environments (Toole & Waldman 1997). Palestinian refugees in Lebanon have often experienced these burdens.

In order to collect information on chronic illness, the survey included a two part question: "Do you suffer from a chronic illness?" and (if yes) "What is this chronic illness?" Descriptive data on chronic illness is presented in Table 5-1. The estimated prevalence of chronic illness among Palestine refugees is 31%. The types of chronic illness were diverse, and include hypertension (32%), back pain (9%), asthma (9%), diabetes (8%), rheumatism (6%), heart problems (4%), and epilepsy (3%).

The reported rate of chronic illness was significantly higher than that reported in older surveys. Previously the rate was at 19% (Ugland, 2003) whereas now our data depicts chronic illness rates at 31%. The difference in reporting may be a product of an aging Palestinian population, as demographic research has noted a precipitate decline in fertility rates among Palestinian refugees in Lebanon in the last few decades (Ugland 2003). Comparing the results to the Lebanese population, it is clear that Palestinian refugees have almost double the prevalence of chronic illnesses with 17% for the former and 31% for the latter (LNHS, 2004).

As expected, prevalence of chronic illnesses was more pronounced among older populations. 83% of individuals aged 55 and above have reported that they suffer from at least one chronic illness. Whereas only 10% of the youngest age group (under 20 years) reported chronic illnesses, compared to respondents between the ages 20 and 55, 33% of which reported an illness. When looking at the breakdown of chronic illnesses, the most prevalent is hypertension (32%). This number is startling when compared to its Lebanese counterpart where the share of hypertension sufferers is half (14%) (Sibai, 2010) that observed among Palestinians. Back pain and asthma are the next two most common chronic illnesses among Palestinian refugees (both at 9%). A smaller percentage of the Lebanese population suffers from diabetes (6%, Sibai,2010) than the Palestinian refugee population (8%). Unfortunately, there is not enough data on Lebanon to compare other chronic illnesses. The most common chronic diseases are listed in Table 5-1.

The prevalence of chronic illnesses in households varies between the extreme poor and non-extreme poor (as defined in Chapter 3). The extreme poor are more likely to have more chronic illnesses per household than non-extreme poor households. On average extreme poor households have 50% more chronically ill patients per household than non-extreme poor households. The same results were found for the comparison between poor and non-poor. This finding was also significant but was of a lesser extent with poor households having 20% more chronic illness cases per household, than non-poor households.

Table 5-1: Frequency and Types of Chronic Illnesses

	<20	20 – 55	>55	Total Palestinian	Total Lebanese
	%	%	%	%	%
Prevalence of chronic Illness					
Yes No Don't Know Type of chronic illness	10.07 89.79 0.13	32.94 67.06	83.32 16.68 -	31.1 68.8 0.10	17.4%* 82.6%*
Hypertension Back pain Asthma				32.32 9.26 8.50	13.8**
Diabetes Rheumatism Heart problems Epilepsy Other**				8.31 5.63 3.61 2.62 29.63	5.9%**

^{*}Latest Lebanese Data from Lebanese Household Survey 2004

Functional disability has also been a persistent feature of Palestinian refugee health. Assessing functional disability, the survey asked, "Do you suffer from a functional disability?" and, if so, "What is it?" Findings for this indicator are shown in Table 5-2. The prevalence of functional disability was 4% among respondents. The two most reported disabilities were paralysis (15%) and disability of extremities (30%: excludes paralysis and amputations). Blindness (9%) and deafness (8%) were also common.

As should be expected, age played an important role in mediating the prevalence of disabilities. The youngest group (under 20) was least likely to report functional disability (2%), while the middle group reported over twice as many (5%), and people above the age of 55 were 5 times as likely to report (10%) to report this indicator. Disability was a product of three common causes: war (19%), accidents (20%), and birth defects (30%).

The Lebanese population has half the rate of disability cases (2%) than the Palestinian refugee population in Lebanon (4%) the reasons behind this difference cannot be traced since Lebanese disability data is not dis-aggregated by illness. The one indicator that may explain the difference is that more slightly disabilities among Palestinian refugees are caused by accidents (20%) as compared to the Lebanese (18%). Disability caused by work is suspected to be higher among Palestinians since, as outlined in chapter 1, they are generally employed in more precarious occupations than their Lebanese counterparts. Both the Palestinian refugee population and the Lebanese population have a similar percentage of disabilities due to birth defect, 30% for the former and 31% for the latter.

^{**} Latest Lebanese Data: Sibai AM and Hwalla N. WHO STEPS Chronic Disease Risk Factor Surveillance: Data Book for Lebanon, 2009. American University of Beirut, 2010.

^{***} Other chronic illness include cholesterol, chest pains, heart arrest, stroke, anemia, prostate, cancer, osteoporosis, kidney problems, Thalessemia, autism, down's syndrome, schizophrenia, mental madness.

Table 5-2: Frequency and Types of Functional Disability

	<20	20 – 55	>55	Total Palestinian	Total Lebanese*
	%	%	%	%	%
Prevalence of functional disability					
Yes No Reported functional disability	2.2 97.8	4.64 95.36	9.63 90.37	4.4 95.6	2.0%* 98%
Disability of extremities – excluding paralysis and amputations) Paralysis Blindness Deafness Amputation of extremities Inability to speak Other Missing Reason for functional disability				30.22 14.73 8.91 8.25 8.78 2.84 26.04 0.24	
Birth defects Accidents War Work Other Missing				29.63 19.93 18.58 8.37 23.27 0.22	30.7% 17.7%

^{*}Latest Lebanese Data from Lebanese Household Survey 2004

Comparing extreme poor and non-extreme poor based on prevalence of disability it is noteworthy that there is no significant difference between the two groups. However, the difference in disability prevalence between poor and non-poor is significant. About 1 in 4 extreme poor households have a disability case in the household, whereas only 1 in 7 non-extreme poor households do.

