



# MULTI-SECTOR NEEDS ASSESSMENT OF SYRIAN REFUGEES RESIDING IN HOST COMMUNITIES

**IRAQ**

**ASSESSMENT REPORT**

**APRIL 2015**

## EXECUTIVE SUMMARY

REACH Initiative (REACH) has been actively supporting information management efforts undertaken by humanitarian actors in Iraq since September 2012 and was requested by the UNHCR to conduct a second Multi-Sector Needs Assessment (MSNA) of Syrian refugees living in camps and non-camps across territories under the control of the KRG.

Since September 2012, the territories under the control of the Kurdistan Regional Government have absorbed multiple bouts of large scale, protracted cross-border and internal displacement. According to the UNHCR's latest registration figures, more than 242,000 Syrian refugees – more than 98% of all refugees Iraq-wide – have been displaced to the territories under the control of the Kurdistan Regional Government. At present, approximately 91,000 individuals reside in formally managed camps, whilst the remaining 151,000 have opted to settle in host communities across the governorates and districts of Dahuk, Dahuk-administered Ninewa, Erbil and Sulaymaniyah<sup>1</sup>.

The latest, and most severe round, was an internal displacement crisis and although caused by the spillover of conflict from neighbouring Syria, displaced an estimated 1.6 million individuals. Of these, an estimated 1.2 million of these individuals now reside in the KRI, scattered across areas already hosting significant numbers of Syrian refugees. Each of these sub-groups faces a different set of opportunities and constraints which interact to determine welfare and vulnerability. That said, this multi-sector assessment report is an attempt at understanding what constraints and vulnerabilities affect Syrian refugees and how they shape resilience and humanitarian outcomes. All findings should be interpreted within the context of the wider regional displacement crisis, both protracted but continuous displacement from Syria, as well as the Iraq IDP crisis.

That said, the report presents findings and analyses across the sectors of demographics, protection, education, livelihoods, food security, health, shelter and WASH for refugees across 20 districts of the KRI as they relate to the Syrian refugee population. Although a camp-centric MSNA report is also to be published, these findings will not be discussed here but will instead be standardized to facilitate comparisons. Key findings from the non-camp assessment include, but are by no means limited to, the following:

- **Livelihoods:** Agricultural waged labour (38%) and skilled wage labour such as construction (24%) are the predominant modes of income generation. The most commonly reported impediment to finding gainful employment was an increase in labour market competition, particularly in areas acutely affected by the IDP crisis, indicating that labour market saturation – or at least perceived saturation – is already an issue in areas such as Dahuk. This is particularly the case for the majority of households engaged in agricultural and manual labour; largely informal, low-skilled professions susceptible to labour market substitution by internally displaced individuals. Over time, this is likely to lead to increased competition, deflation in real incomes and an increase in the application of progressively more severe and irreversible coping behaviours. An estimated 20% of all individuals aged 12 and above were working, indicating a high rate of dependency. High rates of child labour can be observed (**16%**), with male children far more vulnerable than female children. **Average incomes stood at nearly 600 USD, whilst average debt loads approached 1,000 USD.** Incomes were lowest in Sulaymaniyah, where debt-loads were also highest. The rate of application of coping behaviours were also highest here, with households resorting to selling assets to overcome resource constraints. Such inequalities between refugee households in Sulaymaniyah and the rest of the KRI can be observed across multiple sectors of intervention. Overall, 84% resorted to savings and 53% resorted to debt-fuelled consumption to supplement incomes. When savings are exhausted, the recourse to debt accumulation will likely become more prevalent, creating an acute risk of poverty traps. Given that Syrian refugees cannot own land in Iraq, current debt is

<sup>1</sup> UNHCR, Syria regional refugee response, [Inter-agency information sharing portal](#), accessed 24 February 2015.

unlikely to be sourced from formal financial institutions as debt cannot be collateralized with property and other assets of value. This leaves Syrian refugees vulnerable to predatory lending practices and associated protection concerns.

- **Social Cohesion:** Findings on social cohesion were overwhelmingly favourable, which is understandable given the ethnic and cultural affinities that Syrian refugees share with the hosting community of the KRI. Over 65% of households reported that hospitality levels in their areas of residence had remained the same, whilst over 20% reported that they had actually increased in the 3 months prior to the survey. An overwhelming majority of 90% also held favourable or neutral views of public service provision, suggesting that the additional demand for services generated by the IDP influx has not had the expected effect of stifling service provision or proliferating access barriers. Perceptions of levels of petty crime conformed to the same pattern, with over 65% of households reporting that they had remained constant and 25% reporting that rates of petty crime had actually decreased. The assessment found no significant rates of civil or legal disputes.
- **Food Security:** Food insecurity was not found to be prevalent at all, with less than 2% of households falling below the acceptable threshold for food consumption. Over 95% of households had two sources of food, whilst an estimated 70% had three different sources of food; WFP assistance and privately purchased food accounted for over 90% of primary food sources, with WFP assistance most common in Dahuk. WFP assistance is limited to camps, meaning that all non-camp refugees hold formal camp registration documents to access distribution points and gain access to the WFP assistance package. Although diversified food sourcing strategies engender resilience to food insecurity by hedging against exogenous shocks (including the sudden loss of a given food source), all households reported applying food-based coping behaviours to sustain food consumption in the week prior to the assessment. Less extreme coping mechanisms such as reliance on less expensive foods and limiting portion sizes were the most common reported coping strategies, suggesting that communal borrowing practices which disperse risk across multiple households attenuate the more severe food access problems.
- **Education:** Attendance rates in formal education are strikingly low across all districts, with **an estimated 46% of all school-aged children attending formal education across the KRI**. Attendance rates were comparatively lower for boys than girls, with 42% of all school-aged males attending school in comparison to 51% of all school-aged girls. **At an estimated 10%, males aged 15-17 exhibited the lowest attendance rates of any demographic group.** This exponential decline in attendance rates is likely attributable to the high rate of child labour within this demographic group, as well as linguistic differences; older school-age children were taught in Arabic in their areas of origin and the dialect of Kurdish which they grew up with is very different to the dialect taught in schools in the KRI. Perceived costs were also an issue; whilst schooling is free, indirect costs likely weigh heavily on the decision to discontinue formal schooling. These include outlays on clothing and transport, as well as the opportunity costs of schooling (money foregone by having older male children in school as opposed to working and generating an income).
- **Health:** At 70%, immunisation rates for polio were overall low and are indicative of a severe service coverage gap for the Syrian refugee sub-population. Immunisation rates were lowest in Sulaymaniyah, where 45% of at-risk minors aged 0-59 months were reportedly not vaccinated against polio, following a well-established trend observed across other sectors of intervention. Conversely, immunisation rates for measles for at-risk infants aged 9-24 months stood at 83% across the KRI. Immunisation coverage exceeded 90% in Dahuk (91%), Dahuk-administered Ninewa (100%) and Sulaymaniyah (100%), whilst it stood at 66% in Erbil governorate. Access to reproductive healthcare services was overall high at 90% across the KRI, although approximately 16% of pregnant women reportedly had no access to antenatal care in Dahuk and Ninewa governorates. Whilst this may be due to a lack of awareness of the importance of antenatal care, it may also be due to the fact that

the highest rates of non-access were in the more rural districts of Dahuk and Ninewa where proximity to specialized services is an issue. The rate of exclusive breastfeeding was also extremely low, averaging at an estimated 20% across the KRI, indicating nutritional problems for at-risk infants.

- **Protection:** 45% of all Syrian refugees were minors under the age of 18, whilst minors under the age of 12 accounted for an estimated 35% of all Syrian refugees. Acute protection concerns abound and do seem to contribute to outcomes in education, especially in regards to school attendance for girls and older boys. Access to child friendly spaces for boys and girls aged 3-17 is generally low, with an estimated third (34%) of children aged 3-17 having access to such spaces. Whilst girls to access child friendly spaces at a slightly higher rate than boys, such low rates of access are likely attributed to the fact that child friendly spaces are more difficult to access in a non-camp environment. All 20 districts of the KRI were found to host individuals not registered with UNHCR and an estimated 82% of individuals aged 12 and above were in possession of a KRI residency permit in Dahuk and Dahuk-administered Ninewa, whilst only 30% of those residing in Erbil governorate held residency permits.
- **Water, Sanitation and Hygiene:** Drinking water is overwhelmingly sourced from private municipal connections and water insufficiency does not seem to be an issue. Households using trucked water reported the highest rates of water insufficiency, spending, on average 3 days without water. Despite the fact that over 45% of households perceived that the water they consumed was not safe, half of these did nothing to treat their water before consumption. All households had access to showers and latrines.
- **Shelter and Housing:** The predominant type of accommodation was independently rented housing, used by over 80% of households. A substantial proportion (nearly 15%) also resided in shared/collective housing (shared by more than two families). The vast majority were paying rent (95%) at an average cost of 216 USD across the KRI (although this is far higher in major urban centres). **The cost of rent has risen by nearly 20% in Dahuk and 15% in Erbil since April 2014, indicating an acute and sudden onset housing market saturation.** In turn, given that half (51%) of households held either a written rental contract or a verbal rental agreement, whilst 12% were in possession of neither, a poor regulatory system is likely to allow this inflationary spiral to continue unabated. In the medium term, this will lead to increased outlays on housing, likely diverting resources from expenditure on other basic needs and increasing the rate of application of other coping behaviours to bridge gaps and hedge against rising costs.

With mounting pressure on housing and other infrastructure, ever increasing resource scarcity and an institutional shift to a developmental, resilience-centric approach, it is imperative that a coherent tool for vulnerability analysis is developed. Whilst inter-group cohesion – understood from the vantage point of Syrian refugees – does not appear to be under any great strain, this is not to say that the exponential increase in demand across ostensibly all sectors of intervention will not lead to tensions along well-documented socioeconomic cleavages. With labour market saturation, deflation in real incomes and inflation of housing costs, it is vital that humanitarian actors develop a clear and consistent understanding of the risks, constraints and above all, opportunities that Syrian refugees face if protracted displacement is to be prevented from deteriorating into chronic poverty. This is further compounded by the fact that **there seems to be a direct and positive correlation between the proportion of Syrian refugees that a given region hosts and the scope of service delivery and aid allocated. In other words, the regions which host more refugees are better off as the humanitarian response naturally gravitates towards a bigger caseload, leaving those residing elsewhere, namely in Sulaymaniyah, at the fringes of the intervention.** Against this backdrop, the findings and analyses presented herein are an attempt at contributing to a clearer understanding of needs.



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### About REACH

REACH is a joint initiative of two international non-governmental organizations - ACTED and IMPACT Initiatives - and the UN Operational Satellite Applications Programme (UNOSAT). REACH works to strengthen evidence-based decision making by aid actors through efficient data collection, management and analysis before, during and after an emergency. By doing so, REACH contributes to ensuring that communities affected by emergencies receive the support they need. All REACH activities are conducted in support to and within the framework of inter-agency aid coordination mechanisms.

For more information about REACH and to access our information products, please visit: [www.reach-initiative.org](http://www.reach-initiative.org). You can also write to us at: [iraq@reach-initiative.org](mailto:iraq@reach-initiative.org) and follow us @REACH\_info.

## Abbreviations and Acronyms

<b>ANC</b>	Ante-natal care
<b>FCS</b>	Food Consumption Score
<b>HCNA</b>	Host Communities Needs Assessment
<b>IDP</b>	Internally Displaced Person
<b>KRG</b>	Kurdistan Regional Government
<b>KRI</b>	Kurdistan Region of Iraq
<b>MCNA</b>	Multi-Cluster Needs Assessment (for IDPs)
<b>MSNA</b>	Multi Sector Needs Assessment
<b>NGO</b>	Non-Governmental Organization
<b>ODK</b>	Open Data Kit
<b>RRP6</b>	Regional Response Plan 6
<b>UNHCR</b>	United Nations High Commissioner for Refugees
<b>WASH</b>	Water, Sanitation and Hygiene
<b>WFP</b>	World Food Programme

## Geographical Classifications

<b>Governorate</b>	The highest administrative boundary below the national level. The KRI has 3 governorates, each of which controls disputed territory in Iraq
<b>District</b>	Governorates are divided into districts.

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## INTRODUCTION

This assessment was conducted with a view to firstly establishing a baseline in the aftermath of the internal displacement crisis across all sectors of intervention and second, enabling a time-series analysis once a third MSNA is conducted later in 2015. Given that the second round of the MSNA was larger in geographical coverage and sampled at a lower administrative boundary, significant comparisons cannot be made between the first and second rounds. Any comparisons presented here are indicative estimates only.

Given the scale of the displacement crisis, the combined weight of all displaced groups is and will continue to exact a toll on the already beleaguered public and private infrastructure of the KRI. With all borders – internal and external – tightly controlled and the arrival of new entries strictly regulated, the absorptive capacity of the KRI is not diminishing, it is likely exhausted. Moreover, with mounting pressure on employment and incomes, natural resources and housing, there has been a concerted effort to establish parallel structures and services to manage the needs of displaced groups in formal refugee and IDP camps. Ultimately, however, camps cannot house the totality of those displaced within the confines of the KRI and the additional demand that they generate for natural resources and services will have to eventually be met in non-camp settings, too.

That said, even as the combined effects of the displacement crises continue to heighten vulnerability and risk across all groups, the Syrian sub-population faces a particularly acute set of constraints. Although they maintain ethnic and cultural ties with the Kurdish majority of the KRI, they remain externally displaced and without the basic rights enshrined in citizenship (such as land ownership, for instance) or to a much lesser extent, residency, meaning that access to meaningful, sustainable employment and capital is, by default, limited. As they are progressively substituted or competed with by internally displaced Iraqis in segments of the labour market where Syrian refugees traditionally dominate – low waged, agricultural and skilled labour, for instance – their abilities to service their own needs will likely diminish, with negative consequences across all other welfare outcomes and indicators. This phenomenon is already embryonic and likely growing in sectors such as food security and livelihoods, where incomes are key to self-sufficiency.

Finally, inequalities persist even within the non-camp population in that there seems to be a direct and positive correlation between the proportion of Syrian refugees that a given region hosts and the scope of service delivery and aid allocated. The regions which host more refugees are better off as the humanitarian response naturally gravitates towards a bigger caseload, leaving those residing elsewhere, namely in Sulaymaniyah, at the fringes of the intervention. This applies to services such as vaccinations but also has tangible effects on incomes and food security, both of which are more fragile in Sulaymaniyah.

It is thus vital that future programming builds the capacity of refugees to avoid dependency on depleting humanitarian assistance, whilst pre-empting social conflict that might arise due to competition between different communities in the KRI. With this in mind, this assessment seeks to identify the predominant vulnerabilities and risks – as well as their determinants – across 20 districts of the KRI. The focus is primarily on areas that can contribute to resilience-based and sustainable programming, in order to better inform the humanitarian community and enable effective prioritization of assistance. The previous MSNA highlighted key issues that warrant particular attention, including food insecurity, insufficient and now declining incomes, strikingly low attendance rates in formal education and poor access to health services. This round of the MSNA has made it clear that each of these continues to be an issue for the Syrian refugee population as a whole and will attempt to build upon previous reasoning to determine why this is the case.

The first part of the report provides a detailed overview of the methodological approach designed and used by REACH for this assessment, including the challenges and limitations we faced over the course of the survey. The second part of the report outlines sector specific assessment findings on protection, education, livelihoods, food security, health, and water, sanitation and hygiene of refugees across 20 districts of the KRI. Again, due to methodological differences, meaningful and significant comparisons between the first and second round of the MSNA cannot be drawn, meaning that any comparisons across time presented henceforth are indicative only.

## METHODOLOGY

### Sampling

The sampling frame for this assessment was designed using the most recent UNHCR district and governorate level case registration figures to yield a **confidence level of 95% and a margin of error of 10% at district level and a confidence level of 95% and a margin of error of 5% at governorate level**. A total of 1,734 Syrian refugee households were interviewed to attain this level of significance.

In addition, the governorate level sample sizes were weighted to account for the uneven distribution of Syrian refugee households across districts, meaning that if a given district was found to host 10% of the total governorate population, then its relative sample size would also account for 10% of the total surveys required at **governorate level<sup>2</sup>, whilst also conducting enough surveys to maintain district level statistical significance**. So, whilst all data collection was conducted to yield a district-level statistical significance first, if a given district was found to host the majority of the target population, then additional surveys would be conducted to account for this disparity.

Finally, in order to maximize district-level coverage, districts where the number of households was believed to be less than 120 were fused into single sampling units and a district level sample was taken across all districts to ensure that it was representative of the target population across all fused districts. In Ninewa, the fused districts were Shekhan, Akre and Bardarash; in Erbil, the fused districts were Soran and Choman and in Sulaymaniyah, the fused districts were Halabja, Kalar, Darbadikhan, Dokan, Rania, Penjwin and Chamchamal. Going forward, the fused districts will henceforth be referred to as **Ninewa districts, Soran/Choman and Sulaymaniyah districts** for the purpose of the analysis presented here.

### Data Collection

Data collection was planned and conducted in three distinct phases between mid-December and mid-January. The first phase involved gathering input from sector partners and implementing agencies on the proposed list of indicators, whilst ensuring comparability with the previous round of the MSNA as well as the IDP MCNA and the HCNA. The sampling frame was also designed and approved during this phase.

Once the proposed list of indicators was finalized and approved by sector leads and partners, phase two was initiated. Phase two was a site profiling exercise where REACH field teams were deployed across all targeted districts to map clusters of Syrian refugee households, collecting the name of each city quarter, village or township and noting the approximate number of refugee households. This was done in preparation for actual data collection to ensure that household selection was sufficiently randomized and that enumerators spent less time physically searching for respondents. Whilst data collection at household level was random and probabilistic to ensure representativeness at both administrative boundaries, there was also an element of cluster sampling involved, although data collection within the clusters themselves was also randomized.

Once sufficient coverage was attained during the site profiling exercise, the third and final phase was initiated. Here, mixed-sex teams of REACH enumerators were trained in the questionnaire and in sampling technique across all bases. The entirety of data collection was done using ODK mobile data collection platform using smart-phone and GPS-enabled technology to reduce the incidence of inaccuracies and inconsistencies in the data collection, cleaning and analysis processes, whilst also enabling the geo-referencing of all collected data.

Finally, each refugee household surveyed was requested to answer a comprehensive, multi-sectoral survey designed to allow REACH to develop a dataset on the welfare, needs and vulnerabilities affecting Syrian refugee

<sup>2</sup> For a detailed breakdown of the sampling frame, please refer to Annex 1 of this report.

households and to inform any common response strategies. For the purpose of this assessment, a household was defined as a set of individuals or families sharing a corresponding set of shelters or a compound. Where appropriate, this was done on a self-defined basis<sup>3</sup>. No individual household or household identifiers were collected. This approach ensured households could provide information in confidence, thereby reducing respondent bias and mitigating any potential protection concerns which may arise as a result.

## Challenges and Limitations

The most significant logistical and to a degree, methodological, challenge faced by REACH was imperfect information regarding household locations which occurred during the data collection phase. Despite the site verification exercise which was conducted prior to the household survey and the fact that all necessary measures were taken to randomize data collection in the field, information gaps compelled REACH teams to adopt a convenience sampling approach in sparsely populated areas, meaning that respondents themselves were used as key informants to inform household selection. This, however, was the case only in exceptional circumstances such as the rural districts of Sulaymaniyah governorate.

The second limitation is the verification of the veracity of responses to certain questions. One example is that of vaccination rates; given the limited knowledge that some refugee households possess regarding health issues, as well as poor record-keeping, it is difficult to verify whether at-risk minors aged 0-59 months had truly received polio and/or measles vaccinations, for example. This also holds true for questions with longer recall periods, including those attempting to gauge fuel or water scarcity over the course of 30 days prior to the survey. As such, further research or complementary secondary data is recommended.

The final limitation is analytical. **Given differences in methodology and sampling between this round and the first round of the MSNA, statistically robust comparisons across time are not possible.** Any analysis of indicators measured and highlighted here across time are therefore necessarily indicative and should not be construed as significant.

## Excluded Variables

Due to pervasive information gaps and recall bias at household level, the following variables were removed from the analysis on the grounds that the data was deemed unreliable:

- DTP vaccination rates.

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<sup>3</sup> This means that where enumerators were unclear, heads of households were requested to delineate household boundaries themselves to ensure that no overlaps occurred during data collection.

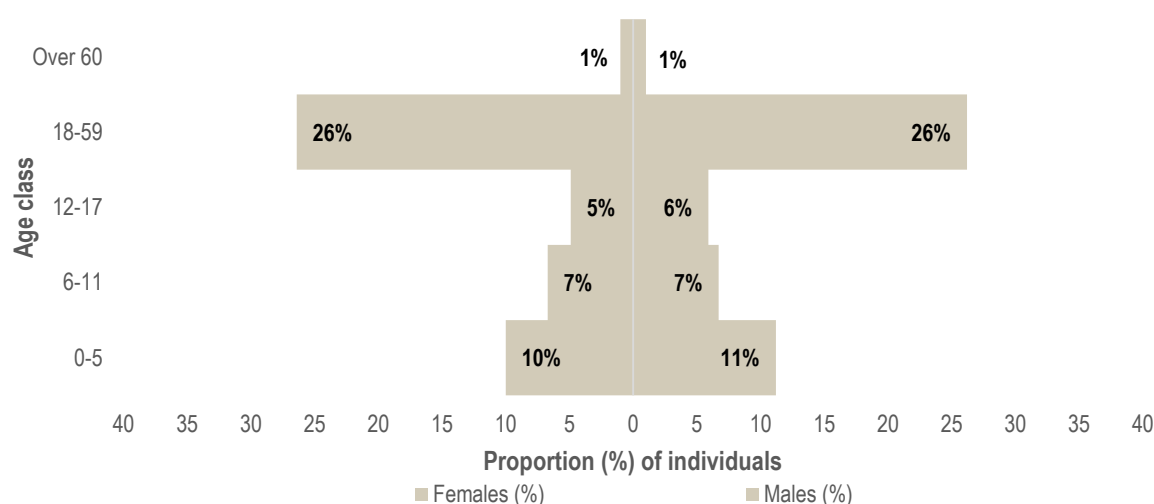


## FINDINGS

### Demographic Profiling

Overall, household level demographic trends are relatively homogenous across the KRI and display no striking variations once disaggregated to district level. Whilst minors under the age of 18 constitute an estimated 46% of the total non-camp Syrian refugee population, younger cohorts under the age of 12 account for an estimated 35% of the total non-camp population meaning that children within this age class constitutes the majority of minors overall. That said, adults who fall within the 18-59 age range constitute the majority of the non-camp refugee population, accounting for an estimated 52% of all Syrian refugees, indicating a high proportion of able-bodied adults within this population sub-group who are capable of competing within the wider KRI labour market.

Figure 1: KRI-wide population pyramid displaying proportions (%) of each demographic group

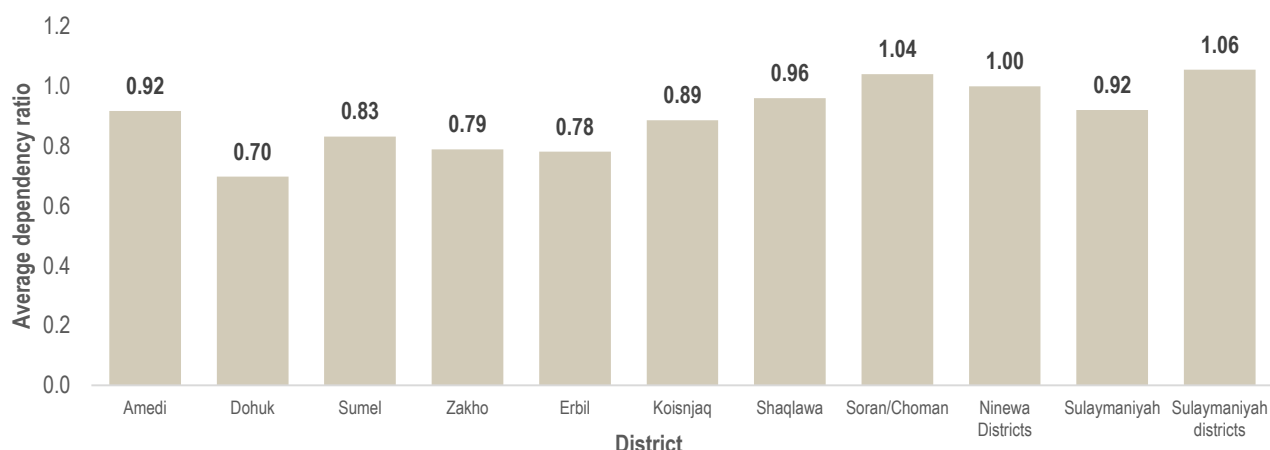


Although the proportion of *minors* relative to the total district population is uniform across districts, accounting for approximately 42-48% in each district, the findings do reveal variation in the distribution of *dependents* across districts, where households with fewer dependents tend to cluster in urban centres. An analysis of dependency ratios<sup>4</sup> also seems to corroborate this hypothesis. For instance, at **0.7, 0.8 and 0.9, Dahuk, Erbil and Sulaymaniyah districts all register comparatively lower average dependency ratios relative to surrounding, often less urbanized districts**, respectively. In turn, this might be attributable to the fact that all three are host to large urban centres where commercial and industrial agglomeration attracts a higher number of single migrant labourers or families with few or no dependents, thereby pushing overall dependency ratios down relative to more rural and less economically developed areas.

Livelihoods patterns and the availability of income-generating opportunities thus appear to, at least partially, determine the spatial distribution of demographic groups. This is the case in across all assessed governorates; in Dahuk governorate, for instance, Amedi, Sumel and Zakho districts are all host to comparatively higher numbers of dependents relative to the urban centre in Dahuk city. The same holds true for Erbil and Sulaymaniyah governorates.

<sup>4</sup> In economics and demography, the dependency ratio is an age-population ratio of those typically not in the labour force (the dependent part) and those typically in the labor force (the productive part). It is used to measure the pressure on productive population. The dependency ratio for this particular assessment was modeled according to the OECD standard which specifies the economically inactive as individuals between 0-15 years and over 60 years. Given the contextual differences and a small rate of child labour, dependents were classified at individuals aged between 0-15 and over 60 for the purpose of this assessment. It was calculated by dividing the total number of dependents by the total number of potentially economically active individuals in each household.

**Figure 2: Average household dependency ratio by district**



Although other exogenous factors, including service access, family ties and the affordability and supply of housing, may also effect demographic outcomes, determining and quantifying the full scale of the effect of these unknown and unobserved variables is beyond the scope of this study.

## Livelihoods

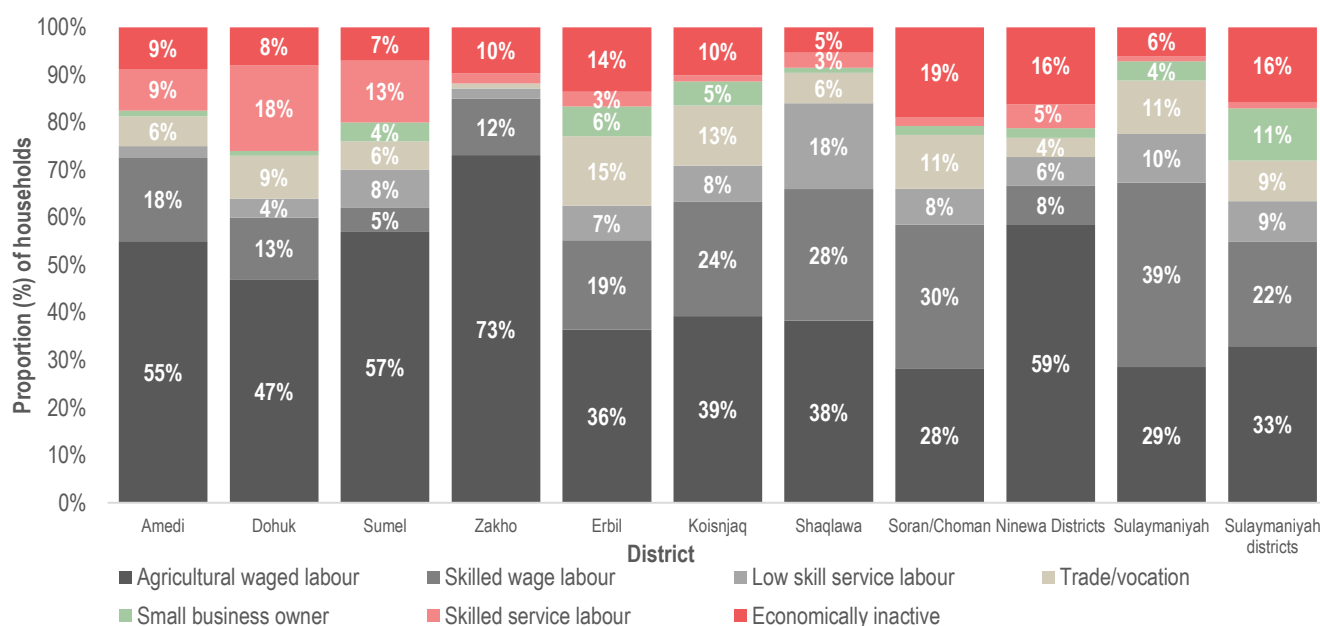
Livelihoods patterns and income sourcing strategies display both a degree of diversity and homogeneity across assessed districts. Whilst findings do suggest that a sizeable proportion of households are drawn from the poorest socio-economic strata of Syrian society; essentially poorly educated, unskilled labourers whose livelihoods and employment choices are automatically limited by their levels of education and training, many are also highly skilled, highly educated business owners and service providers. Despite some variation across districts, the proportion of unemployed or economically inactive households is largely stable and overall, proximity to commercial or industrial clusters in large, urbanized centres does not appear to have a positive effect on employment levels. Sulaymaniyah governorate is the only exception to this trend: the proportion of economically inactive households in Sulaymaniyah city district is nearly a third of the surrounding Sulaymaniyah districts.

## Employment Rates and Coping Behaviours

At 69%, there appears to be a consistent reliance on either low skilled or manual labour across the KRI, with agricultural waged labour (38% of all households) and to a lesser extent, skilled wage labour such as construction (24% of all households) being the predominant modes of income generation. Whilst low skilled service labour was reported as a primary source of income across all districts, the rate at which it is reported is relatively low at 6%. Skilled service labour – including professions such as teaching, law, engineering and the like – was also registered across all assessed districts, albeit with marked variations between both districts and governorates.

Over half of all households in Amedi (55%) and Sumel (57%) reported agricultural waged labour as their primary source of income, whilst nearly three quarters (73%) did so in Zakho, making residents of Zakho districts the most reliant on this casual source of income across all assessed areas. At 59%, the same holds true for the districts of Shekhan, Akre and Bardarash in Ninewa, indicating that either both Dahuk and Ninewa have a natural comparative advantage for agricultural production, thereby increasing the aggregate supply of agricultural labour, or it is the only accessible source of income for Syrian refugees in these districts.

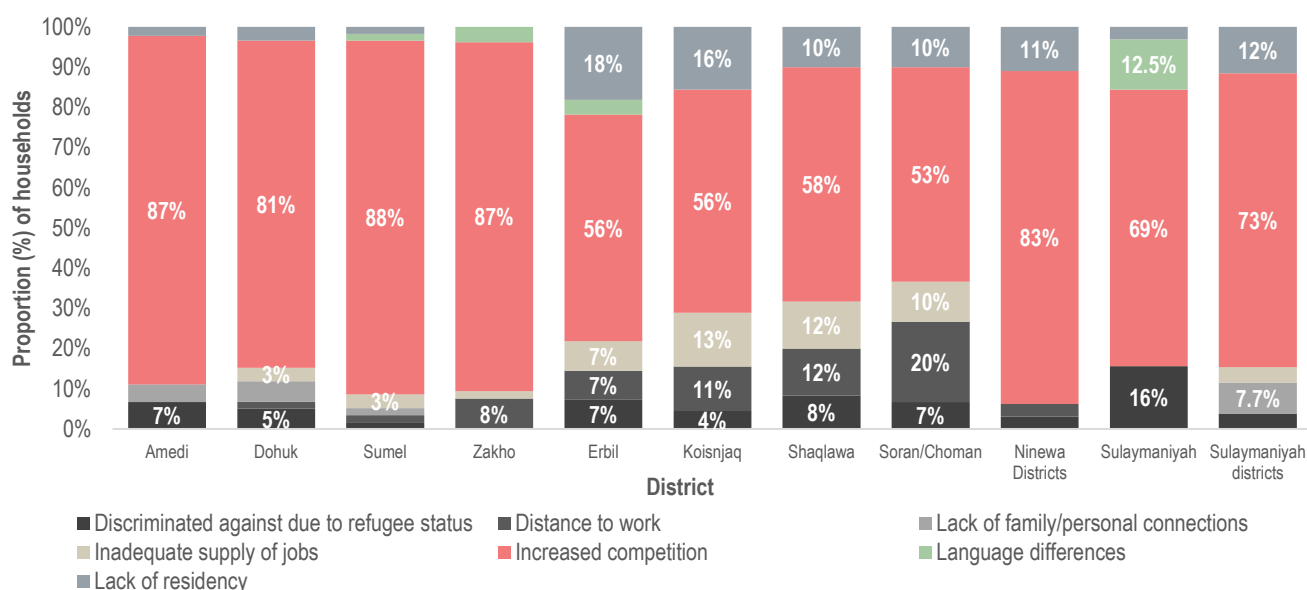
Figure 3: Proportion (%) of households by primary source of livelihood at district level



Where nearly a third (31%) of households in Erbil governorate relied primary on agriculture to generate an income – with the proportion of households across the districts relatively equal – at 27%, a higher proportion reportedly relied on skilled wage labour than in Dahuk. The same can be observed in Sulaymaniyah city district, where 39% of households reported construction and other manual labour jobs and 29% reported agriculture as their primary sources of income. This indicates that the supply of and access to manual labour is stable across the KRI as a whole, with natural variations which can be observed between districts. **Delving further, it also points to a broader trend where skilled wage and agricultural labour roles remain available despite the influx of IDPs and the concomitant increases in demand and labour market competition which such large scale displacement crises generate.** It may also indicate that given the proportion of households who remain engaged in manual labour, refugees do not seem to have been adversely affected by this increase in labour market competition or even substituted by IDP households on a systematic, KRI-wide basis. This is not to say, however, that the effects of increased competition have gone unnoticed or that labour market substitution has not occurred.

Finally, whilst unemployment is a natural phenomenon evident in any context or statistical population, the proportions of economically inactive households appear to be highest in districts outside of Dahuk governorate. For instance, whilst Erbil district is the commercial capital of the KRI, the proportion of economically inactive refugee households stands at an estimated 14%, indicating that despite the agglomeration of economic activity in the regional capital, labour market saturation may well be higher than elsewhere. Whilst the proportion of economically inactive households is comparatively higher in Soran/Choman and the Ninewa and Sulaymaniyah districts (at 19%, 16% and 16%, respectively), the reasons for this cannot be attributed to any single factor. Rather, a combination of unknown and unobserved variables such as proximity to income generating opportunities or lower levels of economic development may be acting to push unemployment levels up in these districts.

**Figure 4: Proportion (%) of households by primary issues faced in accessing employment opportunities**

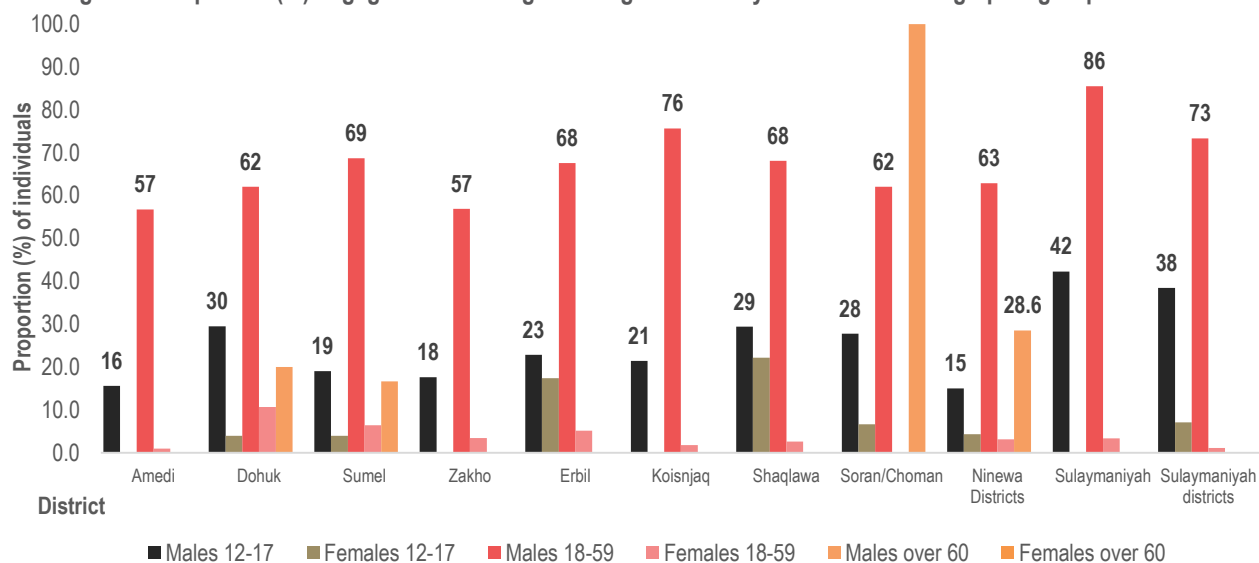


Of the households who reported facing issues in accessing employment, sizeable majorities across all assessed districts of the KRI reported an increase in competition over the course of the 3 months prior to the survey as the major access barrier. Increased competition was most acutely felt in Amedi (87%), Dahuk (81%), Sumel (88%), Zakho (87) and Shekhan, Akre and Bardarash (83%) which are host to 60% of all IDP families<sup>5</sup>, rendering them most vulnerable to increased competition and labour market saturation. The same holds true regardless of livelihood type or skill level, although the proportion of households engaged in manual labour reporting increased competition as a primary access barrier is higher in comparison to all other livelihood groups. For instance, 78% of agricultural labourers, 78% of small business owners and 72% of skilled wage labourers reported increased competition as an access barrier, whilst nearly 60% of highly skilled service professions did.

**At present, this is only indicative of the fact that refugee households face increased competition from internally displaced individuals and hosting community groups overall, not that labour market substitution is occurring on a KRI-wide scale. It does mean, however, that low-skilled households are – or perceive to be – slightly more vulnerable to increased competition, potentially due to the fact that they share similar socio-economic attributes with the IDP population.**

<sup>5</sup> International Organization for Migration, “Displacement Tracking Matrix”, 12<sup>th</sup> February 2015.

Figure 5: Proportion (%) engaged in income-generating activities by district and demographic group



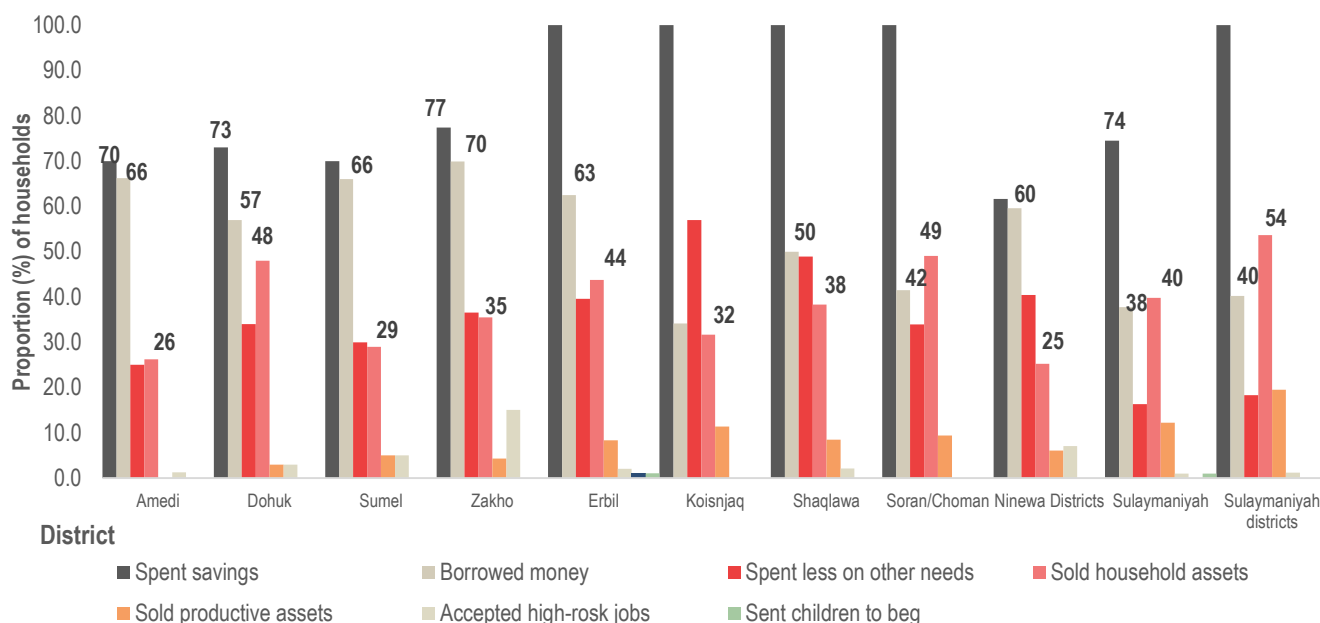
At 67%, the proportion of males aged 18-59 who were engaged in income-generating activities in the 30 days prior to the survey was the highest of any demographic group. They were closely followed by school-aged males aged 12-17, a quarter (25%) of whom were reported as working across the KRI, **indicating that males absorbed the bulk of income-generation relative to all other demographic groups**. In general, the majority of males between the ages of 18-59 were reported as working across all assessed districts, with the proportion of those currently residing in Sulaymaniyah city district the highest at 86%. The same can be observed in Koisanjaq district, where over three quarters (76%) of males between the ages of 18 and 59 were reported as working. Only 4% of females of the same age group were reported as working, despite the fact that they constitute 26% of the total non-camp population. **This indicates that women either face restrictions due to conservative social norms, or are prevented from working due to the type of available employment opportunities.**

**Child labour appears to be common across all assessed districts, with school-aged males between the ages of 12 and 17 particularly vulnerable.** At an estimated 42%, the rate of child labour for this cohort was highest in Sulaymaniyah city district, followed by the surrounding Sulaymaniyah districts where more than a third were working (39%), Dahuk, at nearly a third of the total male population within this age group (30%) and Shaqlawa (29%). Again, findings indicate that all other districts registered the existence of child labour, albeit at varying rates. Conversely, the rate at which female cohorts were working was far lower, with modest rates observable only in Erbil and Shaqlawa districts at 17% and 22%, respectively. **Ultimately, these findings point to the fact that male minors are particularly susceptible to the abandonment of schooling in favour of income generation for the household. In turn, the disparity which can be observed between the rates of child labour for males and females may be attributable to the types of livelihood opportunities available, ie. manual labour, as well as conservative social norms which might place restrictions on female engagement in income generation for the household.**

The application of negative livelihood-based coping strategies can, at varying degrees, be observed across all assessed districts. Although the most prevalent, such as recourse to savings or debt-fuelled consumption are considered relatively mild, the use of more severe coping mechanisms such as the sale of household assets and the reallocation of existing financial resources from other basic needs can also be observed across all districts.



**Figure 6: Proportions (%) of households applying negative coping mechanisms to supplement aggregate incomes, by type of coping strategy (30 days)**



The use of savings to bridge income gaps was used by all households in Erbil, Koinsnjq, Shaqlawa and the surrounding Sulaymaniyah districts. Delving further, an estimated three quarters (75%) of households in Sulaymaniyah city district also used savings to supplement existing incomes, whilst 73% did so in Dahuk district and 77% did so in Zakho district. Over half of households also reported using savings across the remaining districts. Finally, although this does indicate that households are experiencing shortfalls in income, the fact remains that they have savings which can be used as a makeshift welfare net or buffer when needed.

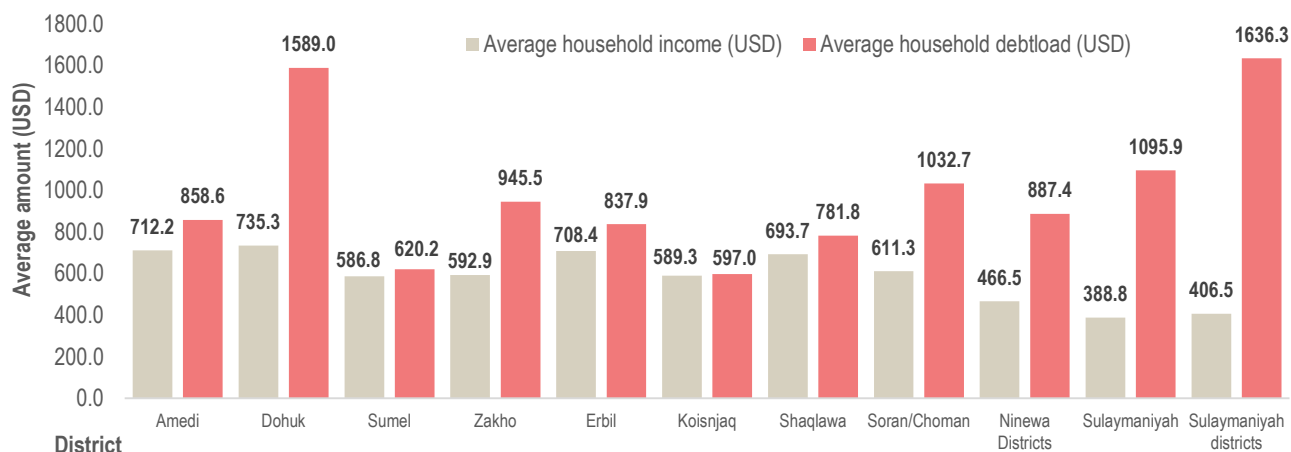
Similarly, the accumulation of debt can also be observed across all assessed districts, although the proportions of households who apply debt-fuelled consumption is overall lower than the proportion of households who resort to savings. That said, residents of Dahuk governorate again appear to be the most prone to using debt to supplement aggregate household incomes. With 70% of households reporting borrowed money as a coping mechanism, refugee households residing in Zakho appear to be comparatively more prone to the use of negative coping strategies than households residing in other districts of the KRI. **Although the effects of increased competition have not necessarily lead to labour market substitution by IDP households, the exponential increase in the supply of labour may well have acted to exert deflationary pressure on real incomes across Dahuk**, thereby compelling households in Dahuk to increase their reliance on negative coping strategies to overcome any income-expenditure gaps which they might experience as a result.