5.2.2 Acute Illnesses

Acute illnesses often occur without warning and, therefore, are difficult to plan for. Acute illness encompasses any sickness—ranging from the common cold, to bronchitis or severe food poisoning—that is non-chronic. While chronic illnesses can be debilitating over the lifecycle, acute illnesses may pose catastrophic short-term consequences. This is especially true of more severe acute illnesses, which may leave the sufferer with lost time from work or other responsibilities and substantial medical bills to pay off. The more serious acute illnesses have the potential to lead individuals and families who are near the poverty further into abject poverty.

The questionnaire item addressing acute illness asked respondents to answer, "Did you suffer from an acute illness in the past 6 months?" If they answered yes, they were asked to further identify which type of illness they experienced. Table 5-3 includes information on the frequency and types of acute illnesses reported. Population wide, prevalence was high (24%), although this percentage gained precipitately among the older population. Among both the youngest and middle age group, 6 month prevalence was 23% and 22% respectively. The rate, however, was 36% among those 55 years and older, more than a 50% increase over the other age groups. The most common types of illnesses reported were

cold/flu and other respiratory problems (36%), gastrointestinal (19%), musculoskeletal (9%), and urinary/reproductive problems (6%).

Table 5-3: Frequency and Type of Acute Illnesses

		AC	GE	
	<20	20 – 55	>55	Total
	Percent (%)	Percent (%)	Percent (%)	Percent (%)
Prevalence of acute illness in the				
past 6 months				
Yes	23.16	22.14	36.69	24.5
No	76.84	77.86	63.23	75.4
Don't know	-	-	0.076	0.10
Type of acute illnesses reported				
Cold/Flu				19.41
Gastrointestinal				18.59
Respiratory				17.24
Musculoskeletal				9.26
Urinary/Reproductive				5.98
Other				29.53

There is no significant difference between the extreme poor and non-extreme poor in terms of prevalence of acute illnesses. However, there is a minimal but significant difference between the poor and non-poor, with non-poor households having an average of about 1.1 acute illnesses and poor households having 1.3 in the past 6 months. Further analysis of acute illnesses by area and housing follows in the next sections.

5.2.3 Psychological Problems

To assess mental illness, the survey asked the proxy respondent to report psychological problems of household members during the last 12 months. These issues were relatively common among those surveyed, nearly 21% reporting experiences of depression, anxiety, distress, or other illness (shown in Table 5-4). Prevalence varied dramatically by age, the oldest age group reported problems over four times as frequently (36%) compared to the youngest group (8%). 27% of the middle age group reported experiences of depression, anxiety, distress, or other illness.

Palestinian refugees in Lebanon have lived through several stressful events within their community: the events and legacy of the Lebanese Civil War, recent military incursions, and lingering political tensions in Lebanon over Palestinian rights. The persistence of conflict and the general malaise of poverty and poor living conditions facing many refugees likely place an undue burden of stress on many of these communities. This may be especially true of the older generation, which has lived through many conflicts in the last half century.

There are no significant differences in the rate of psychological problems among the poor (including extreme poor) and non-poor. Poverty levels seem unrelated to self-reported mental health.

Table 5-4: Frequency of Psychological Problems

		AGE				
	<20	20 – 55	>55	Total		
	Percent (%)	Percent (%)	Percent (%)	Percent (%)		
Prevalence of Psychological problems in the past 12 months						
Yes	8.10	26.57	35.91	20.65		
No	91.05	73.10	63.56	78.78		
Don't know	0.85	0.33	0.53	0.57		

5.2.4 Self-rated Health

Self-rated physical health is another indicator commonly used to assess community health. Many studies have found it as an effective predictor of morbidity and mortality, especially later in life (Jylhä 2009) . The survey question assessing self-reported health asked, "In general, how do you rate your health?" with possible answers being "very good" and "good", "average", and "not good" or "not good at all". The results in Table 5-5 show a substantial disparity between men and women. Men reported "very good" or "good" health 31% of the time compared to 18% of women. Reports of "average" health were relatively similar among the two groups, 43% and 35% for men and women, respectively. However, there was a stark difference in reports of "not good" or "not good at all" health: 47% of women reported in these two categories as opposed to 26% of men. This finding is consistent with the international literature on self-rated health.

Table 5-5: Self-Rated Health Information

	Male household head (76.51%)	Female homemaker (23.49%)	Total
Self-Rated Health (among household heads)	Percent (%)	Percent (%)	Percent (%)
Very good	4.44	2.47	3.98
Good	26.81	15.49	24.15
Average	42.56	35.04	40.79
Not good	19.03	<i>31.35</i>	21.92
Not good at all	7.15	<i>15.65</i>	9.15

5.2.5 Health Indicators by Gender and Area

Table 5-6 and Table 5-7 report frequencies of health indicators by gender and compares health indicators by region in Lebanon. Gender has consistently been a fault line of health outcomes, with several chronic and psychological health problems predominant among women more than men. This study found that women more frequently reported chronic illnesses, psychological problems, and poor self-rated health. On the other hand, men were more likely to report disability. The previous reports suggests that exposure to war was more frequent among men; however, war-related disability represented a relatively small proportion of disability among respondents to the recent survey.