Finally, whilst REACH currently has no means of gauging the source of debt at household level, two potential scenarios can be envisioned. Firstly, debt might be sourced from family, friends and neighbours; although this does increase aggregate debt-loads, it also points to the fact that communal borrowing mechanisms amongst the refugee community are in place to attenuate the most severe effects of declining incomes. Communal borrowing acts to disperse the risks associated with borrowing across a community, ultimately diminishing long-term vulnerability levels. The second and more austere scenario – which anecdotal evidence suggests is common – is predatory borrowing. Under Iraqi law, land and household ownership is limited to Iraqi citizens only, meaning that refugee households have few material assets which can be used as collateral in legal and formal credit arrangements with regulated financial institutions. This in turn means that they are potentially more prone to informal borrowing

practices<sup>6</sup> than the hosting community and, with no formal arrangement for repayment, renders them more vulnerable to the associated protection concerns which predatory lending practices foster.

## Income and Debt

Figure 7: Average household incomes and debt loads (USD) by district



**Average debt loads exceeded average household incomes across all assessed districts.** Refugee households residing in Dahuk, Zakho, Soran/Choman, Ninewa, Sulaymaniyah and surrounding Sulaymaniyah districts appear to hold the largest debt burdens relative to household incomes, with **the debt-to-income ratio the highest in the Sulaymaniyah districts**. Furthermore, residence in urbanized, commercial centres such as Dahuk, Erbil and Sulaymaniyah cities appears to have no consistent effect on either income or debt, with average incomes actually higher in rural Amedi than in Erbil district, for instance. Where this could be attributed to labour market saturation and concomitant wage deflation in Erbil district, the same cannot be said in Sulaymaniyah city district which registered the lowest average incomes of any assessed area.

Table 1: Linear regression model for household income, positive effects in green; negative effects in red

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	district_Dahuk	141.809	52.564	.087	2.698	.005
	district_amed	146.582	57.073	.081	2.568	.001
	district_zakho	59.924	54.117	.036	1.107	.004
	district_ninewa	-268.794	68.645	-.164	-3.916	.000
	district_erbil	154.716	52.690	.093	2.936	.003
	district_sulaymaniyah	-346.440	68.821	-.119	-3.708	.000
	district_sulaymaniyahfused	-328.734	72.132	-.184	-4.557	.000
	no_livelihood	-373.347	53.191	-.230	-7.019	.000
	skilled_service_labour	192.345	70.015	.090	2.747	.004
	agricultural_waged_labour	-90.651	34.311	-.091	-2.642	.000

a. Dependent Variable: Total\_HH\_income\_USD

<sup>6</sup> Effectively loan sharking.

To quantify the effects of the variables explored thus far in the analysis on aggregate household incomes, a linear regression model was fitted for districts of residence and livelihood types<sup>7</sup>. Variables that were indicated as insignificant were removed stepwise to obtain a model where all remaining variables were statistically significant at the 5% level or more, enabling us to draw the following conclusions.

Overall, residing in either Shekhan, Akre or Bardarash – the Ninewa districts – had a negative effect on a given household's income, reducing it by approximately 269 USD, all else equal. This effect was even great in Sulaymaniyah city district and the surrounding Sulaymaniyah districts, where the decrease in household incomes is estimated to be 346 USD and 373 USD, respectively. The effect of residency in Amedi, Dahuk, Zakho and Erbil districts was overall positive, with residents of Zakho reaping the lowest gains in income at approximately 60 USD, all else equal. The effect was greatest in Erbil district, where income gains amounted to an estimated 155 USD, all else equal.

Although the effect was overall positive in Dahuk, this cannot be attributed to the simple assumption that wages are higher across these districts. As noted above, the proportion of households relying on multiple livelihoods based coping strategies is higher across the Dahuk districts, thus potentially contributing to aggregate incomes and yielding higher income gains. The same potentially holds true for Erbil district, indicating that whilst incomes are higher in these areas relative to the rest, they might only be sustained by the use of negative coping mechanisms. Residency in Koisanjaq, Shaqlawa or Soran/Choman districts was not found to have a statistically significant effect on income. **Equally, no statistically significant effects were found for sex of head of household, low skill service labour, business ownership or skilled wage labour.**

As expected, unemployment had the largest negative effect on household incomes, reducing them by an estimated 373 USD per month, all else equal. Effects on incomes were also negative for households engaged primarily in agricultural waged labour, where foregone income amounted to 90 USD per month, thereby corroborating the hypothesis posited above that deflationary effects on real incomes can be felt most acutely in the manual labour segment of the labour market. Although the effects of the IDP influx on incomes cannot be quantified at present, it is likely that increased competition for manual labour has contributed to the deflationary pressures outlined in this report.

## Social Cohesion

Seen from the vantage point of Syrian refugees, multiple phases of internal and external displacement and the resulting impact on housing, services and labour markets have not had the anticipated effect of inflaming social tensions and the fracturing of inter-group cohesion. Where marked spatial inequalities in service access, income levels and aggregate welfare outcomes remain and are clearly visible, social cohesion – as measured by perceived levels of hospitality, crime, costs and access to services – does not appear to have suffered and has, in fact, remained constant if the opinions of majority of households across the KRI are observed.

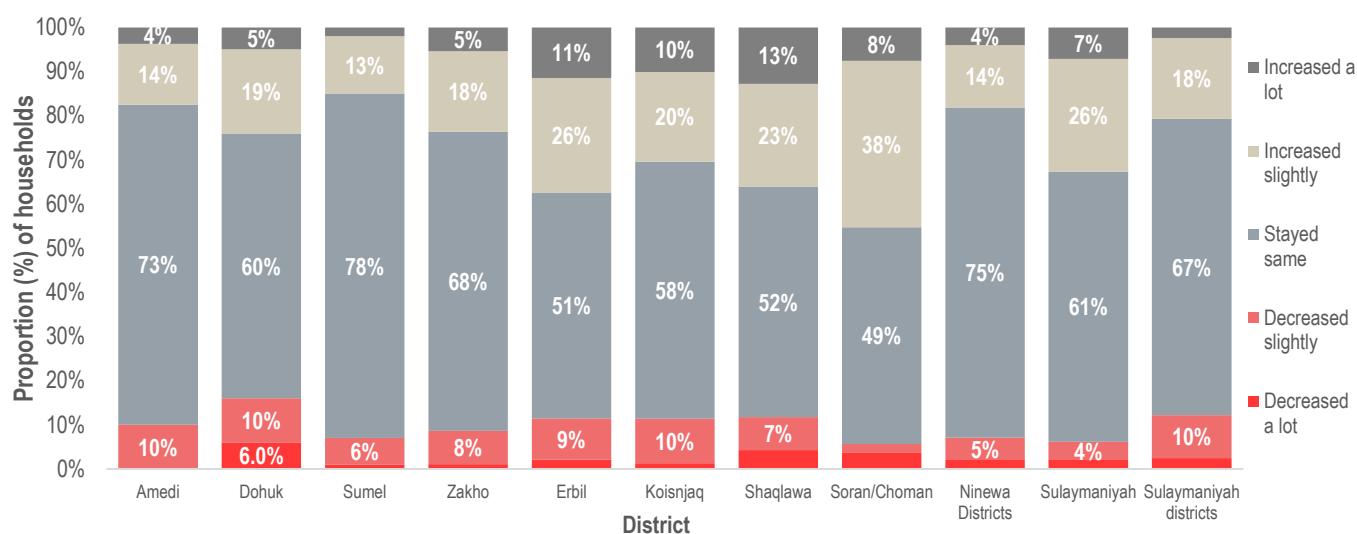
The following analysis presents findings on a set of indicators which were used here as proxies for social cohesion and tension, namely: levels of hospitality, perceived rates of petty crime, the cost of basic needs and the perceived quality of basic services amongst the refugee population. Whilst they will be analysed in isolation, it is equally as important that they be studied together as social cohesion, or conversely social tension, will ultimately be determined by the interaction and aggregate effect of these factors on all groups residing within the territory of the KRI.

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<sup>7</sup> Where districts of residence were dummy variables created from nominal variables, and livelihood types were dummy variables created from previously categorical variables.

## Hospitality Levels

Figure 8: Proportion (%) of households by perceived levels of hospitality in current area of residence (3 months)



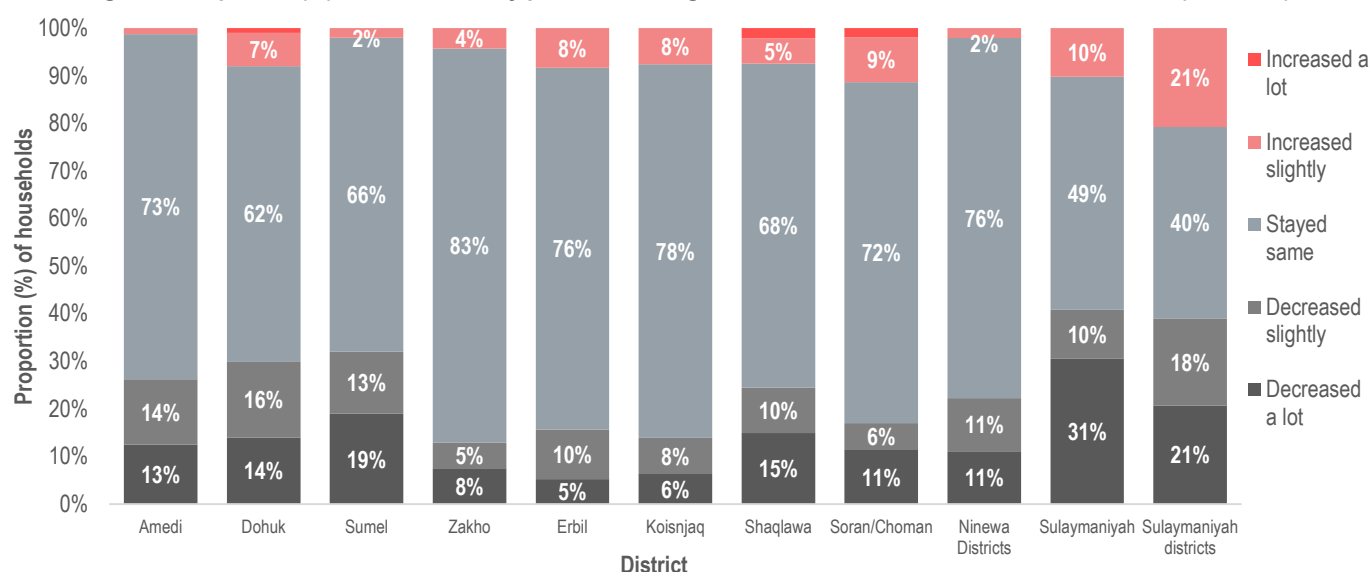
What is most striking is that districts and governorates which have absorbed the highest numbers of refugees and IDPs and whose services have been subjected to the largest exogenous shocks are also those which display some of the highest rates of continuity and increases in levels of hospitality. In Dahuk governorate – at present host to 64% of all Syrian refugees and over 65% of all IDPs – over 20% of households reported that hospitality levels had increased either slightly or a lot, whilst an estimated 70% reported that they have stayed the same over the course of the 3 months prior to the survey. Conversely, only 11% reported a decline in hospitality levels, with an estimated 16% of households in Dahuk district reporting decreases in hospitality levels – the highest of any KRI district.

Seen in this light, Dahuk seems to defy the commonly held assumption of inverse proportionality often cited in policy and academia that where competition for scarce resources is higher, inter-group cohesion – and in particular the effect of exposure to increased competition on the hospitality of the hosting community – is lower and becomes more susceptible to fracturing and decay. So, despite the fact that refugee households residing in Dahuk reported comparatively higher rates of competition for employment and inflated housing costs than other regions of the KRI, perceived hospitality levels appear to have remained stable and have actually increased as a whole.

Equally, the same holds in Sulaymaniyah where refugee incomes are lower and poverty rates higher than elsewhere in the KRI. Hospitality levels have actually increased the most – albeit in relative terms – in this governorate, with an estimated 38% of households reporting increases in hospitality. Both ends of the spectrum – areas experiencing significant exogenous shocks and exponential increases in demand as well as areas hosting populations displaying higher rates of poverty – seem to have absorbed their shocks relatively well, again defying commonly held assumptions regarding social tensions. At this stage, it is essential to note that although findings presented here only represent the perceptions of the refugee community, those who are displaced and are being hosted are often those who are more attuned to social tension than the hosting community itself.

## Petty Crime

Figure 9: Proportion (%) of households by perceived changes in crime levels in current area of residence (3 months)



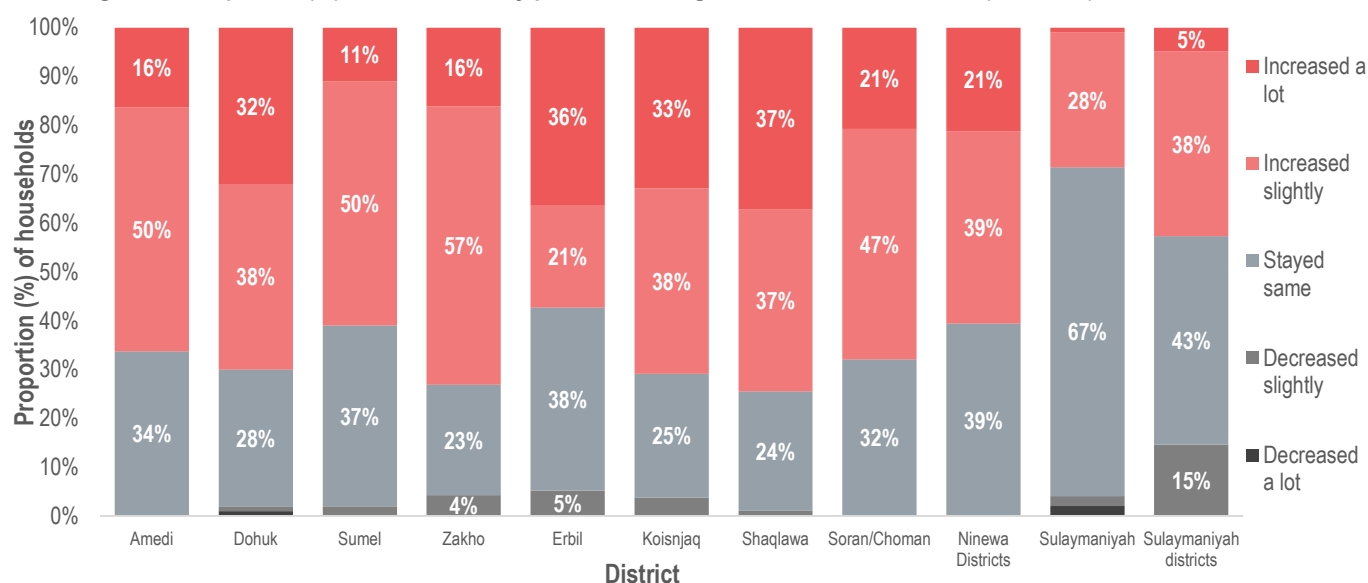
An even greater proportion of households reported that rates of petty crime had either not changed or had decreased than the proportion reporting decreases in hospitality, again contrary to the taboos often assigned to contexts hosting large displaced populations. Again, Dahuk governorate is the major anomaly here; despite incurring a series of exogenous shocks which may well often be accompanied by decreases – perceived or otherwise – in localized safety and security (especially in conflict settings), the proportion of households reported decreases in petty crime rates (27%) is actually higher than in Erbil (16%) and slightly lower than in Sulaymaniyah (36%) governorate. Equally, vast majorities of households across all Dahuk and Dahuk-administered Ninewa districts reported that rates of petty crime had remained constant in the 3 months prior to the survey.

In Sulaymaniyah governorate, near majorities reported that rates of petty crime had actually decreased, with the added caveat that the highest proportion of households had also reported increases in rates of petty crimes of any governorate. For instance, whilst over 40% of households reported that rates of petty crime had decreased, over a tenth (15%) also reported that they had increased, indicating that perceptions may vary according to specific area of residence within the given districts or even the socioeconomic profile of the respondent. Nevertheless, findings do seem to suggest that the KRI is relatively well insulated from the acute insecurity plaguing Iraq proper. Moreover, if this trend is preserved in the long-term, it may well mitigate against the deterioration of inter-group relations by preventing the allocation of blame for perceived increases in crime rates on any single displaced group.



## Cost of Basic Needs

Figure 10: Proportion (%) of households by perceived changes in costs of basic needs (3 months)



An overwhelming majority of households across all assessed areas reported that the cost of basic needs, including, but not limited to: food, shelter, clothing, water and health, had increased over the course of the three months prior to the assessment. Refugee households residing in the provincial capitals of Dahuk and Erbil districts seem to have experienced the largest perceived increases in the costs of basic needs, with an estimated third reporting large increases in costs across both districts, respectively. Whilst the same also holds true for districts such as Amedi, Sumel or Koisnijaq, households residing in Shaqlawa – a well-known tourist resort hosting significant numbers of IDPs – seem to have experienced the largest inflation of costs, with nearly 40% of households reporting a large increase. Sulaymaniyah city district remains the most significant outlier, however, with nearly 70% of households reporting the cost of basic needs as having remained constant over the course of the 3 months prior to the assessment.

The findings presented in the figure above generally conform to a trend observed across other sectors of intervention. Where the scale of an exogenous shock (such as the IDP influx), the refugee caseload and the concomitant increases in aggregate demand for a given good or service are overall larger, price inflation (or at least its perception) is generally higher and its impact (perceived or actual) on Syrian refugees is generally more acute. REACH currently possesses no data on what the actual – or baseline – prices of basic needs, goods and services were prior to the IDP influx of June-September 2014, meaning that the actual rate of inflation cannot be calculated to corroborate these findings across assessed districts.

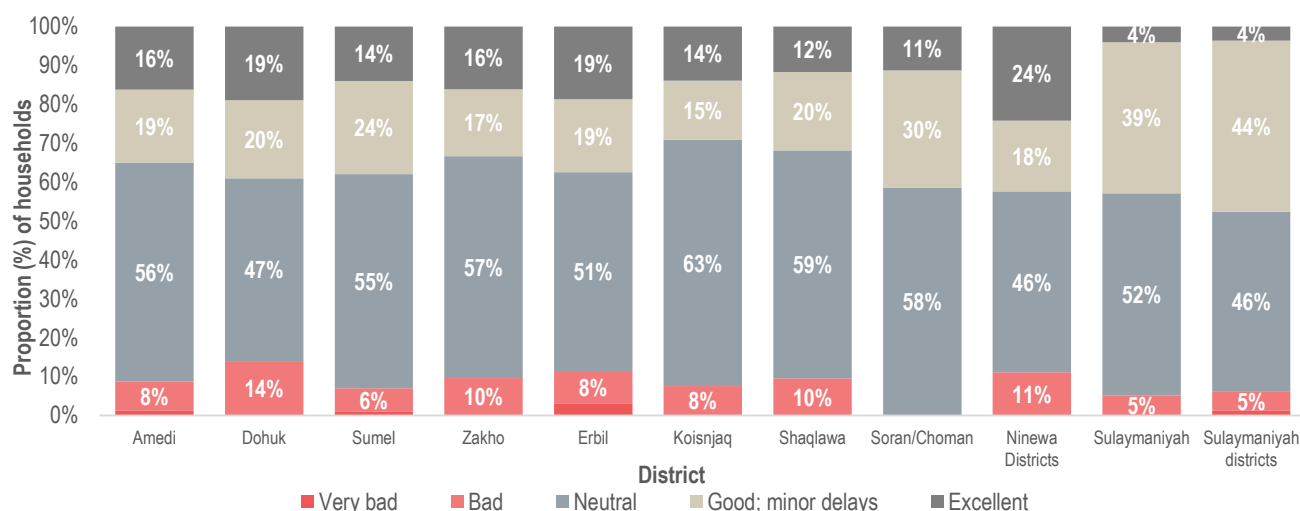
Nevertheless, this is indicative of a potential medium-to-long-term fault line, especially for Syrian refugee households. Although price inflation is generally indiscriminate in the sense that it affects – albeit at varying degrees, depending upon a given household's purchasing power – all populations and sub-populations within a given territory, Syrian refugees are amongst the most vulnerable sub-populations in the KRI. In the long term, protracted displacement could be further compounded by the deflation of real incomes brought about by a sudden increase in surplus labour<sup>8</sup> and a decrease in purchasing power across the board. In this scenario, where Syrian refugees are already facing increased competition in the labour market, labour market substitution and potentially deflating incomes, their vulnerability across key sectors is likely to become progressively more acute as they struggle to meet basic needs. Although price inflation may not be the primary cause of increasing vulnerability in itself, it may

<sup>8</sup> Findings on employment problems seem to imply that increases in the supply of labour are already having a negative effect on incomes and labour market saturation.

mean that dwindling purchasing power is having a negative effect on a given household's ability to service basic needs.

## Access to Public Services

Figure 11: Proportion (%) of households by perceived quality of public services



A slim majority of 51% of households reportedly held neutral views of public services<sup>9</sup> in the KRI in general, although a sizeable proportion – an estimated 35% - held favourable views of public service provision. The perception that public services were good or excellent was most common across Sulaymaniyah, with nearly 40% expressing that public services were overall good in Sulaymaniyah city district and 44% holding the same view in the surrounding Sulaymaniyah districts. Despite this, the proportion of households who felt that public services were excellent was lowest in Sulaymaniyah governorate and highest across the districts of Dahuk and Dahuk-administered Ninewa.

At this point, it is important to note that gauging the actual quality of provision of key public services in the KRI is beyond the scope of this assessment. Instead, the findings presented here are indicative of the perceptions of a particular sub-group of end-users and should not therefore be interpreted as an analysis of the quality of services in general. That said, what the evidence presented here does suggest is that despite multiple rounds of displacement and an exponential increase in the burden placed on public services, the perception of quality amongst Syrian refugees is overwhelmingly neutral or favourable. Now, this is not to say that the capacity of public service providers to cope with this additional demand is not strained or even that the absorptive capacity of public infrastructure is not diminishing. Rather, it simply indicates that as end-users themselves, Syrian refugees believe that the quality of the provision over the course of the three months prior to the survey has remained largely positive.

<sup>9</sup> For the purpose of this assessment, public services were defined as healthcare, municipal services (including water and electricity provision, waste disposal) and key public infrastructure, including roads and the like.

**Figure 12: Proportion (%) of households by perceived reasons for bad public service provision**



Only an estimated 10% deemed public services to be either bad or very bad at the time of the assessment. Amongst this subset of households who were of this view, the vast majority do not seem to have experienced any major access issues, including refusal of treatment and/or discrimination through denial of access. Rather, the most commonly held view was simply that in general, public services were of poor quality or inadequate to service needs. For instance, many households, especially in the more rural parts of Amedi and Sumel districts, described the issue as a lack of hospitals or schools in close proximity, suggesting that at least one reason for holding this view was inadequate supply.

The second most frequently reported reason for this subset of households was insufficient funds to access services; this was overall most common in Zakho and Dahuk districts, with 78% and 43% of households reporting this, respectively. This may indicate three things; these households may prefer or only have access to privatized services and hence cannot finance access on a regular basis, there may be a misperception of the fact that public services are generally free or heavily subsidised across the KRI or simply that households may not have sufficient funds to finance the commute to access the services they require which are not available in their immediate areas of residence.

## Food Security

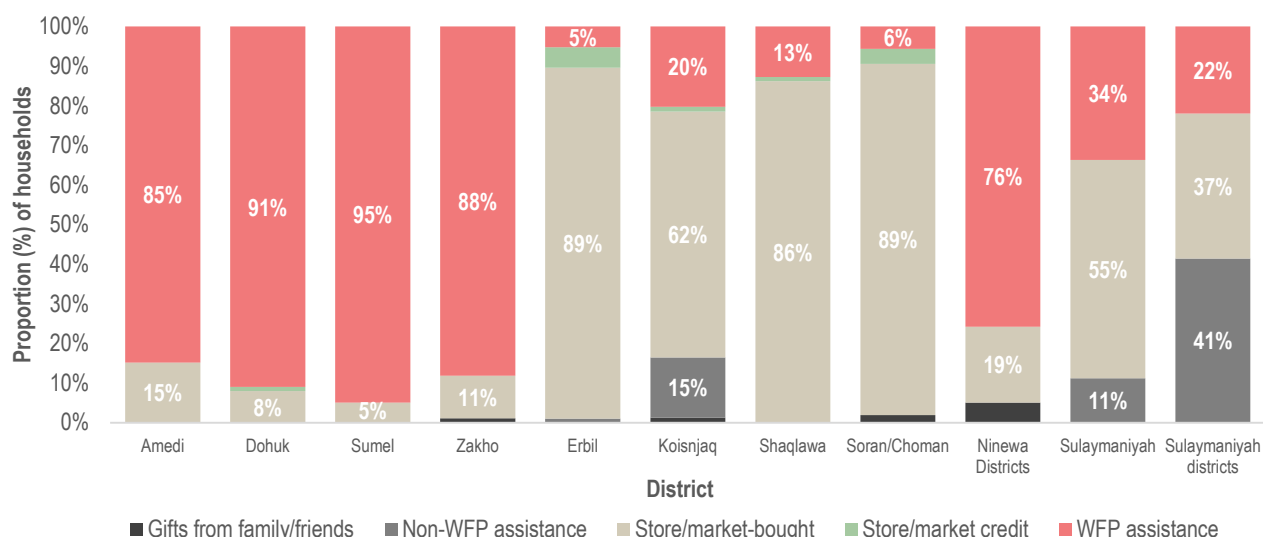
Food sourcing strategies are generally diverse and vary greatly by district. Furthermore, findings indicate that 96% had at least two sources of food, whilst 40% also had access to a tertiary source of food. In this context, diversification is in itself a coping mechanism designed to mitigate against the potential exhaustion of one or more food sources. This suggests two things; those who have the adequate resources tend to diversify and that in general, households do not forego expenditure on or consumption of food. The latter in particular is a KRI-wide trend that emerges from the findings.

Before we commence with the analysis, it is important to note that the scope of WFP assistance does not extend to non-camp settings and despite it being widespread as a source of food across all districts, access is only possible because these households are registered in formal camps where they attend distributions. Now, WFP assistance was reported as a primary source of food across all assessed areas, but the proportions of households within districts varied greatly. For instance, 85%, 91%, 95% and 88% of households relied primary on WFP assistance in Amedi, Dahuk, Sumel and Zakho districts, respectively, indicating a high rate of reliance on food sourced from assistance programmes. The same can be observed across the Ninewa districts, where an estimated 76% relied on WFP assistance as a primary source of food. This trend may not be indicative of a systemic dependency on

assistance packages to service household food needs; rather, it may simply mean that WFP assistance is a widely available and a preferred, cost-reducing source of food across these districts. The opposite can be observed in Erbil governorate, however, where the majority relied on store/market-bought food purchased with private funds (Erbil=86%; Koisanjaq=62%; Shaqlawa=86%; Soran/Choman=89%).

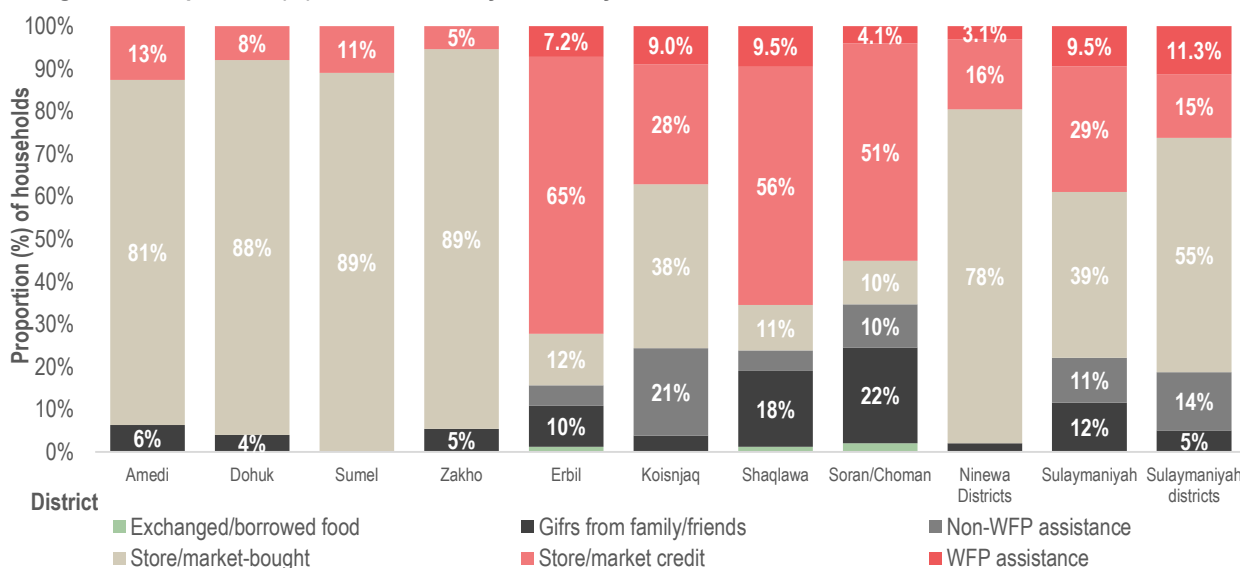
## Sources of Food

Figure 13: Proportions (%) of households by primary source of food



Households residing across the districts of Sulaymaniyah governorate displayed the highest degree of diversity in primary food sources. More than half (55%) relied on privately purchased food in Sulaymaniyah city district, whilst over a third (34%) in turn relied on WFP assistance. In the surrounding Sulaymaniyah districts, 42% relied on assistance from sources other than WFP, indicating that either this source of food is: unavailable in the more rural areas of Sulaymaniyah governorate, the distance needed to be travelled to access a distribution point in Arbat refugee camp is too great, that these households are not registered in formal camps and are hence ineligible for WFP assistance or that there is quite simply a preference for the assistance package provided through mosques, community-based organizations and community support networks.

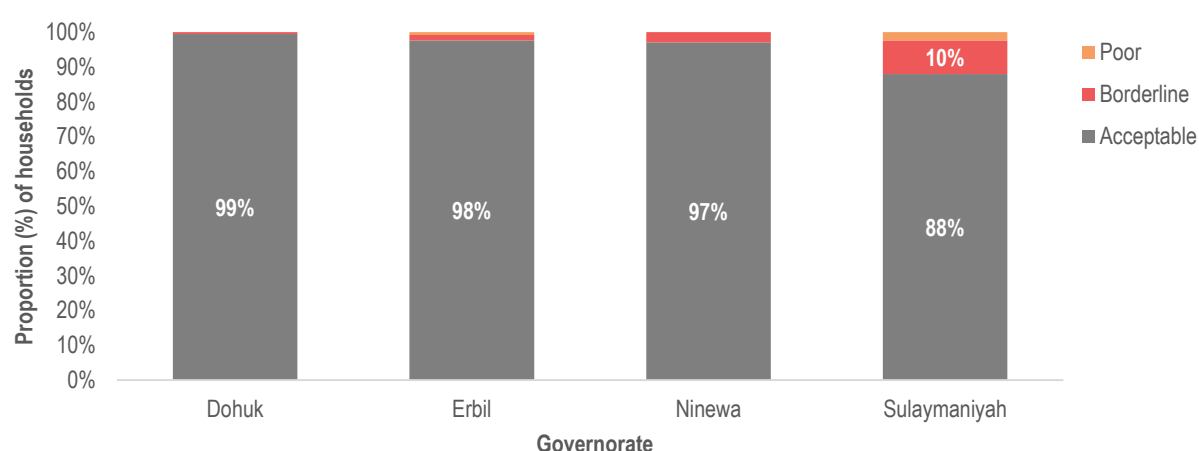
Figure 14: Proportions (%) of households by secondary source of food



In general, findings stand contrary to the commonly held assumption that in-kind sources of food are often substituted with or reinforced by privately purchased food. Although this is the case in Dahuk, where the vast majority of those who relied primarily on WFP assistance used store or market-bought food as a secondary source, findings in Erbil governorate run against this trend. For instance, whilst 86% relied primarily on store or market bought food in Erbil district, a smaller majority of 65% in turn relied on store or market credit to meet household food needs, suggesting that there is a general preference for privately sourced food in this district as WFP assistance is not available to all households residing in non-camp settings. At present, this cannot be attributed to any single factor, but comparatively higher income levels in Erbil may empower households to diversify away from food assistance schemes.

## Food Consumption

Figure 15: Proportions (%) of households by Food Consumption Group, governorate level



With only **2% of households below the acceptable threshold for food consumption<sup>10</sup>**, the rate of food insecurity was found to be extremely low across the KRI. Whilst the nutritional value and the frequency at which the various food groups are consumed does vary across districts, it is overall stable, suggesting that despite falling incomes, **households do not forego expenditure on food and take measures to sustain consumption**. No significant variation in food consumption scoring could be observed between districts, but 12% of refugee households residing in Sulaymaniyah governorate were found to fall below the acceptable threshold for food consumption (10% were categorized as borderline, whilst 2% were categorised as poor).

In order to quantify the effects of different variables and household attributes on aggregate food consumption scores, a linear regression model was fitted for districts of residence, primary food sources and livelihood types<sup>11</sup>. As above, variables which were found to be insignificant were removed stepwise to obtain a model where all remaining variables were statistically significant at approximately 5% level, enabling a comprehensive, representative analysis of results.

<sup>10</sup> The FCS is a composite score based on dietary diversity, frequency of consumption and relative nutritional importance of different food groups. Food items are grouped into 8 standard food groups with a maximum value of 7 days per week. The consumption frequency of each food group is multiplied by an assigned weight that is based on its nutritional content. In order to ensure data quality, enumerators were trained to ask this question to the most senior female member of household who, for cultural reasons, is more likely to be familiar with dietary diversity and food consumption patterns in the household.

<sup>11</sup> Where districts of residence were dummy variables created from nominal variables, and livelihood types were dummy variables created from previously categorical variables.



Table 2: Linear regression model for Food Consumption Score, with negative effects in red, positive effects in green

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
district_amed	-5.633	2.127	-.103	-2.648	.006	
district_koisnjq	-14.168	2.238	-.258	-6.332	.000	
district_shaqlaw	-8.390	2.194	-.165	-3.825	.000	
district_soranchoman	-8.495	2.546	-.129	-3.337	.001	
district_ninewa	-7.174	2.010	-.145	-3.569	.000	
district_sulaymaniyah	-16.412	2.134	-.330	-7.690	.000	
district_sulaymaniyahfused	-9.573	2.374	-.177	-4.032	.000	
trade_vocation	4.332	1.679	.079	2.580	.001	
no_livelihood	-6.012	1.612	-.123	-3.728	.000	
skilled_service_labour	5.479	1.985	.084	2.760	.006	
income_0_500	-9.099	1.862	-.303	-4.888	.000	
income_501_1000	-4.517	1.831	-.146	-2.467	.004	

a. Dependent Variable: FCS\_score

**Primary food sources were found to have no statistically significant effect on a given household's FCS,** thereby corroborating the above hypothesis that refugee households take the necessary measures (such as diversification, for instance) to sustain consumption levels and nutritional intake. The gender of the head of household did not have a significant effect on FCS either. The only positive effects were noted for two livelihood sources: households engaged in highly skilled service labour and a trade or vocation. The effect is small overall; households engaged in skilled service labour reap a gain of 5 FCS points, whilst households practicing a trade or vocation gained 4 FCS points, all else equal. Again, no other livelihood type was found to have a significant effect on food consumption.

Despite this, lower income levels do have a small but nonetheless negative effect on food consumption scores. Belonging to the 0-500 USD income bracket<sup>12</sup> reduced FCS by 9 points, whilst belonging to the 501-1000 USD income bracket reduced FCS by 5 points, all else equal. Residence in the districts of Amedi, Koisanjaq, Shaqlawa, Soran/Choman, Ninewa, Sulaymaniyah city or the surrounding Sulaymaniyah districts also had a negative effect on FCS. Food insecurity or diminished food consumption is thus predominantly a spatial phenomenon, with each of these districts most likely carrying its own set of food access barriers. For instance, the negative effect was greatest in Sulaymaniyah city (a reduction of 16 FCS points) and Koisanjaq districts (a reduction of 14 FCS points), all else equal.

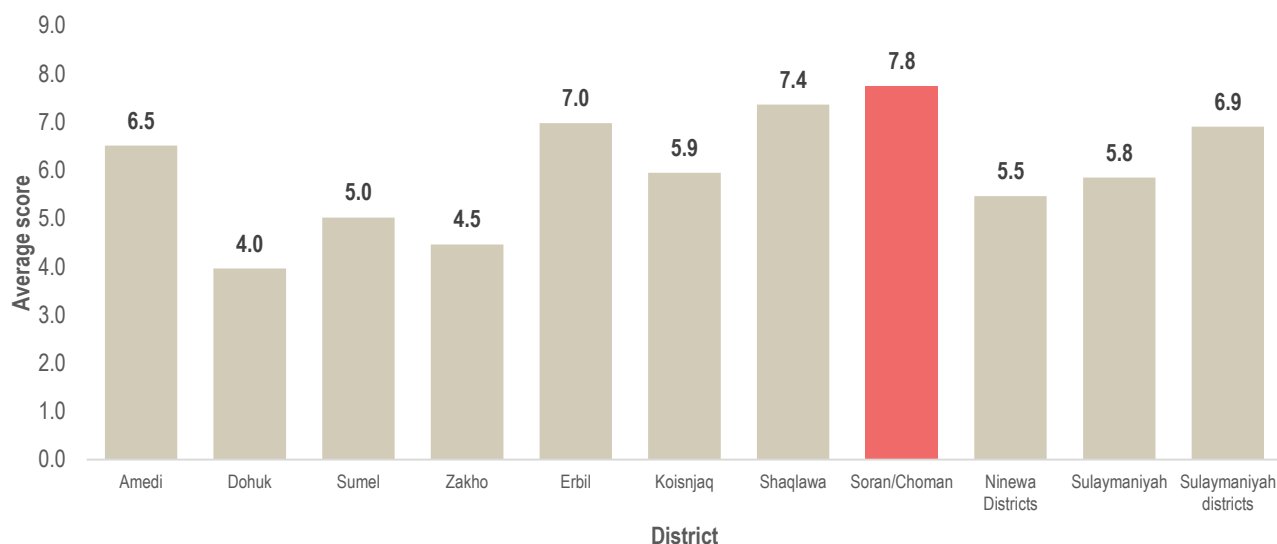
As noted above, the negative effects on income levels were greatest for households residing in Sulaymaniyah city district (a reduction of 329 USD), suggesting that the amount of food consumed as well as its nutritional value are at least partially determined by income levels – or conversely, diminished purchasing power or higher food prices – in this district. Overall, however, households tend to sustain consumption regardless of livelihood type or income levels, suggesting that food intake is not something that can be compromised on. Regardless, although food insecurity is not an issue now, the relationship between incomes and food security is strong, meaning that any major deflation of earnings could have a severe impact on consumption.

<sup>12</sup> An additional variable of was created where households were grouped into appropriate income brackets, eg. 0-500 USD, 501-1000 USD, 1001-1500 USD, etc. to allow for this analysis.

To elaborate further, the districts of Amedi, Koisanjaq, Shaqlawa, Soran/Choman, Ninewa and Sulaymaniyah, where incomes and food consumption are lower, are nascent pockets of food insecurity which could benefit from more targeted assistance to mitigate further degradation.

## Coping Strategies

Figure 16: Average Coping Strategies Index score by district (7 days)



The application of negative coping strategies is generally very low, but varies substantially by both district and type of coping strategy. Composite coping strategy scores also vary, where **the rate of application as well as the severity of the strategies in use is higher across the districts of Erbil governorate than in Dahuk**, for instance, where relatively low CSI scores were registered. With an average CSI score of 8, households residing in Soran/Choman appear to employ negative coping strategies the most in order to service household food needs; this is closely followed by Shaqlawa, where the average CSI score was 7, and Erbil and Sulaymaniyah districts, both with an average score of 7.

None of the most severe coping behaviours are noted on a district-wide scale and only moderate levels of the others can be observed, indicating that households tend to employ the less severe and more reversible strategies first – such as switching to less preferred foods, for instance – before recourse to more severe behaviours such as sending children to work or reducing the number of meals eaten over the course of a day.

Findings show that the most common (and one of the least severe) coping behaviours was relying on less expensive and preferred food. Although the rate at which it is applied varies, 17% of households reported employing this strategy every day in the 7 days prior to the survey, and 45% applied it between 1-3 days. Approximately one in four households (26%) reported not having resorted to this behaviour at all. Although limiting portions at mealtimes isn't generally considered a severe coping mechanism, the vast majority (an estimated 70%) reported not having had to limit portions to sustain household consumption, but 22% used it either once or twice in the 7 days prior to the survey.

The same holds true for reductions in the number of meals eaten; 80% of households reported not having employed this coping behaviour at all, whilst 13% resorted to it either once or twice. **Of the households who did apply it at least once, 60% resided in Erbil governorate at the time of the assessment.** Borrowing food was also not prevalent, with 85% of households reporting no use of this behaviour at all, but again, of the 15% who applied it at least once, the majority (53%) were from Erbil governorate. Overall, the same pattern can be observed across all

governorates and coping mechanisms; whilst the majority of households do not resort to more severe means of meeting food needs, the majority of the proportion that do apply such strategies tend to reside in Erbil governorate.

## Education

### Rates of Attendance

Although attendance rates vary by district, governorate and demographic group, **findings indicate that overall, an estimated 46% of all school-aged children were attending formal education across the KRI.** Attendance rates were comparatively lower for boys than girls, with 42% of all school-aged males attending school in comparison to the 51% of all school-aged girls who were reported as attending formal education at the time of the assessment. Moreover, at an estimated 10%, males aged 15-17 exhibited the lowest attendance rates of any demographic group, whilst 31% of all female children aged 15-17 were reported as attending formal education across all assessed areas of the KRI. Although KRI-wide figures reveal an alarming trend and high rates of non-attendance, district level findings should also be examined to ascertain what the spatial distribution or demographic determinants of attendance truly are.

Table 3: Rates (%) of attendance for school-aged children aged 6-17 by demographic group and district

District	Males 6-11	Females 6-11	Males 12-14	Females 12-14	Males 15-17	Females 15-17	District attendance rate
Amedi	53.6	62.9	55.6	55.6	0.0	33.3	48.3
Dahuk	54.5	65.5	57.1	36.4	4.3	35.7	45.0
Sumel	75.8	67.5	62.5	66.7	11.1	23.1	57.1
Zakho	76.9	72.7	46.7	60.0	21.1	31.3	54.0
Erbil	34.3	35.7	17.6	9.1	5.6	33.3	25.6
Koisanjaq	58.1	39.3	30.8	50.0	13.3	44.4	42.0
Shaqlawā	30.2	26.7	12.5	29.4	0.0	20.0	22.8
Soran/Choman	25.0	7.7	16.7	44.4	0.0	16.7	20.5
Ninewa Districts	50.0	48.4	58.3	30.8	31.3	20.0	44.4
Sulaymaniyah	55.6	51.7	35.7	61.5	8.3	44.4	46.2
Sulaymaniyah districts	54.5	40.0	0.0	33.3	0.0	0.0	34.2

A governorate-level analysis reveals striking trends, where attendance rates are overall lowest in Erbil governorate at 38% of all school-aged children, and highest in Sulaymaniyah, where 55% of all school-aged children attended formal schooling<sup>13</sup>. Although Dahuk displayed comparatively higher rates of attendance (53% of all school-aged children) in proportional terms, the actual number of children who are not attending formal education is likely highest in Dahuk in absolute terms as Dahuk is host to a far higher number of Syrian refugees than Erbil.

At district level, attendance rates appear to be lowest in Shaqlawa, Soran/Choman and Erbil districts at 21%, 23% and 26% of all school-aged minors, respectively. This is followed by the surrounding Sulaymaniyah districts, where just over a third (34%) were attending school. At variance with this stand the districts of Sumel and Zakho in Dahuk, where over half (57% and 55%, respectively) of all school-aged minors were reported as attending school at the time of the assessment; although almost half of children were not attending across these districts, they still exhibit higher attendance rates than any other districts of the KRI.

<sup>13</sup> Governorate level attendance rates are weighted to account for the unequal distribution of the target population across districts, hence why governorate level findings are different to those obtained for district level findings.