Table 5-6: Health by Gender

		Gender	
	Males (47%)	Females (53%)	Total
	(%)	(%)	(%)
Prevalence of chronic Illness			
Yes	29.44	32.41	30.55
No	69.95	66.96	67.45
Missing	0.617	0.638	2.00
Prevalence of functional disability			
Yes	5.91	2.93	4.28
No	92.67	95.78	93.04
Missing	1.41	1.29	2.69
Prevalence of acute illness in the			
past 6 months			
Yes	23.71	24.6	24.48
No	74.89	73.88	75.51
Missing	0.022	0	0.01
Prevalence of Psychological			
problems in the past 12 months			
Yes	18.98	22.22	20.65
No	80.36	77.28	78.78
Don't know	0.66	0.49	0.57

Chronic illnesses and psychological problems were most frequently reported in Central Area camps and gatherings. However, incidence of chronic illnesses does not vary much in magnitude across regions. The difference between them is significant but rather small. As for the refugee communities in the North, they reported the lowest rates of nearly all illness indicators and also had the best self-rated health. This is related to the fact that Palestine refugees in the North have better living conditions than those in other areas as outlines in earlier chapters.

Communities in the Bekaa reported similar rates as Saida and Tyre on all illness indicators except for acute illness, which were twice as frequent (46%) in the Bekaa compared to Saida (23%) and Tyre (20%). The Bekaa had by far the highest incidence of cold and flu illnesses in the past 6 months (37%), which may explain the high prevalence of acute illnesses in the Bekaa. In this instance the prevalence of acute illnesses probably unrelated to poverty status, but due to natural climatic causes . Self-rated health was relatively similar across all areas, although residents of the Central Area and Tyre (both at 33%) experienced slightly higher reports of "bad" or "very bad" ratings—compared to the other regions.

Table 5-7: Health by Region

	No	North Central Area		Saida		Tyre		Bekaa		
	% within region	% across Lebanon	% within region	% across Lebanon	% within region	% across Lebanon	% within region	% across Lebanon	% within region	% across Lebanon
Chronic Illness	24.4	15.6	35.5	25.1	32.4	27.9	31.3	27.7	30.8	3.8
Disability	3.2	14.5	5.5	27.2	5	30.3	3.8	24.3	4.3	3.7
Acute Illness	19.4	15.9	32.5	29.1	23.2	25.3	20.2	22.5	46	7.2
Self reported Mental Health	19.3	18.5	34.6	36.6	13.9	17.6	16.3	21.7	31	5.7

Note on how to read the table: 30.8% of residents in the Bekaa have a chronic illness but this only represents 3.8% of chronically ill across Palestinians living in Lebanon since the population size is small.

5.2.6 Health Expenditures

As shown in Table 5-8, all households with an illness have a higher household health expenditure than those without illnesses in the household. This difference is significant at the 5% level for household health expenditure in households with a chronic illnesses or psychological problems and significant at the lower 10% level for households with a disability. However, the difference in expenditure was not significant for acute illnesses.

The proportion health expenditure represents in the total household budget is important to assess the actual weight health expenses represent for the household. Those with a chronic illnesses case in the family spend more money than those without, the amount of money spent on health represents about 15% of their total expenditure; whereas, those without a chronic illnesses allocate only 6% of their expenditure to health. The same applies for all types of illnesses; those with an illness spend more on health from their total expenditure. This chimes with observations made in chapters 3 and 4, which found that households with ill members, especially when the head of household is affected, are more likely to be poor. For acute illnesses, the difference in expenditure is not significant. This is mainly because acute illnesses are those that are sudden thus causing expenditure values to fluctuate.

When looking at the total health expenditure amount across camps, there is no significant difference between camps and gatherings. However, considering the share of health expenditure in total expenditure there is a small and only somewhat significant difference (at the 10% level) between camps and gatherings, indicating that those living in camps spend 12% of their budget on health while those living in gatherings spend 11%. This is in line with the findings from chapter 3, which showed that people living in camps are poorer implying that their total household income is less than that in gatherings, even though the absolute amounts they spend on health are similar.

Table 5-8: Prevalence of Illness by Total Imputed Household Expenditure

	Health Expenditure/ Month Mean (USD)	Share of Health Expenditure from Total Expenditure (%)
Prevalence of chronic Illness		
Yes	139.4***	14.7***
No	88.5***	6.2***
Prevalence of disability		
Yes	168.4**	15.2***
No	125.1**	10.9***
Prevalence of acute illness		
Yes	141.4	12.4***
No	116.6	10.4***
Prevalence of psychological problems		
Yes	162.5***	13.6***
No	106.8***	10.1***

^{***} Significant at 5% **Significant at 10%

The average share of health expenditure for Palestine refugees from total expenditure across Lebanon is 12%. In the North, this percentage is 6% which is the lowest among all areas. Tyre, showed the highest share of health expenditure, 14%, whereas health spending in the other areas fall around the average. In comparison, the Lebanese population spends an average of 14% of their total expenditure on health (Ammar, 2003). However, this may be an effect of their superior wealth, since health expenditure as an absolute amount as well as in terms of share in total spending is known to increase with income; whereas the share of other goods such as food or utilities for example, decreases as income increases. Intuitively, wealthier households can afford better health care but will still spend the same amount on potatoes as a poor family of similar size does. Examining the amount of health expenditure, Palestinians spend on average \$132 on health while the Lebanese spend \$343 in 2003 (Ammar, 2003); which is more than double of that spent by Palestine refugees. This shows that difference in health expenditure far exceeds the difference in the share health expenditure represents in the total household budget.

Looking further into the specific camps and gathering, those with the highest share spent on health are Al-Buss, Mar Elias, and Burj el Shemali Camps, and those living in the gatherings surrounding Burj el Shemali and Sabra and Ard Jalloul. The high share spent on health in Mar-Elias and Buss Camp can be explained by their small size, a few high cost patients are likely to inflate averages, which would be evend out in larger samples. Still, Burj el Shemali, its surroundings as well as Sabra and Ard Jalloul all have expenditures close to the average and yet represent proportionately above average of their total expenditure. In addition, of the five areas that spend the highest budget share on health, three are located in Tyre. This suggests a policy focus on Tyre and potentially CLA gatherings.