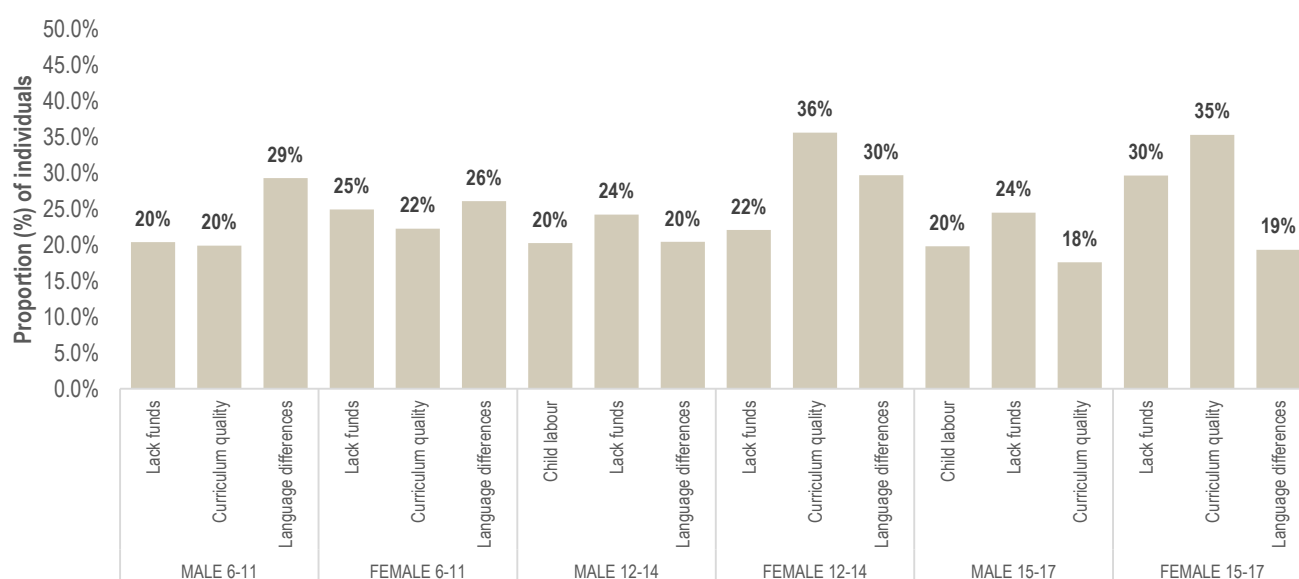
The most striking trends emerge once attendance rates are examined by demographic group, however. In general, female school-aged children appear to sustain attendance longer and at higher rates than their male cohorts across nearly all districts, but males aged 6-11 do exhibit higher overall attendance rates than females within the same age-group; this pattern holds across all districts bar Erbil, but disappears for the 12-14 and 15-17 age groups. It may be the perception of parents that protection concerns abound where younger female school-children are concerned, which in turn acts as a barrier or deterrent to school-attendance for this particular demographic group. As noted above, the effect disappears almost entirely for older cohorts and rates are actually reversed, with male minors displaying much lower rates of attendance than females across nearly all other districts and age-groups. The only exceptions to this trend can be noted in the districts of Amedi, Dahuk, Erbil and Ninewa and only for the 12-14 age group where protection concerns may still linger, making parents less inclined to send younger female children to school for fear of harassment, insecurity and the like.

Interestingly, though attendance rates for males aged 12-17 are low in general, they exhibit an exponential decline once the 15 year threshold is passed, dropping from nearly 40% for males aged 12-14 to 10% for older cohorts aged 15-17. In fact, no males aged 15-17 were attending formal education in Amedi, Shaqlawa, Soran/Choman and the surrounding Sulaymaniyah districts, whilst only 4% were attending in Dahuk district and 6% were attending in Erbil district. This is most likely attributable to the rate of child labour which males aged 12-17 exhibit; for instance, a third of males aged 12-17 were reported as engaged in income-generating activities in Dahuk, whilst 42% were working in Sulaymaniyah city district. For males at least, absorption into the labour market seems to be a key determinant of non-attendance, with older cohorts seemingly more likely to abandon schooling in favour of income generation for the household.

## Reasons for Non-attendance

That said, though child labour is indeed prevalent amongst male children in particular, the rate at which it is reported still fails to account for the full rate of non-attendance, warranting a closer examination of the full spectrum of reported reasons for such low levels of school attendance. The issue may simply be the lack of available schools as well as linguistic differences in those that are available; the latter is of particular relevance for older cohorts who were taught only in Arabic and spoke an entirely different dialect of Kurdish.

**Figure 17: Proportion (%) of school-aged children by top three reported reasons for non-attendance**



Although some predictable trends emerge, the diversity of responses is generally quite low regardless of demographic group. The proportion of children reported as not attending school due to child labour generally aligns with what was noted above, but the proportion of children reported as not attending due to employment is lower than actual rates of child labour, suggesting that although children may be working, parents simply do not consider this the primary reason for abandoning schooling. In other words, heads of households may simply attach more weight to other factors which push children out of school. Alternatively, this may mean that children are working and attending school simultaneously.

Together, the lack of funds, the perception that the quality of the taught curriculum was poor and perceived linguistic differences in spoken dialects constituted the most commonly reported reasons for non-attendance. For instance, a lack of funds was reported across all groups, whilst the perceived quality of curriculum was consistently reported amongst all demographic groups bar males aged 12-14. The same can be observed for linguistic differences which reportedly prevent attendance which was reported amongst all groups bar males aged 15-17. The issue with these findings is that they are not substantiated by the reality of education policy; schooling is largely free or heavily subsidised for all enrolled children, which in turn negates the fact that a lack of funds is the major impediment to attendance.

This may simply be due to the fact that parents and/or caregivers are unaware of the benefits to which they are entitled. It may also mean that indirect costs, including outlays on clothing, food and travel to associated opportunity costs (such as the money foregone by pulling the child out of employment and enrolling them in formal education), all of which may present substantial financial access barriers which poorer households are ill-equipped to surmount.

### Rates of Attendance in Informal Education

Table 4: Rates (%) of attendance in informal education for school-aged children reported as not-attending formal schooling

District	Males 6-11	Females 6-11	Males 12-14	Females 12-14	Males 15-17	Females 15-17
Amedi	50.0	100.0	66.7	0.0	100.0	66.7
Dahuk	20.0	0.0	25.0	100.0	0.0	0.0
Sumel	25.0	50.0	0.0	0.0	0.0	0.0
Zakho	0.0	33.3	0.0	0.0	0.0	0.0
Erbil	42.9	85.7	100.0	0.0	100.0	100.0
Koisnjaq	66.7	0.0	50.0	50.0	0.0	100.0
Shaqlaw	11.1	0.0	0.0	100.0	100.0	0.0
Soran/Choman	0.0	0.0	0.0	0.0	0.0	0.0
Ninewa districts	0.0	40.0	0.0	0.0	0.0	100.0
Sulaymaniyah	57.1	20.0	100.0	100.0	0.0	100.0
Sulaymaniyah districts	100.0	71.4	0.0	100.0	0.0	0.0

Rates of attendance in informal education were found to be markedly higher amongst younger than older cohorts, with the proportion of children in informal education higher for those aged 6-11 than for other age groups. Erbil district appeared to be the locus of informal education activities, with over 60% of all children who are no longer attending formal education reportedly attending informal education activities at least 4 days per week. This was followed by Sulaymaniyah and Amedi districts, where overall rates of attendance in informal education were 68% and 65%, respectively.

Upon closer inspection, trends gleaned from rates of attendance in formal schooling also appear to be reflected here. For instance, younger males display higher rates of attendance than younger females, but this is reversed for the 15-17 age bracket. Ultimately, it simply seems to suggest that as with formal education, parents may well feel

that younger girls are more at risk of protection issues – including harassment, violence and abuse – than younger male children. Age appears to attenuate this as more girls who do not attend formal education are pushed into informal education activities and males seemingly become more prone to absorption in the labour market.

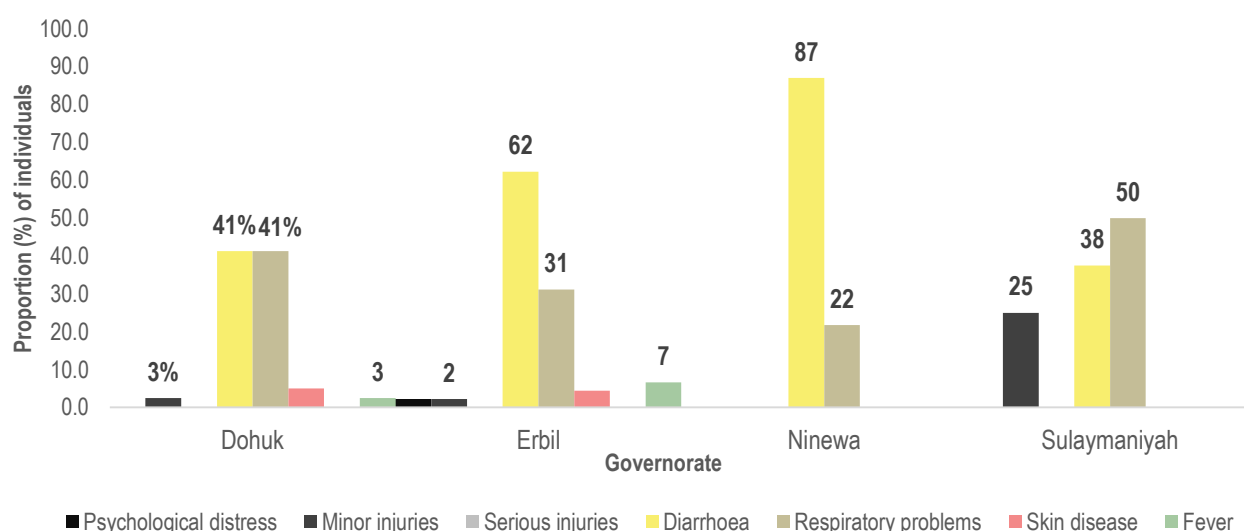
Finally, although a significant proportion of school-aged children attended neither formal nor informal education activities across multiple districts, minors who did not attend formal schooling were attending informal education *en masse*. In Amedi district, for instance, all girls aged 6-11 and all males aged 15-17 attended informal education activities at least 4 days per week. Equally, all males aged 12-14, all males aged 15-17 and all females aged 15-17 attended informal education activities in Erbil district. The same held true in Sulaymaniyah city district, too. Although the issue of appalling rates of attendance in formal education remains, these figures do suggest that parents are disinclined to pull children out of school entirely and instead prefer a more informal, *ad hoc* solution. Although informal education is neither accredited nor transferable to formal curricula in Iraq or elsewhere, it does indicate that there may be a perception that displacement in Iraq is temporary. This might in itself act as a disincentive for parents to enroll children in a schooling system which they perceive to be poor and instead opt for a more temporary substitute in informal education until such time that formal education can be continued.

## Health

### Health Issues

Health problems reportedly affected an estimated 5% of all non-camp refugees in the two weeks prior to the survey. Within this affected sub-population, diarrhoea was the most commonly reported health issue amongst infants aged 5 or under, accounting for 54% of all infantile ailments across the KRI and 75% of all incidences of diarrhoea. It accounted for 87% of all reported health issues in Ninewa and over 60% of all reported health issues in Erbil. Although less prevalent in Dahuk and Sulaymaniyah governorates, it still accounts for a near-majority in both (41% and 38%, respectively). In and of itself, diarrhoea cannot be diagnosed as a stand-alone condition, but is indicative of a wider dietary or, more likely, hygienic issue. Whilst poor hygiene practices may well be a contributing or enabling factor, contaminated food and water sources, acting as vectors for a bacterial infection, may also be the key determinants.

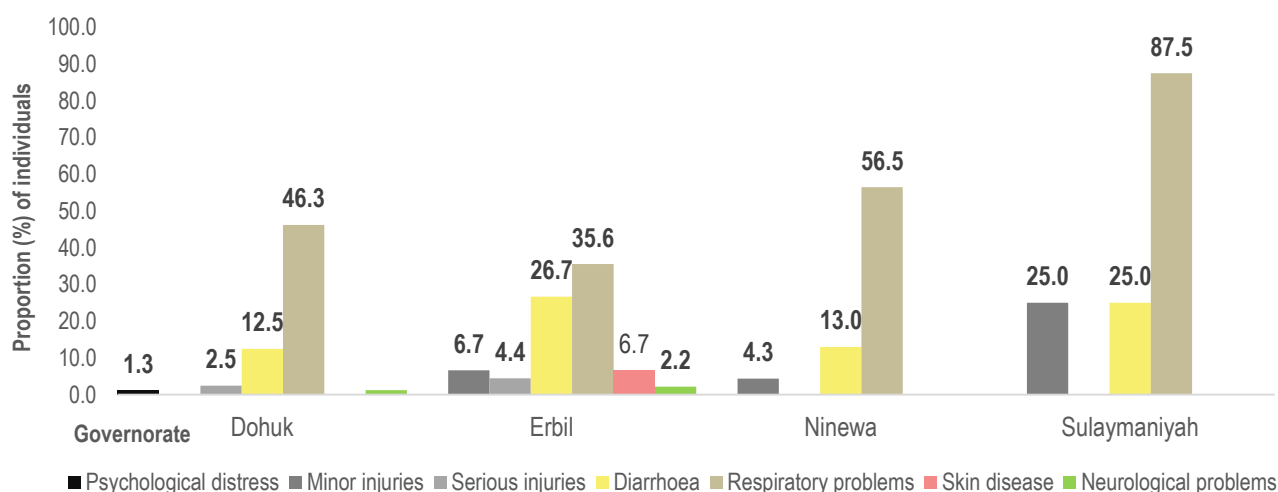
**Figure 18: Proportion (%) of individuals aged 5 or under by type of health issue (as proportion of all individuals with health issues)**





At this stage, it is worth noting that it is unexpected for diarrhoea to be the most common reported health issue given the time of year, when the risk and incidence of respiratory problems and infections is higher on a global scale. This may well be attributable to the hypothesis posited above that poor hygiene practices are a key determinant of the persistence of diarrhoea amongst the Syrian sub-population. That said, the second most often reported health issue were respiratory problems or breathing difficulties, accounting for an estimated 35% of all reported health issues amongst infants aged 5 or less.

**Figure 19: Proportion (%) of individuals aged more than 5 by type of health issue (as a proportion of all individuals with health issues)**



Once the 5 year threshold is passed, the incidence of diarrhoea is nearly halved to 19% in comparison to infants below the age of 5, whilst the rate of reported respiratory problems exhibits a sharp increase, affecting an estimated 55% of all individuals with health issues. Although the incidence of diarrhoea is still arguably high, affecting a quarter (25%) of all individuals with health issues in Sulaymaniyah governorate, it does not exhibit levels as high as what can be observed with infants aged 5 and under. That said, the rate of respiratory problems is highest in Sulaymaniyah governorate where 88% of all individuals with health issues were affected. This is followed by Ninewa, where over half (56%) of all affected individuals were suffering from respiratory issues. Given the timing of the assessment, this could also be attributable to the fact that it was the season where respiratory infections and problems reach a peak, leading to a higher overall incidence.

## Chronic and Non-communicable Diseases

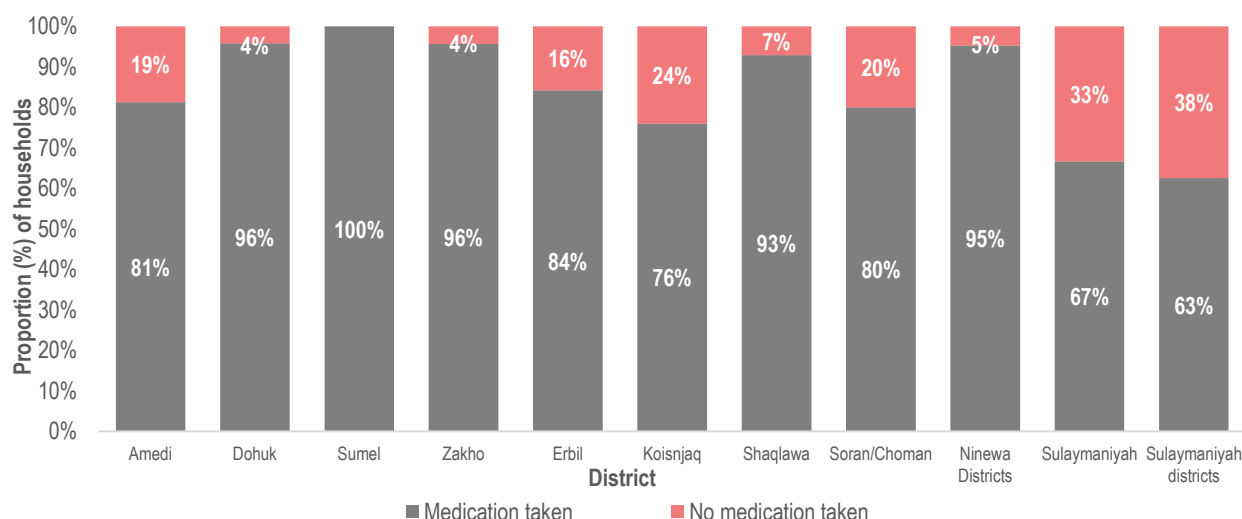
**An estimated 5% of all Syrian refugees of all age groups were reported to be suffering from a chronic illness at the time of the assessment.** Past research indicates that globally, chronic, non-communicable diseases afflict approximately 10-15% of a given statistical population, meaning that refugees in the KRI display below-average rates of chronic conditions. Although these conditions vary in severity, afflict certain demographic groups disproportionately and REACH cannot determine causality with any household level data, the findings allow us to at least infer the potential causes and the demographic distribution of ailments.

That said, treatment and medication rates across the most affected regions varied considerably. Over 80% of those suffering from a chronic medical condition across Dahuk and Ninewa reported seeking treatment and over 90% took regular medication for their condition. The proportion of households who had accessed medical treatment was overall highest in Amedi and Sumel districts (100% of households across both), followed by Dahuk and Zakho (where 75% of households reported seeking treatment). Equally, over 90% of households across Dahuk governorate reported having access to and taking regular medication. Only half reported access in Koisanjaq district,

where a higher proportion of households was affected, although 75% reported taking regular medication to help with their condition. It has to be highlighted that the number of people taking treatment regularly can be linked to two key factors, including a perceived chronic diseases rather than a diagnosed disease or constraints in accessing diagnostic services and medication.

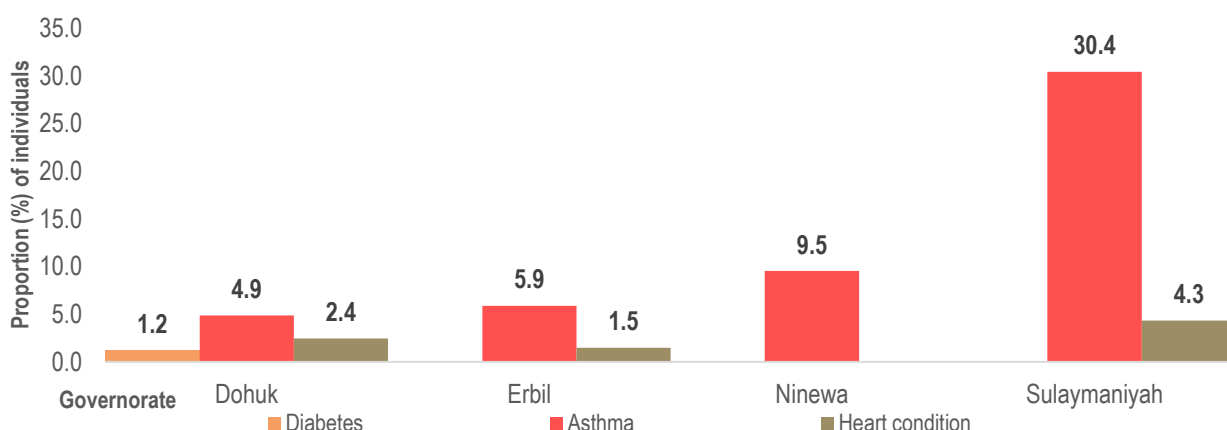
Overall, this suggests that healthcare coverage – whether publicly, privately or NGO-provided – is higher and easier to access in Dahuk than elsewhere. Although this is understandable given the fact that Dahuk hosts a higher proportion of refugees than the rest of KRI – thus naturally dovetailing the scope and focus of the humanitarian response towards this area – this does mean that other, hard-to-reach regions remain comparatively underserved.

**Figure 20: Proportion (%) of households hosting individuals with chronic illnesses who regularly take medication**



As the distribution of refugee households moves south and south-east towards Sulaymaniyah and surrounding areas, access to medication appears to decrease, following a trend established across other sectors of intervention. Access to services is generally lower in Sulaymaniyah and may well be for access to medication, too. This may well be determined by factors which are beyond the scope of this assessment, but it does point to the fact that aggregate welfare – whether we consider food security, incomes, health or resource scarcity in general – is lower in Sulaymaniyah than elsewhere in the KRI.

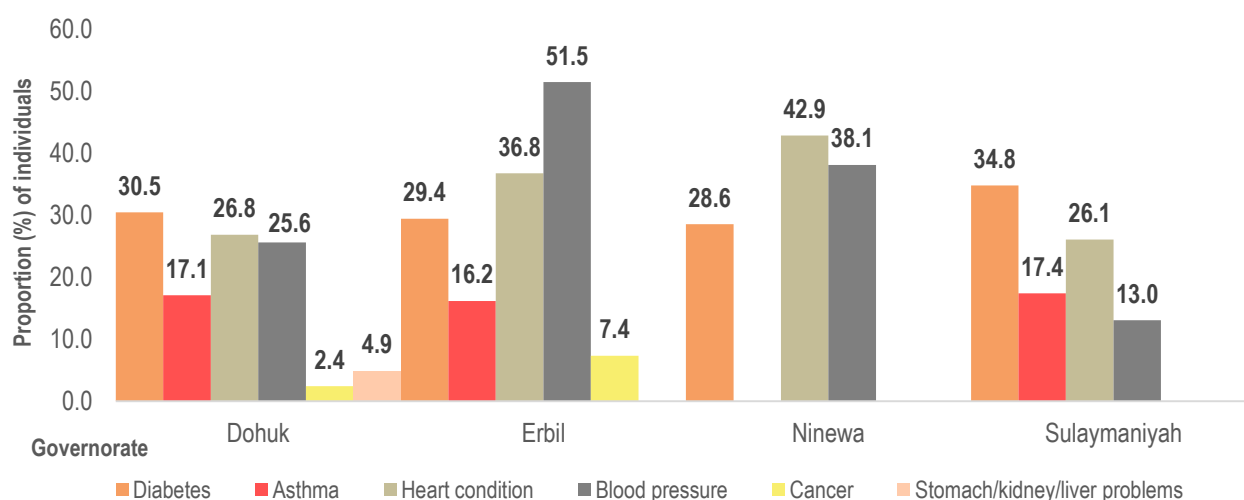
**Figure 21: Proportion (%) of children aged 5 or under by type of chronic illness (as a proportion of all chronically ill individuals)**



District level findings indicate no particular spatial trend, but demographic findings across governorates do, with Dahuk and Sulaymaniyah yet again disproportionately affected. That said, an estimated 10% of all individuals suffering from a chronic condition were infants aged 5 or under and suffering from asthma, with nearly a third (30%) of asthmatic children residing in Sulaymaniyah governorate at the time of the assessment.

Heart conditions and cardiovascular diseases were not found to affect a significant proportion of children aged 5 or under. Aside from asthma, then, the majority of chronic conditions and non-communicable diseases appear to affect older cohorts. This is understandable given that chronic illnesses such as these normally develop at later stages in life and can be attributed to long-term dietary imbalances and lifestyle patterns which children are not normally affected by.

**Figure 22: Proportion (%) of individuals aged more than 5 years by type of chronic illness (as a proportion of all chronically ill individuals)**

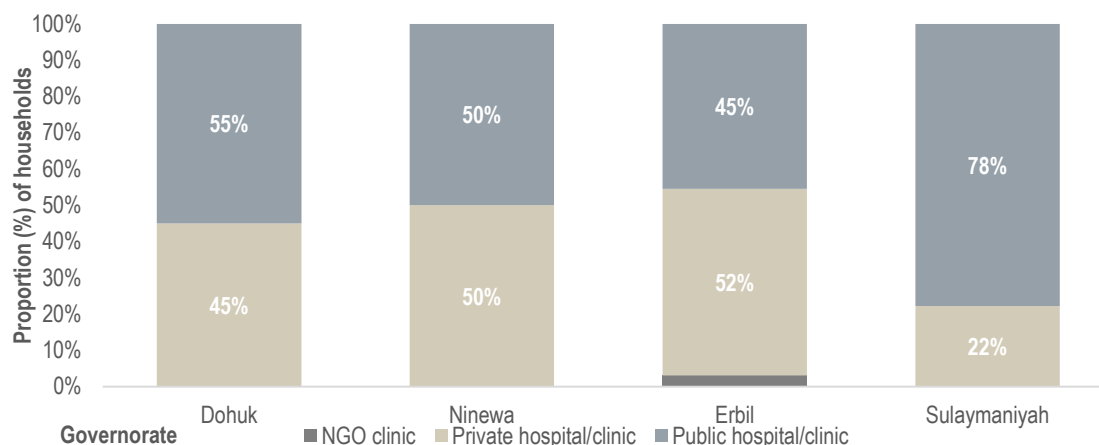


Individuals affected by chronic diseases exhibit conditions largely symptomatic of dietary and lifestyle imbalances, with diabetes, cardiovascular and blood pressure problems (including cases of hyper and hypotension) found to be the most common amongst older individuals. Cardiovascular problems accounted for an estimated 33% of all instances of non-communicable diseases amongst people older than 5, again suggesting that dietary and lifestyle differences contribute to a higher incidence of chronic illness amongst older cohorts.

A slightly smaller proportion of those affected by chronic diseases aged over 5 (32%) were suffering from blood pressure problems, with over half of those suffering from chronic diseases in Erbil governorate reporting hypotension and hypertension, whilst this figure stands at nearly 40% of individuals residing in Ninewa. Asthma, although present across all governorates bar Ninewa, was far less prevalent than was the case with infants aged 5 or under, again highlighting the variation in ailment types across demographic groups. As a condition, it naturally occurs in infants and young children at a rate higher than can be observed in an adolescent or adult segment of a given statistical population. It dissipates with age, which most likely explains why just over 10% of those aged over 5 years are suffering from asthma across the KRI.

## Access to Treatment

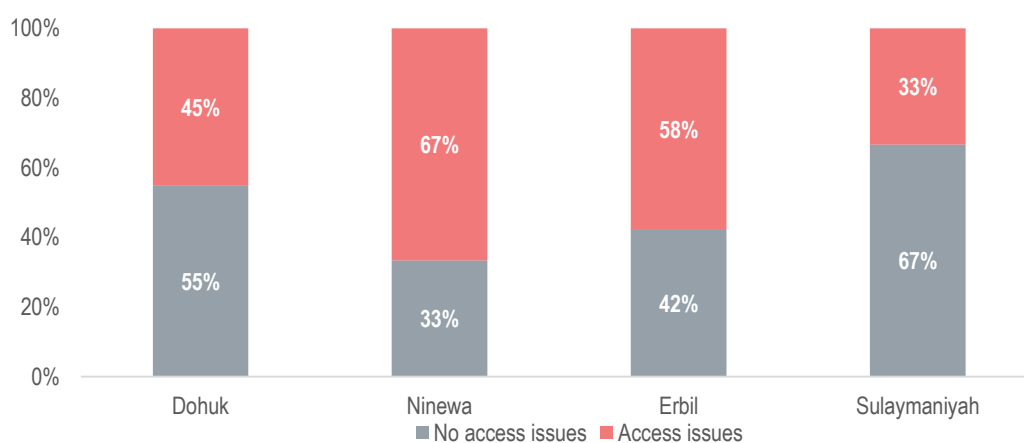
Figure 23: Proportion (%) of households by source of medical treatment



Of all individuals experiencing health issues in the 14 days prior to the survey, over half (52%) reported accessing medical care. Findings show that healthcare and medical treatment were accessed primarily through public facilities, with over half (53%) of households reporting the use of public hospitals and clinics across the KRI, although the rate of access does vary considerably by governorate. Overall, though, access patterns to public or private services do not seem to be determined by governorate of residence. The only outlier in this respect is Sulaymaniyah, where 78% of those who sought medical treatment did so in public facilities. With 22% accessing private care, it does not mean that private care is unavailable, rather that households residing in Sulaymaniyah governorate either prefer public care or that given lower income levels, cannot afford to access private care. Nevertheless, rates of access to public and private care are nearly equal across Dahuk, Ninewa and Erbil and given that healthcare which is provided for free is often accessed at similar rates as private, paid-for healthcare, findings should be re-examined under a set of assumptions which go beyond spatial patterns.

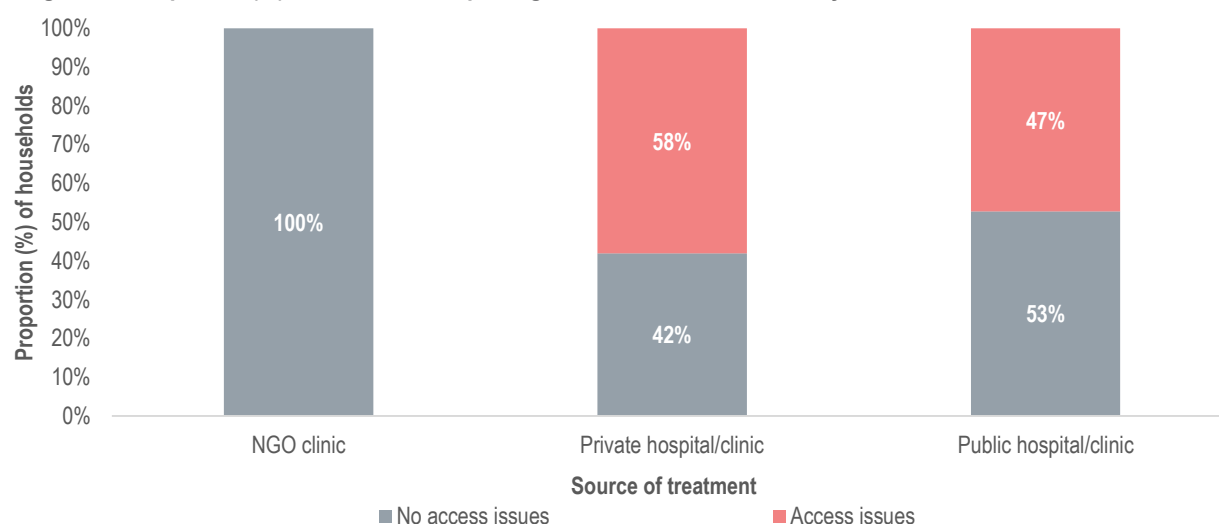
For instance, all households engaged in skilled service labour who hosted individuals with medical conditions reportedly sought treatment in privately-run facilities. Equally, over 75% of households who were found to be economically inactive at the time of the assessment also accessed private healthcare, suggesting that income is not a determinant of and has little, if any, effect on access patterns. That said, access patterns and sourcing strategies are most likely determined by a variety of unknown and unobserved variables such as proximity to type of facility, personal preferences and perceived quality of services, none of which can be quantified at present.

Figure 24: Proportion (%) of households reporting healthcare access problems



Of the households who reported accessing healthcare services in the two weeks prior to the assessment, over half (51%) experienced difficulties in gaining access to the services and treatment they required. The majority of those who required treatment in Ninewa (67%) and Erbil (58%) reported experiencing problems in accessing the services they needed, whilst a third (33%) did so in Sulaymaniyah.

**Figure 25: Proportion (%) of households reporting healthcare access issues by source of healthcare**



Seeing as no particular spatial pattern can be derived from these data, a source-based analysis of findings is warranted. Access issues were reported at a higher rate for households accessing privately (58%) as opposed to publicly provided care (47%), suggesting that the private provision of healthcare is not necessarily more efficient or that this is the reason certain households opt to seek private treatment. No access issues were reported in NGO-run facilities.

**Table 5: Proportion (%) of households experiencing access difficulties by mode of healthcare provision**

Type of facility	Relevant services/medication unavailable	Refused treatment	Cost of healthcare	Distance to facilities
NGO clinic	0%	0%	0%	0%
Private hospital/clinic	11%	6%	100%	6%
Public hospital/clinic	65%	0%	41%	18%

No households who sought treatment over the course of the two weeks prior to the survey were refused treatment by staff or administration across any of the NGO and publicly-run facilities in the KRI, whilst access problems were reported for both privately and publicly provided healthcare. The most commonly reported access issue was not denial of treatment or proximity to service, but the perceived cost of healthcare. This was the case for all households which sought treatment in privately-run clinics and hospitals and for 41% of those who sought treatment at publicly run facilities. Whilst cost is an understandable access barrier in private clinics, the provision of treatment is heavily subsidised or free within the public healthcare system. That said, these are most likely indirect costs associated with physical access and the cost of transport or the purchase of medicine post-examination which may be out of stock in the health facility.

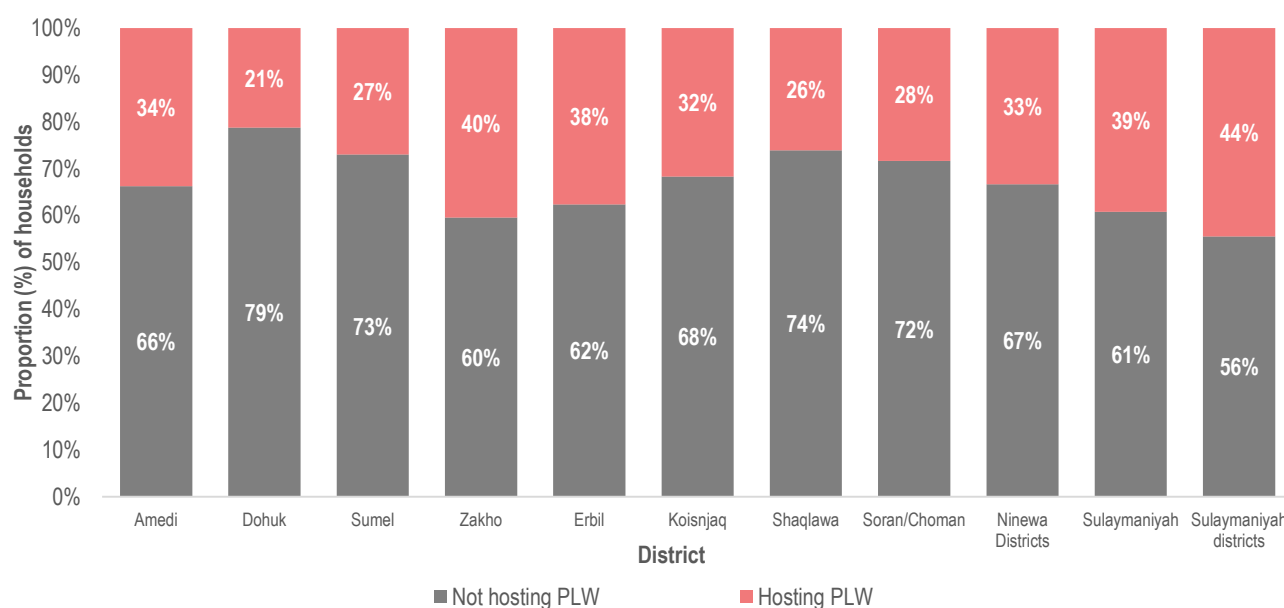
Given that healthcare is a service which is non-excludable, heavily subsidised and made available for all individuals residing on the territory of the KRI regardless of residency status, direct costs may be more applicable to privately

sourced health services. Moreover, it may also suggest that Syrian refugee households are not entirely aware of the full extent of the benefits to which they are entitled, leading to perceptions that costs are too high. Equally, it might also indicate that even with extensive public subsidies, the procurement of medication may still be too high of a financial burden. The second most commonly reported access barrier was the fact that the relevant services or medication were not available when needed, reported across approximately 37% of households across the KRI who sought treatment in the two weeks prior to the survey. The availability of appropriate treatment options and medicine is purportedly a far more acute problem in public clinics and hospitals (reported by 65% of households) than in private facilities (11%). This might also be linked to the fact that public primary health care facilities offer a smaller range of services in line with KRI policies while private facilities are free to offer a larger range of services.

## Reproductive Healthcare

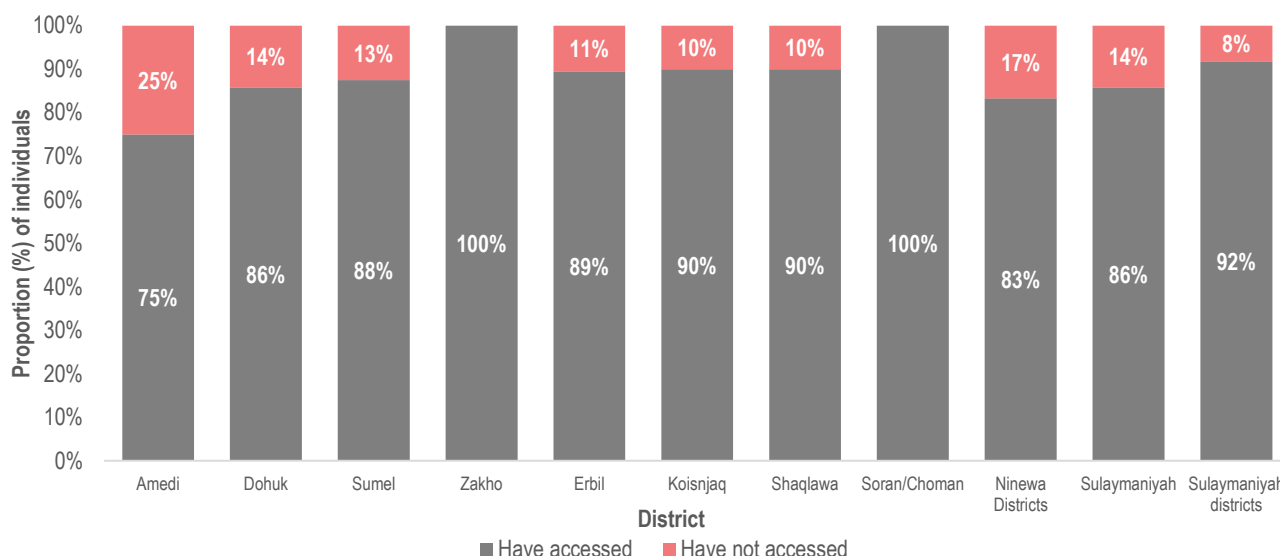
Nearly a third (30%) of households were found to host either pregnant or lactating women at the time of the assessment. The proportion of households was highest in the surrounding Sulaymaniyah districts, where a near majority (44%) were hosting pregnant and/or nursing women at the time of the assessment. Equally, pregnant and/or nursing women were found amongst 40% of all households in Sulaymaniyah city and Erbil city districts, respectively, and nearly a third of households in Amedi districts and the Ninewa districts of Shekhan, Akre and Bardarash. Dahuk and Dahuk-administered districts of Ninewa were host to the highest proportion of pregnant and/or lactating women in both relative and absolute terms.

Figure 26: Proportion (%) of households hosting pregnant and/or lactating women



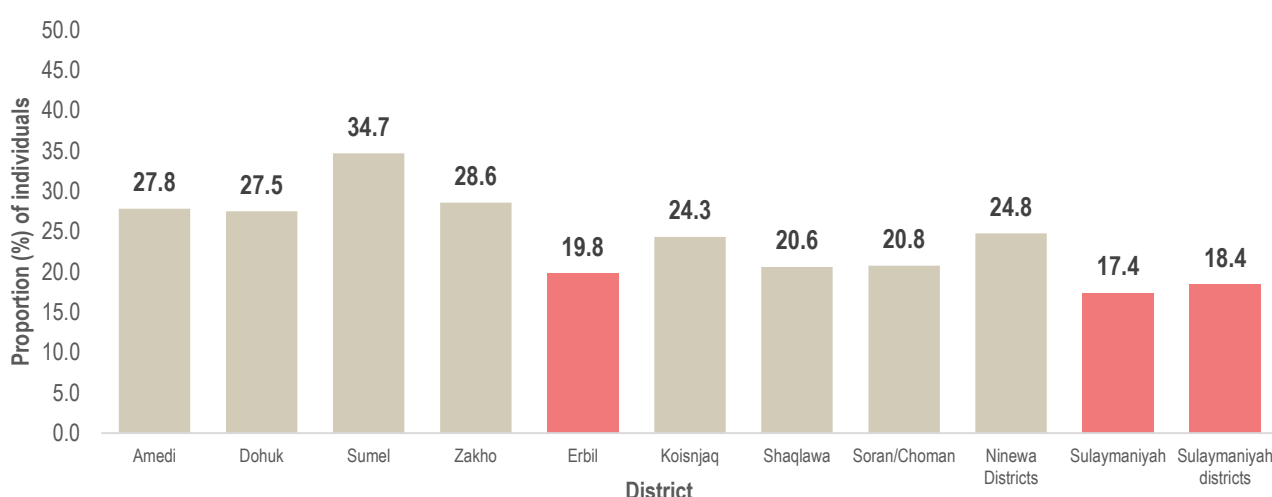
Overall, pregnant and lactating women accounted for over a fifth (21%) of all women across the KRI. Lactating women accounted for approximately 15% of all adult women and over 60% of all women within the sub-group. Over a fifth (21%) of adult women in Amedi district and over a quarter (an estimated 26%) in the surrounding Sulaymaniyah districts were found to be lactating at the time of the assessment. Dahuk city district was host to the lowest proportion of lactating women (9%), whilst the distribution was largely stable across Erbil governorate as a whole, accounting for approximately 12% of all of-age women in each of the Erbil districts.

**Figure 27: Proportion (%) of pregnant women who have accessed ante-natal clinics**



Findings indicate that the rate of access to reproductive health services across the KRI is high, with only a tenth (10%) of all pregnant women reporting no use of or access to essential ante-natal care during their pregnancies. District-level findings vary and appear to follow no previously observed trends in generic service access levels. In fact, contrary to previous findings, Dahuk and Dahuk-administered Ninewa exhibit lower rates of access than other regions of the KRI, with a quarter (25%) of pregnant women in Amedi reporting no use of or access to antenatal obstetric care. Equally, nearly a fifth (17%) of pregnant women across the Ninewa districts reported not using or accessing such services, suggesting that whilst antenatal and obstetric care is available in Dahuk and Ninewa, the comparatively higher caseload means that not all needs can be furnished. It may also be due to the long distances which need to be travelled to access antenatal services or simply a lack of awareness of the importance of antenatal care across the inherently more rural districts of Dahuk and Ninewa.

**Figure 28: Proportion (%) of infants under 5 exclusively breastfed for at least 6 months**



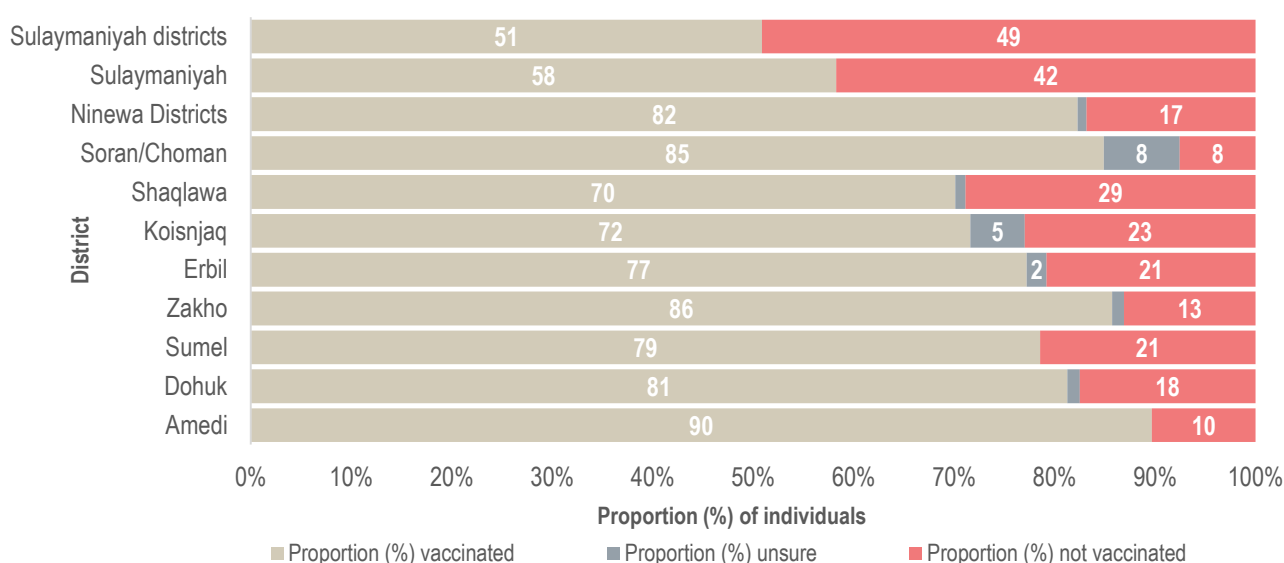
The rate of exclusive breastfeeding for infants was generally low across the KRI ( and reached a peak of just over a third (35%) in Sumel district. This is also indicative of a wider trend where exclusive breastfeeding rates are generally – if only somewhat – higher in Dahuk and Dahuk-administered Ninewa governorates than elsewhere. Conversely, at 18% rates were lowest in Sulaymaniyah governorate, indicating a widespread infant nutrition issue.



## Immunisation Rates

Findings indicate that **nearly a third (30%) of at-risk children aged 0-59 months have not been vaccinated against poliomyelitis<sup>14</sup> across the KRI**. In contrast, data from independent verification exercises after the polio vaccination campaign indicate an overall coverage of approximately 90%. The difference in findings may be due to a variety of reasons including methodological differences between the two assessments as well as actual differences in immunisation service coverage across geographic areas. The rate varies substantially by district and by governorate, with Dahuk and Dahuk-administered Ninewa districts exhibiting the highest vaccination rates overall. This follows a trend observed with other forms of service coverage and access; generally, districts and regions which host higher proportions of Syrian refugees (essentially Dahuk) exhibit higher rates of access to services. Polio vaccinations are no different in the sense that whereas 90% of at-risk infants in Amedi and 86% of at-risk infants in Zakho were purportedly vaccinated against poliomyelitis, just over half (58%) were reported as vaccinated in Sulaymaniyah city district.