When comparing Nahr El Bared and Beddawi Camps, there was no difference in expenditure. Though those who have been displaced by the destruction of Nahr el Bared receive full health care, many of those displaced actually live in gatherings or Beddawi camp, the survey does not to distinguish between long term residents and recently displaced. However, the share health care spending in the North is very low when compared to other areas.

5.3 HEALTH SERVICES AVAILABLE TO PALESTINIANS REFUGEES

Palestinians receive health services from a wide variety of care providers, though mainly from the United Nations Relief and Works Agency (UNRWA), Palestinian Red Crescent Society (PRCS), non-governmental organizations (NGOs), and private clinics.

Past studies on health care utilization have identified UNRWA as the primary provider of health services to Palestinian refugees in Lebanon. UNRWA provides primary health care services to refugees by way of 29 health centers located in areas with high densities of Palestinian refugees. The services provided by these centers include walk-in general consultations, maternal and child health care services, treatment of chronic diseases, and provision of medications. Many centers also have specialists, dental, and laboratory services available. UNRWA provides most secondary and limited tertiary care services to its constituents,

The PRCS and NGO health centers generally run health clinics focused on providing primary care, along with minimal curative care services. The primary difference between UNRWA and other health providers is that UNRWA provides medications to its patients. The results of this survey showed

that hose with acute illnesses accessed medical services from a wide variety of providers. This information is provided in Table 5-9. The most frequent visits were to the UNRWA clinics (32%), followed by private clinics (24%), Palestinian Red Cross (10%), Hospitals (9%), and hospitals subcontracted with UNRWA (9%).

Table 5-9: Health Service Providers and Hospitalization Information for those who Had an Acute Illness in the Past 6 Months

	Percent (%)
Accessed medical services	
UNRWA clinic	32.20
Private clinic	24.33
Hospitals	9.21
Palestinian Red Cross	10.46
Hospital affiliated to UNRWA	9.19
Other clinics	8.51
Didn't go to any hospital	4.57
Other	1.54

A total of 35% of households reported hospitalization of at least one household member during the past six months. A similar proportion of households (38%) reported doctor visits due to an acute illness. 57% of households reported doctor visits or medical expenses due to chronic illness. 5% of households report doctor or medication expenses due to a disability. This indicates that chronic illness is the most frequent motivation for seeking medical advice.

5.3.1 Cost and Expenditure

Although all refugees registered with UNRWA have access to basic health service, insurance is a valuable asset allowing families flexibility in choosing a care provider and affording services partially or not covered by UNRWA. On average, households paid \$614 over the past 6 month for hospital visits, \$164 for doctor consultations for acute illnesses, \$137 for chronic illnesses, and \$262 dollars for households reporting disability.

Table 5-10 contains information on insurance and health care costs for Palestinian refugees. The vast majority of refugees (95%) do not have insurance in addition to UNRWA's coverage. Private insurance covered 5% of respondents, while only 1% benefited from public insurance. About half of the Lebanese employed (52%) and nearly a quarter of unemployed (21%) have health insurance (LNHS, 2007). A large proportion of Lebanese rely on Public Insurance, such as the NSSF, the army or cooperatives, which Palestine refugees do not have access to. Those without insurance rely on the Ministry of Public Health (MoH) for coverage. The Ministry covers hospitalization, mainly tertiary but also secondary cases. Once requested they directly pay 85% of the bill to hospitals and the remaining 15% is a co-payment, though this is sometimes exempt. Moreover, MoH dispenses expensive drugs for catastrophic illnesses and provides vaccines and essential drugs to public and NGOs health centers (Ammar, 2003). For primary and secondary health care the un-insured Lebanese usually visit NGO or private clinics. In many ways the public health care provision offered by MoH follows the opposite strategy to that followed by UNRWA,

by focusing on tertiary and some secondary hospitalization but not providing primary or secondary outpatient services. Each system satisfies different policy objectives that have to be set by the provider. Due to the socio-economic differences of the Lebanese and Palestinian populations a direct statistical comparison of the merits of both systems is unreliable.

Table 5-10: Insurance and Expenditure on Health

	Palestinian Population	Lebanese Population
	Percent (%)	Percent (%)
Type of insurance		
No insurance	94.29	53.3
Private	4.54	4.8
Public	1.17	38.4
	Mean	
Household payment (in USD) for illness		
Hospital visit in past 6 months	614.240	
Non Chronic illness in past 6 months	164.400	
Regular doctor visits or medication for chronic illness	137.119	
Regular doctor visits or medication for disability	262.148	

Table 5-11 indicates the likelihood and source of financial assistance for health care expenditures. 29% percent of those who were hospitalized received financial help from relatives and friends, for acute illness cases this was at 39%. Organizations (including UNRWA) were the primary benefactors assisting those in need. These sources contributed to hospital payments 75% of the time (numbers supersede 100% as some respondents received assistance from multiple sources) and helped beneficiaries with acute illnesses in 61% of cases. UNRWA was the main provider among all organizations for both hospitalized (75%) and acute (61%) cases. Meanwhile, among respondents visiting a doctor or taking medication for chronic illnesses (57% of which received help), 42% received assistance with payment, coming primarily from organizations (71%) and relatives/friends (33%). Of the organizations that assisted chronically ill patients, 79% received this assistance from UNRWA. This can be explained by the fact that UNRWA provides free consultations and medications for these primary cases. Among people with disability, financial assistance was less frequently granted for doctor visits or medication, present in only 32% of responses. Organizations still were the most common sponsor of disability care costs, supporting approximately 58% (47% UNRWA) of those seeking care, while 39% of respondents received assistance from friends or relatives. Compared to the assistance UNRWA gives in hospitalized, acute, and chronic cases, it gave the least assistance to disabled patients. UNRWA covers up to 30% (or a maximum of \$500) for prosthesis and implants (these include for example screws & plates, mesh, nails, clips etc.). Assistance for health cases that did not originate from UNRWA was larger for disability cases. However, for all other cases the main source of aid was UNRWA.