**Figure 29: Reported rates of polio vaccination amongst children aged 0-59 months**



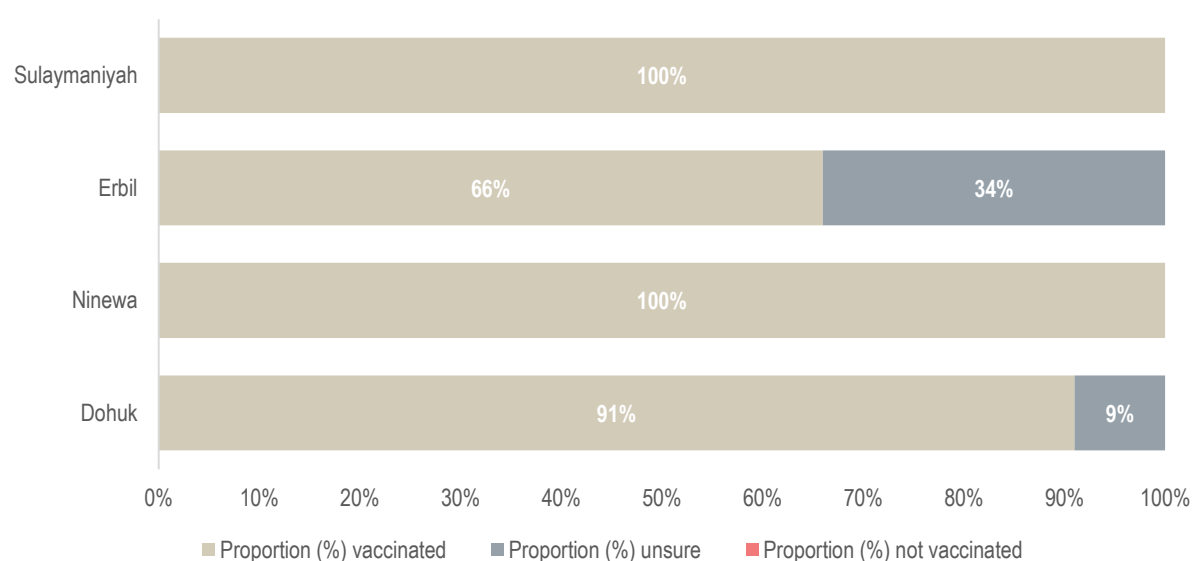
At 55%, Sulaymaniyah governorate displayed the lowest rates of polio vaccinations of any region of the KRI in proportional terms. Although the absolute caseload may be lower than in Erbil or Dahuk, nearly half of at-risk infants residing across the districts of Sulaymaniyah governorate remain susceptible to infection. Erbil exhibits a 20% higher proportion of at-risk children purportedly vaccinated against poliomyelitis, with an estimated 75% of children immunized. Vaccination rates were higher in urban centres such as Erbil district (77%) where healthcare service coverage is most likely higher overall, but the highest proportion of vaccinated children was interestingly in Soran/Choman (85% vaccinated), districts which appeared to be underserved and where vulnerability was higher across other sectors of intervention. Although absolute caseloads may well be lower in Soran/Choman, immunization coverage appears to be higher here than in areas such as Sulaymaniyah where needs exceed the scope and availability of required services.

Whilst it is beyond the scope of this assessment to gauge the scale of supply, such sizeable inequalities in reported coverage between Sulaymaniyah and the rest of the KRI cannot be attributed solely to information gaps or recall bias at household level. Although immunisation service coverage does cover the governorate most affected by the

<sup>14</sup> Enumerators were trained to describe OPV as “two-drops” to respondents who were unsure/unaware that their children had been vaccinated. “Do not know” was only recorded in the instance that a respondent truly had no recollection or documented record of such a vaccine, whilst children were only reported as not vaccinated if respondents or heads of household were certain that at-risk children had not been vaccinated.

refugee influx (namely, Dahuk), regions such as Sulaymaniyah and rural Erbil effectively fall outside of the scope of the common response strategy which disproportionately targets the worst hit regions of the KRI.

**Figure 30: Reported rates of vaccination against measles for children aged 9-24 months**



Vaccination rates against measles for at-risk minors aged 9-24 months appear to be higher than for polio, with an estimated 83% of all children immunised across the KRI. Following a well-established pattern, Dahuk and Dahuk-administered Ninewa districts displayed higher rates of immunization against measles (an estimated 95% of all at-risk infants) than all other regions of the KRI. With 66% reported as not vaccinated, immunisation rates were found to be lowest in Erbil governorate, whilst all infants were reportedly immunised in Sulaymaniyah, thus bucking a trend observed with polio vaccinations where coverage was lower in Sulaymaniyah governorate than elsewhere.

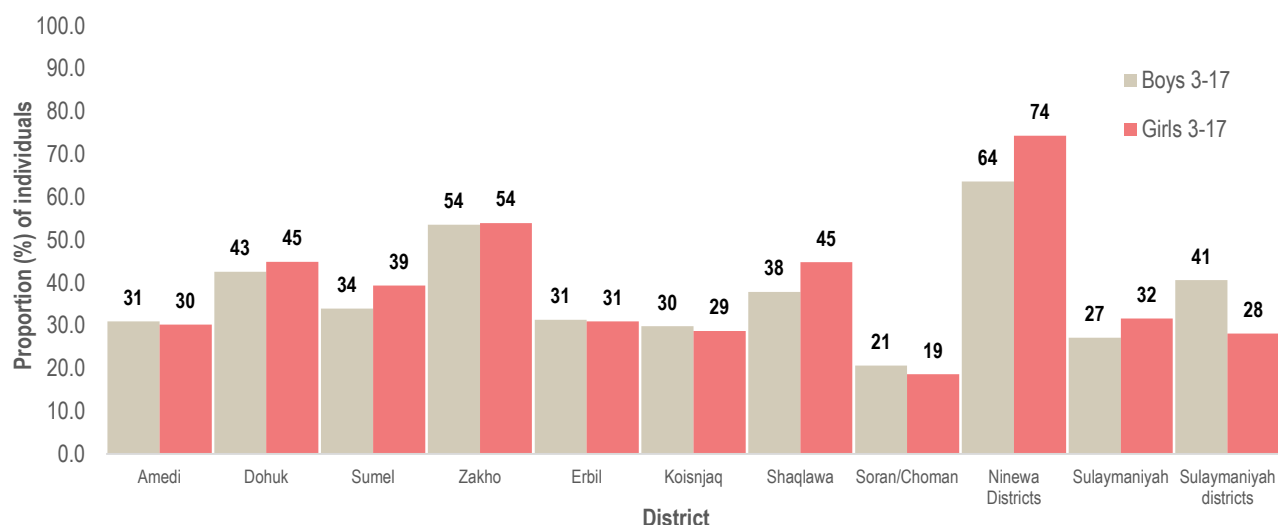
Interestingly, a significant proportion of households – nearly 16% across the KRI – also reported not knowing whether children had been vaccinated<sup>15</sup>. This stands in stark contrast to the 2% of households who were unsure of whether their children were vaccinated against polio and underscores the difficulty in gauging vaccination rates accurately for more unconventional infectious diseases where no official, documented records exist. In the routine vaccination schedule of Iraq, children receive 8 injections until the age of 5. It is thus understandable that recall bias and the degree of uncertainty is higher for this particular vaccination.

## Protection

Protection concerns abound in effectively all protracted displacement crises, and the position of Syrian refugee households is no different within the context of the KRI regardless of sex or age. Access to secured, formal child friendly spaces for boys and girls aged 3-17 is low relative to the total number of minors, whilst the proportion of individuals in possession of KRI residency permits varies greatly depending on governorate of residence. Separated and unaccompanied minors are found in each district of the KRI, albeit the proportion of households hosting these minors is low.

<sup>15</sup> Enumerators were trained extensively on how to explain what the measles vaccination does in the instance that respondents did not understand the concept. All necessary measures were taken by field teams and “Do not know” was only recorded if the respondent or head of household truly could not find any record/recall such a vaccination taking place.

**Figure 31: Proportion (%) of boys and girls between the ages of 3 and 17 with access to safe, child friendly spaces outside of the home**



Access to secure, formal child-friendly spaces<sup>16</sup> peaks in the Ninewa districts and in Zakho, where the majority of minors reportedly access and use child friendly spaces. Girls appear to have modestly greater access to child friendly spaces than boys in these districts (and on the whole). Nevertheless, the fact remains that the vast majority – **an estimated 62% - of all Syrian refugee children purportedly do not have access to secured play areas outside of the home**<sup>17</sup>.

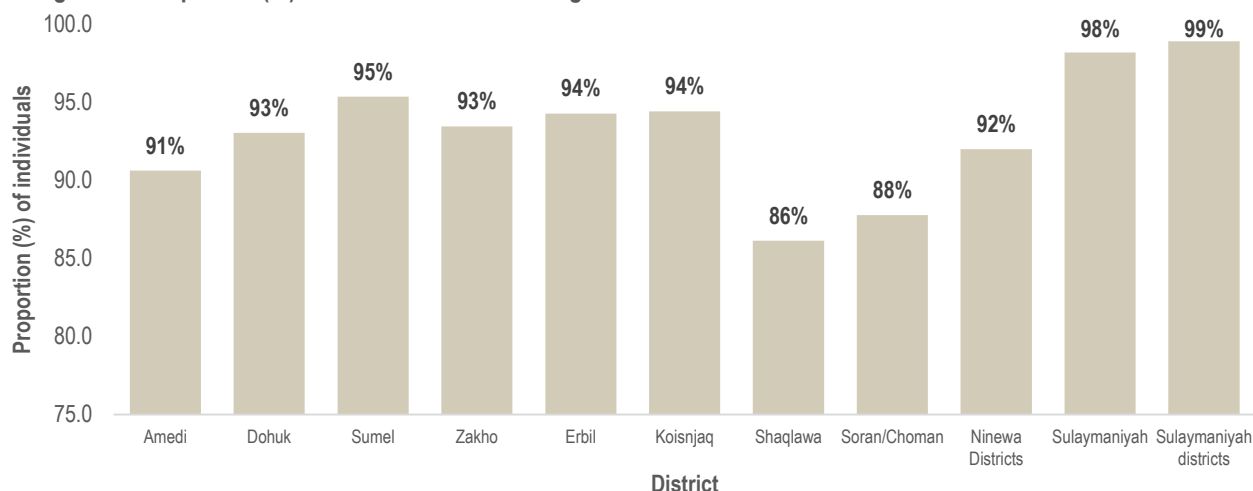
Whilst gauging the scale of the supply of safe spaces is beyond the scope of this assessment, findings do indicate that there is either a clear shortage of child-friendly spaces, under-usage of existing infrastructure, or both. In turn, under-usage might be attributable to the fact that households are unaware of existing spaces or are not accustomed to sending their children explicitly or even occasionally to such spaces. Furthermore, the disparity in access and/or usage between boys and girls might be due to the fact that girls are simply more likely to use these spaces in comparison to their male counterparts, which again indicates that the issue may not be supply, but rather demand and usage.

<sup>16</sup> For the purpose of this assessment, formal child-friendly spaces were defined as any formally managed child and youth centres or facilities administered by accredited organizations, including NGOs, community-based organizations or public agencies.

<sup>17</sup> Enumerators were explicitly trained not to register playing outside of the home, i.e. on the street, as access to a safe space, for example.

## UNHCR Registration and KRI Residency Permits

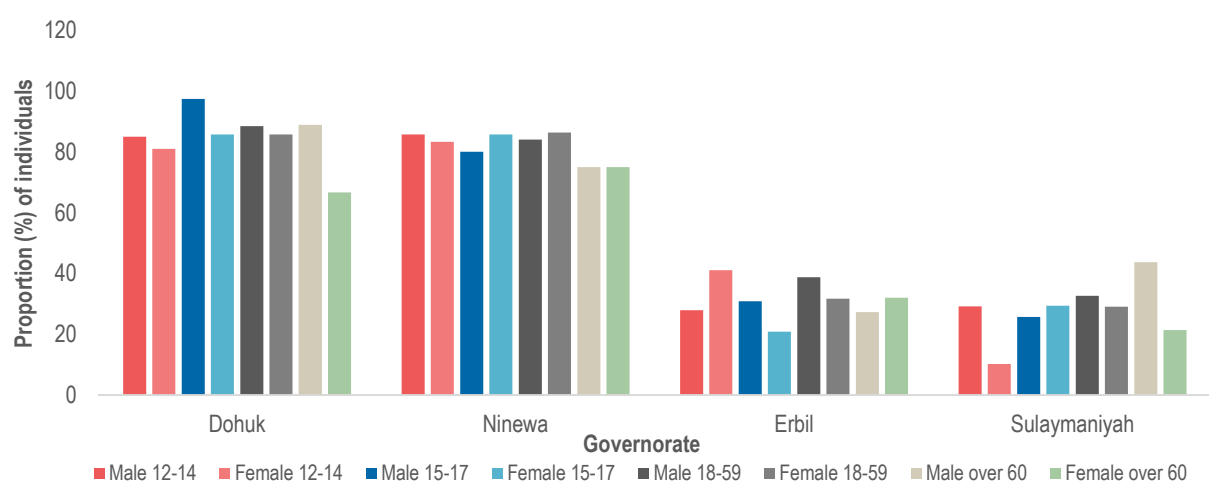
Figure 32: Proportion (%) of household members registered with UNHCR under at least one case



Overall, all 20 assessed districts were found to host unregistered individuals, with the proportion of individuals reportedly not registered with UNHCR highest in Shaqlawa district (an estimated 14%), followed by Soran/Choman at 12% and Amedi district at approximately 9% of all assessed individuals. **Approximately 4% of all households were not registered with UNHCR at KRI level<sup>18</sup>.** These households and individuals are effectively excluded from common response strategies which ensure regular access to food, shelter and health assistance, for example.

Conversely, registration rates appeared to be highest in Sulaymaniyah governorate, where an estimated 99% of non-camp refugees were reportedly registered at the time of the assessment. Despite modest variation across the districts of Dahuk, the vast majority of refugees were registered; the same held in Erbil and Koisanjaq districts of Erbil governorate. Coverage also appears to be highest across the Dahuk districts despite the comparatively higher caseload.

Figure 33: Proportion of individuals aged 12 and above in possession of a KRI residency card



Even greater degrees of variation can be observed between the proportions of individuals who hold KRI residency permits across the assessed districts. For instance, the proportion of individuals in possession of a KRI residency card is far higher for those residing in Dahuk and Ninewa governorates than it is in Erbil or Sulaymaniyah. With approximately 80% of eligible individuals in Dahuk and 84% of eligible individuals in Ninewa governorate, it is

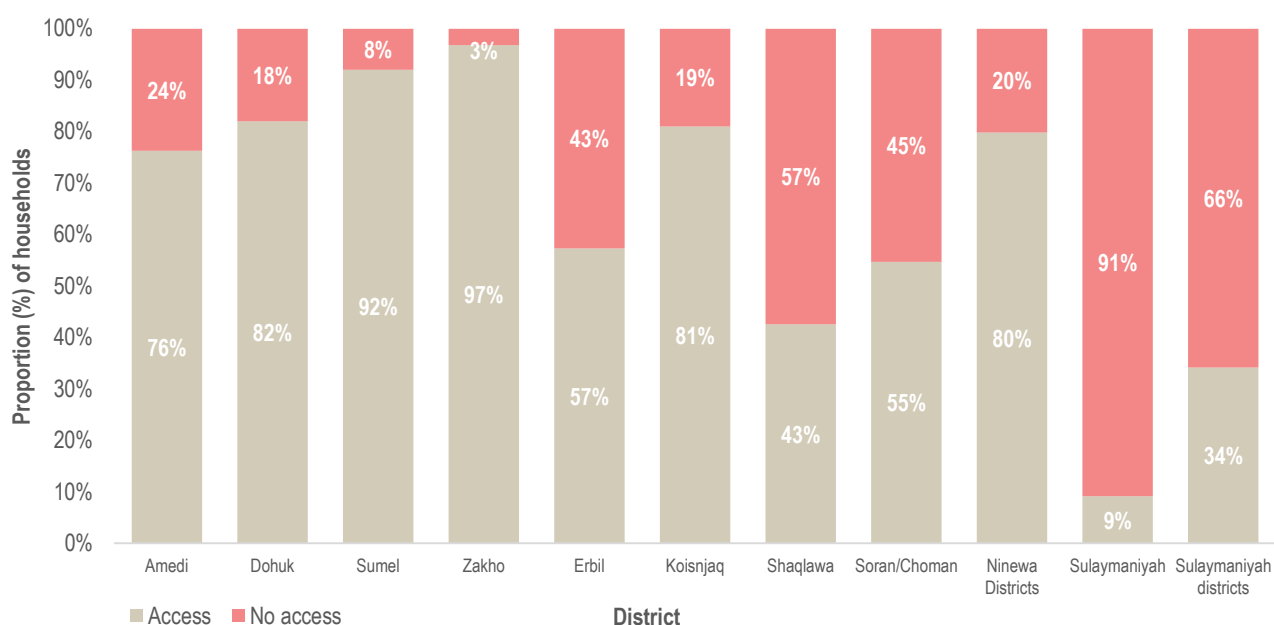
<sup>18</sup> Enumerators validated this response by verifying UNHCR registration documents and, where unavailable, simply recorded the reported answer.

possible that refugee households residing in Dahuk governorate-administered districts are subject to less stringent regulations on access (or may simply be subject to a more streamlined process) to residency status than counterparts in Erbil and Sulaymaniyah governorates (31% and 18% of all eligible individuals, respectively). Indeed, anecdotal evidence from Sulaymaniyah suggests that the Sulaymaniyah authorities faced administrative and technical difficulties in the registration process, resulting in a backlog<sup>19</sup> and prolonged clearance periods by governorate authorities. Given that similar findings can be observed in Erbil governorate, we can assume that similar procedures might be effective in Erbil-administered districts.

The consequences are ample and range from limitations on access to public services to exclusion from better paid and more secure segments of the labour market. Livelihoods outcomes seem to corroborate this, with the majority of households engaged primarily in low skilled manual or service labour to generate an income. For individuals and households without residency permits, employment in the formal, regulated sector of the labour market is impossible, thus necessarily limiting access to casual and often informal jobs where they have ostensibly no legal protection, are susceptible to predatory practices (including over-work and under-pay), socially degrading behaviour and have little or no job security.

### Access to Community Leaders and Community Support

Figure 34: Proportion (%) of households with regular access to their community leader



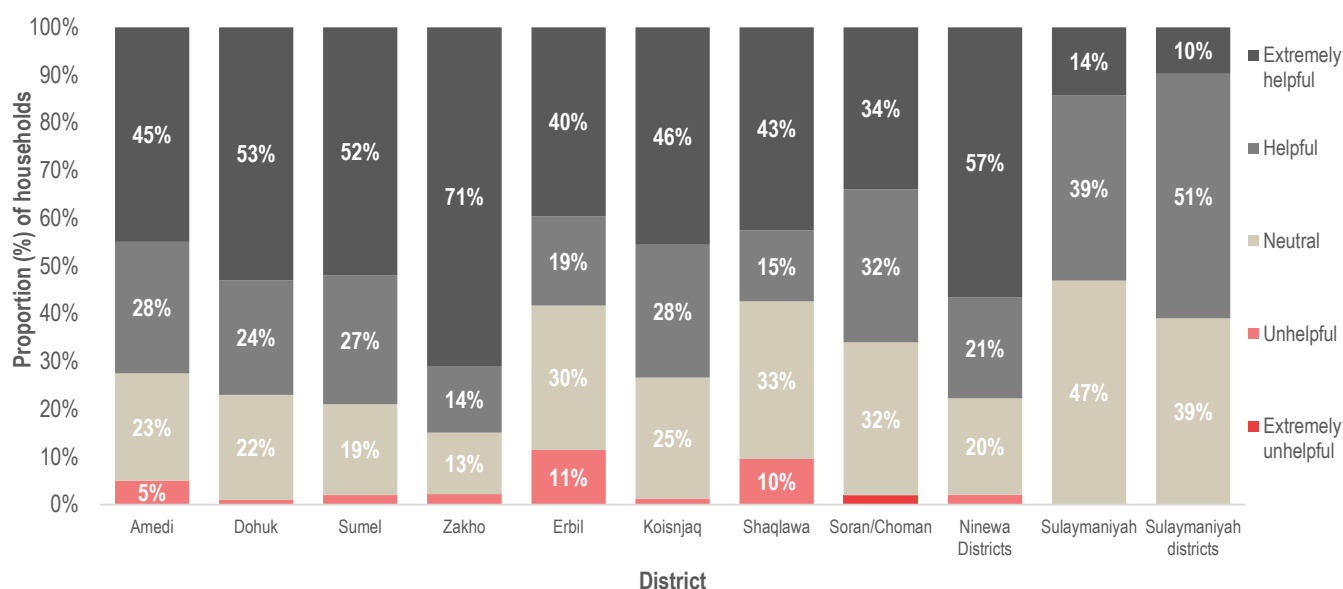
Access to community leaders – or *mukhtars* – appears to vary greatly depending on district and governorate of residence. The majority of refugee households reportedly have access in Dahuk (92%), Erbil (60%) and Ninewa (82%) governorates, whilst two thirds (an estimated 66%) of households reportedly have no access to their community leader in Sulaymaniyah governorate. Access rates are highest in districts across Dahuk and Ninewa; similar rates of access can be observed potentially because they all fall under the purview of the Dahuk administration, indicating that public authorities<sup>20</sup> in these districts pursue a more inclusive policy towards refugees. This is also reflected in the distribution of residency permits across governorates, where refugees residing in Dahuk appear to have far easier access to residency status and the benefits this carries. Contrary to this stand refugee households residing in Sulaymaniyah and, to a somewhat lesser extent, Erbil governorates.

<sup>19</sup> The authorities in Sulaymaniyah are now reportedly issuing residency permits to all individuals who pass the vetting process.

<sup>20</sup> *Mukhtars* are government employees, essentially civil servants, who receive a government salary.

Whilst low access rates in these districts might again be attributed to unknown and unobserved variables, including distance, income levels, language barriers and the like, it might also mean that households themselves feel no need to engage *mukhtars* to seek aid in resolving issues and hence report low rates of access. Ultimately, however, access rates are most likely determined by a combination of both supply and demand factors, the nature of which is beyond the scope of this assessment. It is important to note, however, that degrees of access to a community leader – perceived or actual – do not necessarily equate with degrees of support from the hosting community.

**Figure 35: Proportion (%) of households by perception of degree of support from the local, hosting community**



Across the KRI, an estimated majority of 66% of refugee households reported that their respective hosting communities were either helpful or extremely helpful, but findings do indicate substantial variation across districts and even governorates of residence. In Dahuk governorate, for instance, 57% of respondents indicated that their hosting community was extremely helpful. Smaller, but nonetheless sizeable, proportions of households reported this in Ninewa (44%) and Erbil (41%). Conversely, only 14% of refugee households reported that their hosting community was extremely helpful in Sulaymaniyah, with the added caveat that a majority of 53% reported that they perceived it as helpful and 30% perceived it as neutral.