Table 5-11: Prevalence and Source of Financial Contributions to Health Services

	%
Hospital visits in the past 6 months (n=54,810)	
Yes	35.47
No	64.53
Financial assistance with hospital visit in the past 6 months (n=19,440)	01.33
Yes	61.24
No	38.76
Contributors who financially assisted with hospital visits in past 6 months (n=11,693)	
Relative	21.19
Friend/neighbor	7.72
Association/organization	76.29 (75% of which
	was UNRWA
N 01 : 11 : 11 : 10 : 11 (54077)	assistance)
Non Chronic illness in the past 6 months (n=54,977)	00.00
Yes	38.36
No Financial assistance with Non Chronic illness in the past	61.64
6 months (n=20,523)	
Yes	26.25
No Contributors who financially assisted with Non Chronic	73.75
Contributors who financially assisted with Non Chronic illness in the past 6 months (n=5,388)	
Relative	33.01
Friend/neighbor	6.16
Association/organization	60.74 (61% of which
Association/organization	was UNRWA
	assistance)
Regular doctor visits or medication for chronic illness	acciotarioc)
(n=55,065)	
Yes	57.53
No	42.47
Financial assistance with regular doctor visits or medication for chronic illness (n=30,955)	
Yes	41.70
No	58.30
Contributors who financially assisted with regular doctor visits or medication for chronic illness (n=12,908)	
Relative	28.54
Friend/neighbour Association/organization	4.22 70.73 (71% of which
Association/organization	was UNRWA
	assistance)
Regular doctor visits or medication for disability (n=54663)	assistance)
Yes	5.23
No	94.77
Financial assistance with regular doctor visits or	
medication for disability (n=2,724)	
Yes	31.6
No	68.4
Contributors who financially assisted with regular doctor visits or medication for disability (n=860)	
Relative	25
Friend/neighbor	14
Association/organization	58 (47% of which was
	UNRWA assistance)

^{*} Household percentages

5.4 HOUSING QUALITY

The health and wellbeing of communities depends much on the provision of adequate housing facilities that provide healthy living environments that supply basic needs and are free from hazard (Lawrence 2006)As knowledge in this field progresses, research has increasingly demonstrated the negative impact of poor housing conditions on health (Bonnefoy et al. 2003);(Habib et al. 2009); (Harpham 2009); (WHO 2004) . Dampness and the presence of molds within living environments has been linked to respiratory illnesses (Spengler et al. 2004) and crowding was also associated with the spread of infectious diseases (Krieger & Higgins 2002).

Several initiatives have been implemented to improve the housing quality of homes in camps and gatherings. Nearly 6% of households have benefited from UNRWA-sponsored housing renovation programs, the vast majority of which have occurred in Tyre. Comparatively, 4% benefited from non-UNRWA improvement programs, spread evenly across both camps and gatherings. For data on housing indicators, refer to Table 5-12.

Table 5-12: Frequency Table on Housing Indicators*

	Percent (%)
Household benefited from UNRWA housing improvement programs (n=57977)	
Yes	5.62
No	89.44
Missing	4.94
Household benefited from non-UNRWA housing improvement programs (n=57978)	
Yes	3.93
No	90.33
Missing Type of walls in the house (n=57977)	5.74
` /	
Cemented stone and painted	84.62
Cemented stone	4.75
Building stone	5.22
Cement	4.71
Other (Wood, Absestos, Eternite) Type of roof in the house (n=55457)	0.70
Building stone	2.34
Eternite	7.51
Cement	89.1
Other (wood, Asbestos)	1.00
Humidity problems in the house (n=55119)	
Blotches on the wall	18.48
Blotches over 1 m ²	5.35
Water seeps through the walls	7.60
Water seeps through the ceiling	34.91
No problems	33.66
Fuel used for cooking (n=54993)	
Gas	97.44
Electricity	1.93
Other (kerosene, Diesel, Coal/Wood)	0.64
Crowding Index** (n=55435)	3.6.
<2	57.62
2-3	34.87
>3	7.51

^{*} Household Percentages

^{**} Crowding index is the number of people per room in the household.

The majority of homes had painted cemented stone walls (85%), while the rest had plastered stone (5%), building stone (5%), and cement (5%). A considerable majority of homes had cement roofing, and 8% used eternite. Dampness and leaks were also quite common, affecting 66% of homes. Eighteen percent of all homes had blotches on the walls and an additional 5% had blotches larger than a square meter. Water leaked through the ceiling in 35% of homes and reportedly leaked through walls in 8%. Housing features were relatively uniform across all areas, although households located in Tyre or Bekaa were over twice as likely to receive the benefit of UNRWA renovation programs, with 10% and 8% receiving assistance in Tyre and Bekaa respectively (compared to 4% in all other regions). Non-UNRWA renovation assistance programs were much more prevalent in the North and Central Area (6% and 4% each) compared to 3% in Saida and Tyre and 1% in Bekaa. There were no significant differences between housing indicators in camps and gatherings.

Table 5-13: Frequency of Housing Indicators by Area

					Α	rea				
	North		Central Area		Saida		Tyre		Bekaa	
	% within region	% across Lebanon	% within region	% across Lebanon	% within region	% across Lebanon	% within region	% across Lebanon	% within region	% across Lebanon
			Туре	e of Wall in	the Hous	e				
Cemented stone and painted	72.7	16.6	91.9	25	89.7	28.8	80.7	25.5	92.9	4.2
Cemented stone	4.1	16.6	1.2	5.6	7	39.8	6.4	36.4	1.9	1.6
Building stone	22.7	83.7	.2	.8	2.3	11.7	.7	3.8	0	0
Cement	.3	1.4	6.4	31.2	.1	.7	11.2	63.3	4.4	3.6
Wood	.2	29.4	.4	70.6	0	0	0	0	0	0
Asbestos	0	0	0	0	.4	86.5	0	0	.4	13.6
Eternite	0	0	0	0	0	0	.6	1	0	0
Other	0	0	0	0	.7	61.7	.4	33.7	.4	4.7
			Турє	of Roof i	n the Hous	se				
Building stone	0.02	1.6	1.1	10.7	7.4	85.1	.06	.7	1.2	1.9
Wood	0	0	0	0	1.2	88.5	0	0	1.2	11.5
Asbestos	0.3	16.2	0.2	12.7	0.5	42	0.4	29.1	0	0
Eternite	8.3	21.2	2.6	8.1	4.6	16.7	14.7	52.7	2.8	.01
Cement	91.2	19.7	96.1	24.8	85.8	26.1	84.3	25.5	94.5	.04
Other	0	0	0	0	0.05	43	0.06	52.1	0.04	37.7
			Humidit	y Problem	s on the H	louse				
Blotches on the wall	21.8	22.7	21.1	25.9	24.1	35.5	8.4	12.3	17.1	3.5
Big blotch, over 1 m2	7.5	27	6.8	28.9	6.5	33.1	1.8	9.1	2.8	2
Water seeps through the walls	7.6	19.3	9.3	27.8	6.1	21.8	7.5	26.6	9.1	4.5
Water seeps through the ceiling	25	13.8	25.4	16.6	26.6	20.7	58.5	45.3	33.4	3.6
No problems	38.2	21.8	37.4	25.24	36.7	29.6	23.8	19.1	37.6	4.2
			Fu	el Used fo	r Cooking					
Gas	99.5	19.5	97.3	22.8	95.2	26.6	98	27.2	99.2	3.9
Electricity	0.2	.2	2	22.4	4.3	60.7	1	15.5	0	0
Other (kerosene, Diesel, Coal/Wood)	.4	-	.8	-	.5	-	1	-	.8	-
				Crowding	Index					
<2	54.9	18.3	62.9	25	62.5	29.6	50.9	23.7	51.7	3.4
2-3	37.4	20.6	32.5	21.3	30.1	23.6	39.7	30.6	36.8	3.4
>3	7.7	19.6	4.6	14	7.4	26.7	9.5	33.9	7.5	5.8

Certain housing characteristics were related to increased prevalence of specific health problems. Refer to Table 5-13 for a comprehensive comparison of housing quality indicators and health. Homes with walls built of stone were least likely to house individuals reporting chronic illness. However, those with wood, eternite, or asbestos in their walls had the highest prevalence of chronic illnesses (100%). This can be a result of the small number of shelters that use these substances for construction. Households also reported lower rates of psychological problems when their roofs were made of building stone. Like the walls, if the roof was made from either of wood, asbestos, or eternite, chronic illnesses were more prevalent within the household. Homes that leaked from their ceiling were more likely to house individuals with chronic illness, while homes with big blotches on their walls housed more individuals reporting psychological problems and acute illnesses. Additionally, households benefiting from either UNRWA or other home renovation programs were slightly more likely to report every type of health problem. This pattern probably has nothing to do with the quality of these renovations, but rather is a reflection of the relative poverty and dismal state of previous shelters of those seeking housing assistance compared to larger refugee population. The only other housing indicator which reached significance was overcrowding, as homes with more than 3 people per room resulted in higher rates of acute illness and functional disability. Literature shows that families using kerosene, wood, or coal as fuel for cooking are more likely to have acute illnesses (especially among children) (Mishra 2003). This is true of our survey as acute illnesses vary between 86 and 100 percent prevalence for families that use any one of these three fuels.

Upon assessing the type of walls within and across camps, the vast majority have cement walls. Eighty-six percent of those that have asbestos in their walls reside in Saida. It is important to insure that the residents of these homes are not directly exposed to the asbestos as it is carcinogenic (see discussion below) (Frost et al. 2008). The "Other" category mainly consisted of sand stone material. The main material used for ceilings is cement. However, again attention must be paid to asbestos ceilings. An alarming 59% of those living in Tyre complain of water leaking through the ceiling. The highest rates were among residents of Rashidiyeh Camp. This figure represents 45 percent of the total percentage of all those suffering from leaks in ceilings. Moreover, the majority of refugees have problems with humidity. The most used fuel for cooking is gas, but there are some that use kerosene, diesel, coal, and wood. The use of these fuels in households is linked to acute respiratory illnesses, which is also depicted in Table 5-13. As for overcrowding, the highest rates within areas are in the Bekaa. This is because overcrowding is very high in Wavel Camp. However, when comparing absolute numbers, then Ain el Helwe and Rashidiyeh have more instances of overcrowding. A total of about 8% of households experience overall "bad" housing conditions and overcrowding.

Table 5-14: Health Problems by Housing Indicators*

	Chronic	Disability	Acute illness	
	illness in HH	in HH	in HH	Psychological problems in HH
	Percent (%)	Percent (%)	Percent (%)	Percent (%)
Type of walls in the house				
Cemented stone and painted	76.11	15.81	58.91	43.05
Cemented stone	80.10	24.33	69.42	48.32
Building stone	65.30	14.93	55.87	41.46
Cement	85.33	19.38	59.97	31.50
Wood	100.00	29.42	34.15	0.00
Asbestos	100.00	13.55	71.18	28.82
Eternite	100.00	0.00	66.66	66.69
Other	83.95	10.27	56.01	32.60
Type of roof in house				
Building stone	72.62	31.40	44.35	19.30
Wood	87.71	20.75	58.40	42.28
Asbestos	82.49	14.38	59.69	51.19
Eternite	83.57	17.48	63.14	39.44
Cement	75.65	15.76	59.41	43.47
Other	100.00	21.51	70.74	61.70
Humidity problems at the				
house				
Blotches on the wall	77.72	17.20	59.44	34.82
Big blotch, over 1 m2	77.91	22.30	59.61	61.84
Water seeps through the walls	77.21	17.52	65.71	54.73
Water seeps through the	80.02	17.01	59.92	43.42
ceiling	80.02	17.01	59.92	43.42
No problems	70.81	13.72	57.13	40.64
Fuel used for cooking				
Gas	76.22	16.26	59.51	42.41
Kerosene	76.25	34.22	86.36	70.26
Electricity	82.88	16.80	52.24	42.41
Mazoot / diesel	100.00	0.00	36.56	36.56
Coal/wood	100.00	28.94	100.00	100.00
Other	100.00	16.26	100.00	100.00
Crowding Index**				
<2	75.92	13.62	55.87	41.62
2-3	75.50	19.30	63.49	44.05
>3	82.97	22.82	66.65	43.96

^{*} Percentages indicate the proportion of those reporting an illness within each category (Household percentages)

^{**} Crowding index is the number of people per room in the household.

APPENDIX 1:

We have adapted the ILO International Standard Classification of Occupations as follows:

- 1. Legislators, senior officials and managers were grouped with professionals under our professionals' definition.
- 2. Clerks and associate professionals were also grouped together.
- 3. As for the armed forces, these are Lebanese men who are enrolled in the Lebanese Army but are married to Palestinian women. However they make up less than 1%.
- 4. Armed forces and skilled agriculture workers were grouped under the 'other' category in some analyses as they are both below 1%.

INTERNATIONAL STANDARD CLASSIFICATION OF OCCUPATIONS (ISCO-88)

Major Group 1 Legislators, senior officials and managers

- 11. Legislators and senior officials
 - 111. Legislators
 - 112. Senior government officials
 - 113. Traditional chiefs and heads of villages
 - 114. Senior officials of special-interest organisations
- 12. Corporate managers ¹
 - 121. Directors and chief executives
 - 122. Production and operations department managers
 - 123. Other department managers
- 13. General managers ²
 - 131. General managers

Major Group 2 Professionals

- 21. Physical, mathematical and engineering science professionals
 - 211. Physicists, chemists and related professionals
 - 212. Mathematicians, statisticians and related professionals
 - 213. Computing professionals
 - 214. Architects, engineers and related professionals
- 22. Life science and health professional
 - 221. Life science professionals
 - 222. Health professionals (except nursing)
 - 223. Nursing and midwifery professionals
- 23. Teaching professionals
 - 231. College, university and higher education teaching professionals
 - 232. Secondary education teaching professionals

- 233. Primary and pre-primary education teaching professionals
- 234. Special education teaching professionals
- 235. Other teaching professionals

24. Other professionals

- 241. Business professionals
- 242. Legal professionals
- 243. Archivists, librarians and related information professionals
- 244. Social science and related professionals
- 245. Writers and creative or performing artists
- 246. Religious professionals

Major Group 3 Technicians and associate professionals

- 31. Physical and engineering science associate professionals
 - 311. Physical and engineering science technicians
 - 312. Computer associate professionals
 - 313. Optical and electronic equipment operators
 - 314. Ship and aircraft controllers and technicians
 - 315. Safety and quality inspectors
- 32. Life science and health associate professionals
 - 321. Life science technicians and related associate professionals
 - 322. Modern health associate professionals (except nursing)
 - 323. Nursing and midwifery associate professionals
 - 324. Traditional medicine practitioners and faith healers
- 33. Teaching associate professionals
 - 331. Primary education teaching associate professionals
 - 332. Pre-primary education teaching associate professionals
 - 333. Special education teaching associate professionals
 - 334. Other teaching associate professionals
- 34. Other associate professionals
 - 341. Finance and sales associate professionals
 - 342. Business services agents and trade brokers
 - 343. Administrative associate professionals
 - 344. Customs, tax and related government associate professionals
 - 345. Police inspectors and detectives
 - 346. Social work associate professionals
 - 347. Artistic, entertainment and sports associate professionals

348. Religious associate professionals

Major Group 4 Clerks

- 41. Office clerks
 - 411. Secretaries and keyboard-operating clerks
 - 412. Numerical clerks
 - 413. Material-recording and transport clerks
 - 414. Library, mail and related clerks
 - 419. Other office clerks
- 42. Customer service clerks
 - 421. Cashiers, tellers and related clerks
 - 422. Client information clerks

Major Group 5 Service workers and shop and market sales workers

- 51. Personal and protective services workers
 - 511. Travel attendants and related workers
 - 512. Housekeeping and restaurant services workers
 - 513. Personal care and related workers
 - 514. Other personal service workers
 - 515. Astrologers, fortune-tellers and related workers
 - 516. Protective services workers
- 52. Models, salespersons and demonstrators
 - 521. Fashion and other models
 - 522. Shop salespersons and demonstrators
 - 523. Stall and market salespersons

Major Group 6 Skilled agricultural and fishery workers

- 61. Market-oriented skilled agricultural and fishery workers
 - 611. Market gardeners and crop growers
 - 612. Market-oriented animal producers and related workers
 - 613. Market-oriented crop and animal producers
 - 614. Forestry and related workers
 - 615. Fishery workers, hunters and trappers
- 62. Subsistence agricultural and fishery workers
 - 621. Subsistence agricultural and fishery workers

Major Group 7 Craft and related trade workers

- 71. Extraction and building trade workers
 - 711. Miners, shotfirers, stone cutters and carvers
 - 712. Building frame and related trades workers
 - 713. Building finishers and related trades workers
 - 714. Painters, building structure cleaners and related trades workers
- 72. Metal, machinery and related trades workers
 - 721. Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers
 - 722. Blacksmiths, tool-makers and related trades workers
 - 723. Machinery mechanics and fitters
 - 724. Electrical and electronic equipment mechanics and fitters
- 73. Precision, handicraft, printing and related trades workers
 - 731 Precision workers in metal and related materials
 - 732. Potters, glass-makers and related trades workers
 - 733. Handicraft workers in wood, textile, leather and related material
 - 734. Printing and related trades workers
- 74. Other craft and related trades workers
 - 741. Food processing and related trades workers
 - 742. Wood treaters, cabinet-makers and related trades workers
 - 743. Textile, garment and related trades workers
 - 744. Pelt, leather and shoemaking trades workers

Major Group 8 Plant and machine operators and assemblers

- 81. Stationary plant and related operators
 - 811. Mining and mineral-processing-plant operators
 - 812. Metal-processing-plant operators
 - 813. Glass, ceramics and related plant-operators
 - 814. Wood-processing-and papermaking-plant operators
 - 815. Chemical-processing-plant operators
 - 816. Power-production and related plant operators
 - 817. Automated-assembly-line and industrial-robot operators
- 82. Machine operators and assemblers
 - 821. Metal-and mineral-products machine operators
 - 822. Chemical-products machine operators
 - 823. Rubber- and plastic-products machine operators
 - 824. Wood-products machine operators

- 825. Printing-, binding-and paper-products machine operators
- 826. Textile-, fur-and leather-products machine operators
- 827. Food and related products machine operators
- 828. Assemblers
- 829. Other machine operators and assemblers
- 83. Drivers and mobile plant operators
 - 831. Locomotive engine drivers and related workers
 - 832. Motor vehicle drivers
 - 833. Agricultural and other mobile plant operators
 - 834. Ships' deck crews and related workers

Major Group 9 Elementary occupations

- 91. Sales and services elementary occupations
 - 911. Street vendors and related workers
 - 912. Shoe cleaning and other street services elementary occupations
 - 913. Domestic and related helpers, cleaners and launderers
 - 914. Building caretakers, window and related cleaners
 - 915. Messengers, porters, doorkeepers and related workers
 - 916. Garbage collectors and related labourers
- 92. Agricultural, fishery and related labourers
 - 921. Agricultural, fishery and related labourers
- 93. Labourers in mining, construction, manufacturing and transport
 - 931. Mining and construction labourers
 - 932. Manufacturing labourers
 - 933. Transport labourers and freight handlers

Major Group 0 Armed forces

- 01 Armed forces
 - 011 Armed forces

APPENDIX 2: Summary demographic data by area

	Average Age	Male	Female	Household Size
North	28.9	46.4	53.6	5.4
Beddawi Camp	28.7	45.2	54.8	5.4
NBC	26.5	47.4	52.6	5.6
Zahriyeh	37.6	45.7	54.3	4.8
El Mina	35.5	44	56	4.4
Jabal Beddawi & Beddawi Village	28.6	48.1	51.9	5.7
CLA	31.5	47.8	52.2	5.1
Dbayeh Camp	38.6	55.6	44.4	4.5
Mar Elias Camp	29.3	45.8	54.2	5.3
Shatila Camp	27	48.6	51.4	5.5
B/B Camp	29.8	48.9	51.1	5.3
Haret Hreik & Mreije	34.3	43.2	56.8	5.1
B/B Village	36.2	44.3	55.7	4.7
Jnah	30.8	45.8	54.2	4.6
Sabra Shatila & Ard Jallul	30.3	52.1	47.9	5.2
Tareeq el Jedide	37.5	47.3	52.7	4.6
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Naameh & Haret Naameh	25.1	43.3	56.7	6.1
Aramoun	23	51.1	48.9	5.3
Saida	30.7	46.8	53.2	5.4
Mia Mia Camp	29	47.6	52.4	5.3
Ain el Helweh Camp	30.5	46.7	53.3	5.5
Taameer & Villat	27	52.6	47.4	6
Old Saida Town	28.4	42.3	57.7	5.6
Dallaa, Hay Zuhour	33.6	45.3	54.7	4.9
Al Barrad	38.1	50	50	5.1
Wadi Zeineh	30.3	46.2	53.8	5.5
Tyre	29.8	47.5	52.5	5.8
Rashidiyeh Camp	30.2	46.8	53.2	5.5
Burj el Shemali Camp	28.8	46.4	53.6	5.8
Buss Camp	31.9	43.7	56.3	5.6
Chabriha	30.4	48.7	51.3	6.5
Jal el Bahr	28.6	50.7	49.3	5.5
Qasmiyeh	29.7	49.1	50.9	7.5
Burj el Shemali surr., Masaken	28.5	54	46	6
Bekaa	30.5	47.1	52.9	5.5
Wavel Camp	30.4	46.4	53.6	5.7
Bar Elias Jalala, Taalabaya and Saadnayel	28.3 32	45.7 46	54.3 54	5.6 5.2

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