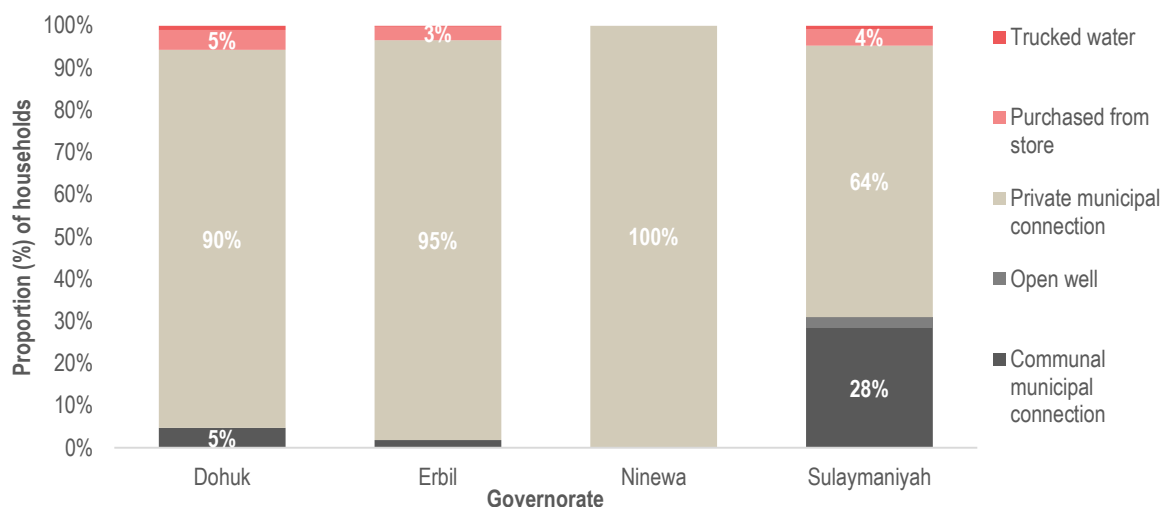
Overall, these findings are indicative of a broader trend of support (material or otherwise), inclusion and, although less quantifiable, integration across the KRI as a whole. Whilst access to *mukhtars* does vary and is exceptionally low in some areas, this should not be equated or confused with lack of support from or integration into the wider hosting community.

## Water, Sanitation and Hygiene

Drinking water and water for other domestic usage are primarily sourced from private municipal connections, with little variation across governorates. In 82% of cases, the primary source of drinking water was reported to be a private municipal connection. The proportion of households identifying private municipal connections decreases when water is sourced for domestic needs, however. Although the majority – an estimated 58% - still uses private municipal connections for domestic water, approximately 40% reported usage of communal municipal connections, too, indicating a shift away from privately sourced water when it comes to non-drinking needs. Although REACH currently possesses no information as to why this is, it may well be that communal connections incur less costs, meaning that households shift away from private consumption as a coping behaviour, much the same as with borrowing food or money.

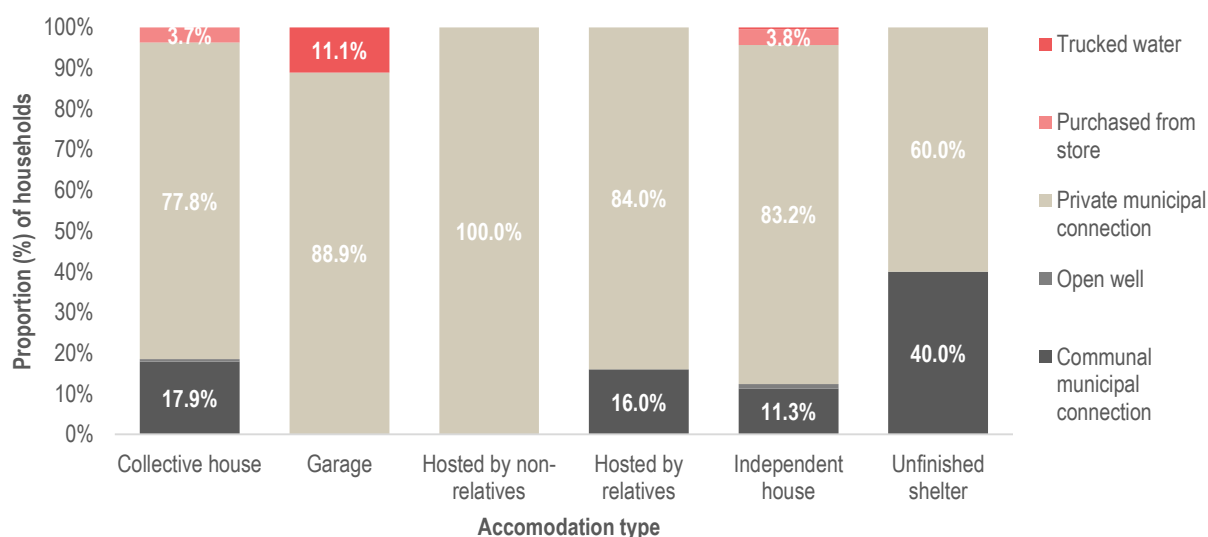
## Water

Figure 36: Proportion (%) of households by primary source of drinking water



As with food, households in Sulaymaniyah governorate displayed the highest degree of diversity in drinking water sourcing. Whilst the majority did use private municipal connections, over a quarter (28%) of Sulaymaniyah's residents also used communal municipal connections; furthermore, 89% of all municipal connections across the KRI were found to be in Sulaymaniyah. This may well be a coping behaviour as noted above, or it may point to the quality and type of shelters used by refugee households in Sulaymaniyah. For instance, 60% of the communal municipal connections were found to be in shared/collective housing in this governorate, suggesting that some households may not have the required infrastructure to access private connections in their home. Furthermore, 3% were found to source water from open wells; REACH currently possesses no indication of whether these wells are secured sources or not. A similar picture emerges across the KRI which indicates the water sourcing and shelter type are closely linked.

Figure 37: Proportion (%) of households by primary water sources, disaggregated by accommodation type

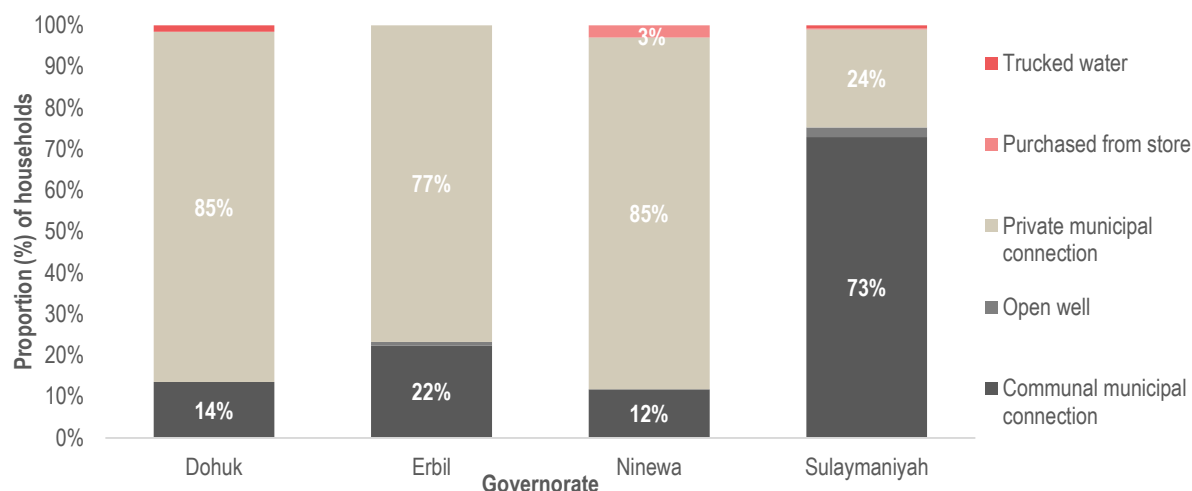


**Nearly a fifth (18%) of those residing in shared/collective housing and 40% of those residing in unfinished buildings identified communal municipal connections as their primary source of drinking water.** A further 16% of those found to be hosted by relatives also used communal connections, indicating that shared forms of housing often do not have the required infrastructure to service individual families or households within those



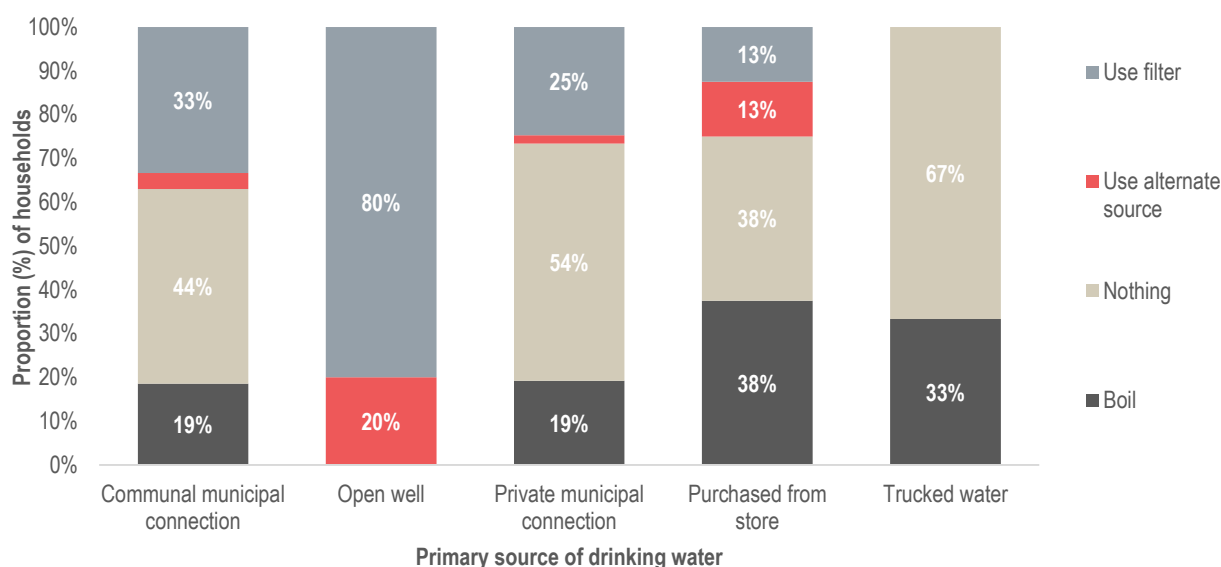
shelters. Over time, this is likely to lead to over-usage of existing infrastructure and likely to leave these households vulnerable to water-borne diseases.

**Figure 38: Proportion (%) of households by primary source of domestic water**



The majority (approximately 58%) relied on private municipal connections for domestic water, whilst 40% reported using communal municipal connections. Refugees residing in Sulaymaniyah again displayed the greatest degree of diversity in water sourcing strategies, with 73% relying on communal municipal connections, 24% using private municipal connections and 2% relying on open wells for household water. **The trend across the KRI is clear; in general, households do have access to municipal infrastructure, but the nature of this infrastructure – private or communal – tends to vary according to the purpose the water is being used for.** Both drinking and household water are primarily sourced from private connections, but communal connections become more prevalent when the water is being used for domestic usage. Although water is an easily accessible, low cost alternative to trucked or privately purchased water, the potential presence of pollutants due to degraded infrastructure may be turning water into a vector for water-borne diseases.

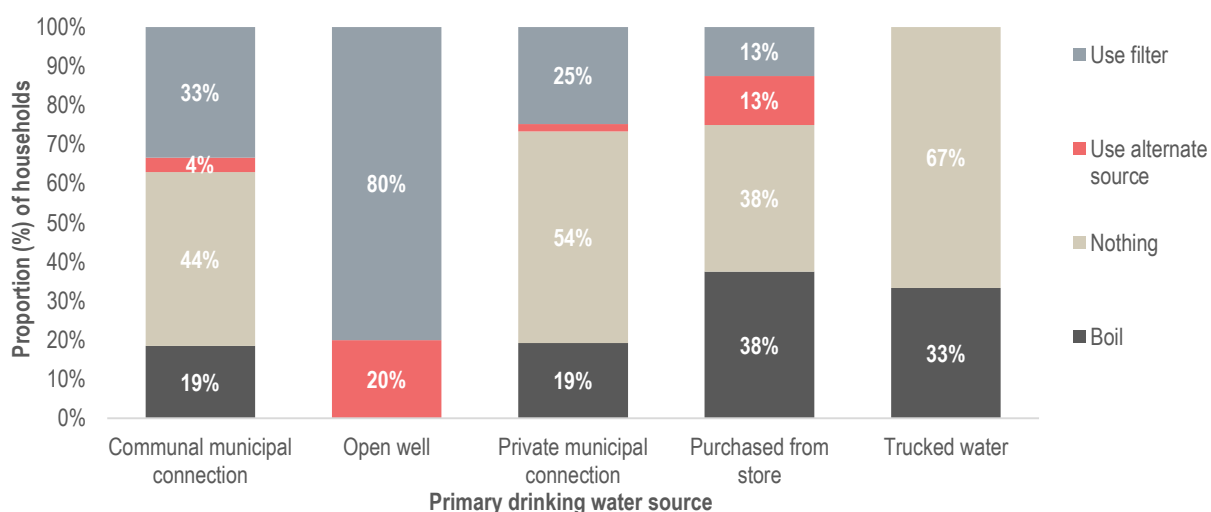
**Figure 39: Proportion (%) of households reported to treat drinking water, by primary source of drinking water**



Overall, **a majority – nearly 60% - of households perceive that the water they drink is safe and thus do nothing to treat it.** Nearly 80% of households who used communal connections believed that their drinking water was safe, whilst 55% believed that private connections were safe for drinking. Half of households who used open

wells to source drinking water also believed that it was safe, leaving a sizeable majority of households exposed to the health risks that untreated and unsafe water sources bring.

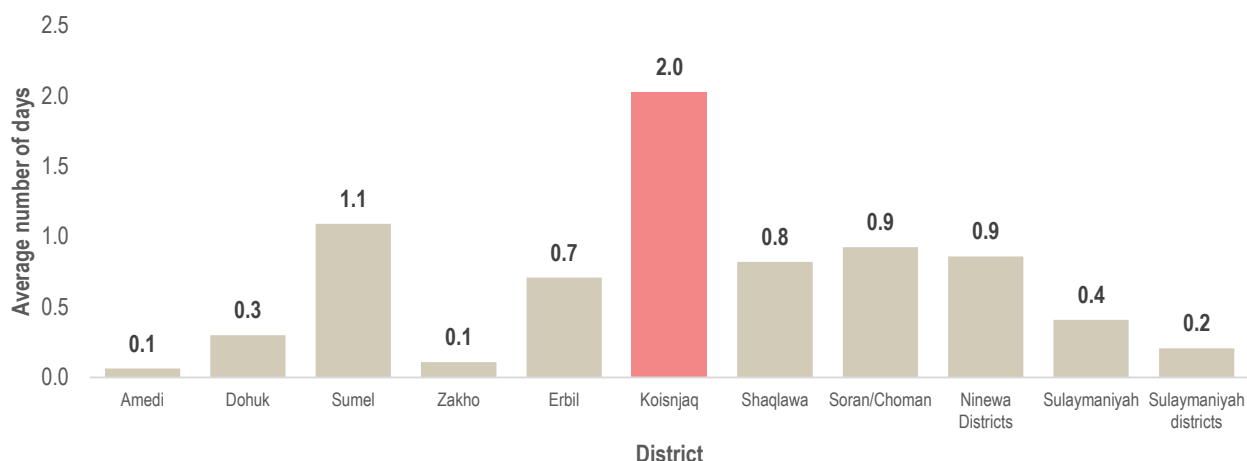
**Figure 40: Proportion (%) of households by reported method of water treatment, disaggregated by water source**



An estimated 53% of households across the KRI took no measures to treat the water they consumed for drinking, although this did vary by water source. With private municipal connections identified as the predominant means of sourcing drinking water, a majority of 54% of these households did nothing to treat water. A smaller proportion (approximately 44%) reported not treating water sourced from communal municipal connections. Whilst both present health risks, the latter in particular, where multiple households share a single water point in crowded and often unsanitary living conditions, are particularly at-risk of water-borne diseases. That said, there appears to be a systemic lack of awareness about the health risks that untreated and/or unsafe water sources pose. Although ease of access and minimal cost seem to be the predominant determinants of water sourcing for refugee households, acute, long-term health risks remain unaddressed.

## Water Sufficiency

**Figure 41: Average water scarcity in days by district (30 days)**



Water scarcity was not found to be a major concern across the KRI as a whole, but variation in the length of water scarcity can be observed across districts. Households residing in Erbil governorate were most water scarce with, on average, 1 day of no water over the course of the 30 days prior to the survey. Residents of Koinsjaq district – where average scarcity amounted to 2 days, double of any other district – were the most vulnerable to water shortages across the KRI. Within Dahuk governorate, households residing in Sumel appeared to be the most water

scarce with 1.1 days' worth of water shortfalls; the same holds true for the Ninewa districts, albeit it to a slightly lesser extent. Sulaymaniyah was the least water scarce governorate, with an average of 0.3 days spent without access to water for drinking or for other domestic usage.

That said, coping with water scarcity follows a well-established pattern observed above with income shortfalls and food shortages. Although variation is evident across certain districts, the most commonly exhibited coping behaviours are communal borrowing mechanisms which were applied by an estimated 68% of households across the KRI. As with incomes or food, pooling resources amongst family, friends or neighbours appears to be the easiest method of overcoming resource scarcity in general. Pooling resources is generally considered to be a low-cost, low-risk and above all, reversible coping strategy, which may explain the rate at which it is employed in a context such as the KRI where intra-communal ties are strong.

**Table 6: Proportion (%) of households by type of strategy applied to overcome water scarcity**

District	Borrow from family/friends	Reduce consumption	Borrow money	Redirect funds from other needs	Store credit
Amedi	50.0%	50.0%	50.0%	0.0%	0.0%
Dahuk	62.5%	37.5%	12.5%	0.0%	12.5%
Sumel	45.0%	40.0%	15.0%	0.0%	0.0%
Zakho	100.0%	33.3%	0.0%	0.0%	0.0%
Erbil	40.0%	35.0%	10.0%	20.0%	0.0%
Koisanjaq	88.0%	0.0%	4.0%	4.0%	4.0%
Shaqlawaw	100.0%	0.0%	0.0%	0.0%	0.0%
Soran/Choman	85.7%	0.0%	0.0%	0.0%	0.0%
Ninewa Districts	55.6%	33.3%	22.2%	11.1%	22.2%
Sulaymaniyah	16.7%	16.7%	16.7%	0.0%	33.3%
Sulaymaniyah districts	100.0%	0.0%	0.0%	0.0%	0.0%

Borrowing was employed by all households residing across the districts of Zakho, Shaqlawa and the surrounding Sulaymaniyah districts. The majority of those residing in Amedi, Dahuk, Koisanjaq, Soran/Choman and the Ninewa districts also applied this coping mechanism, although the actual proportion does vary across districts. It is clear, however, that borrowing water was most common in Erbil governorate, which yet again underscores the propensity of refugee households residing in Erbil to resort to coping behaviours at a higher rate than other governorate. This is, in turn, indicative of comparatively higher resource scarcity in general.

The second most prevalent coping behaviour was reducing aggregate consumption, practiced by nearly a quarter (23%) of households across the KRI. This is generally applied in instances where current consumption is reduced, but not skipped altogether, in order to sustain lower levels of future consumption, albeit at lower levels. There is an inherent trade-off here, much as is the case with food scarcity. It is a slightly more severe form of coping behaviour but findings indicate that it is often used in tandem with borrowing, indicating that the amount borrowed is often not enough to bridge a given household's monthly or weekly shortfall and that households in general prefer to primarily borrow to sustain current levels of consumption. Reducing consumption was overall most common across the districts of Dahuk governorate, in particular Amedi (50%) and Sumel (40%) districts. Just over a third (35%) of households in Erbil district reported reducing consumption and it was not reported in either Koisanjaq, Shaqlawa or Soran/Choman, again indicating **that in general, household's prefer to borrow water rather than reduce the amount they consume.**

All households residing in non-camp settings had access to functional latrines, regardless of accommodation type. A slightly lower proportion of 95% also had access to functional showers; of the households who reported no access

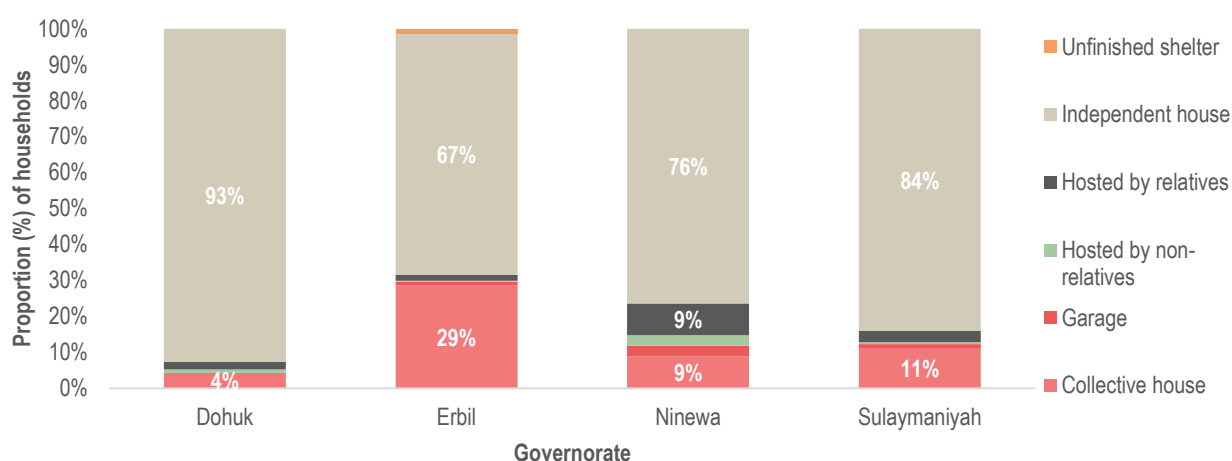
to shower facilities, 53% resided in Erbil governorate, whilst 29% resided in Dahuk governorate. In general, however, refugee households appear to have regular and unimpeded access to sanitary facilities.

The issue then becomes whether sanitation facilities are segregated by sex and whether women have adequate privacy when using these facilities to mitigate against potential protection risks. This is of particular concern in shared/collective forms of accommodation, although non-segregated latrines were prevalent across all forms of shelter. Overall, **only 4% of households across the KRI reported having shower facilities segregated by sex**, but over 95% reportedly had locks and privacy screens in place to ensure privacy for the most vulnerable household members.

## Shelter and Housing

Nearly 80% of refugee households residing in host community settings have settled in independent forms of housing, including residential houses or apartments. The demographic and socioeconomic attributes of a given household do seem to determine accommodation, with manual labourers and the most vulnerable residing in shared/collective forms of housing.

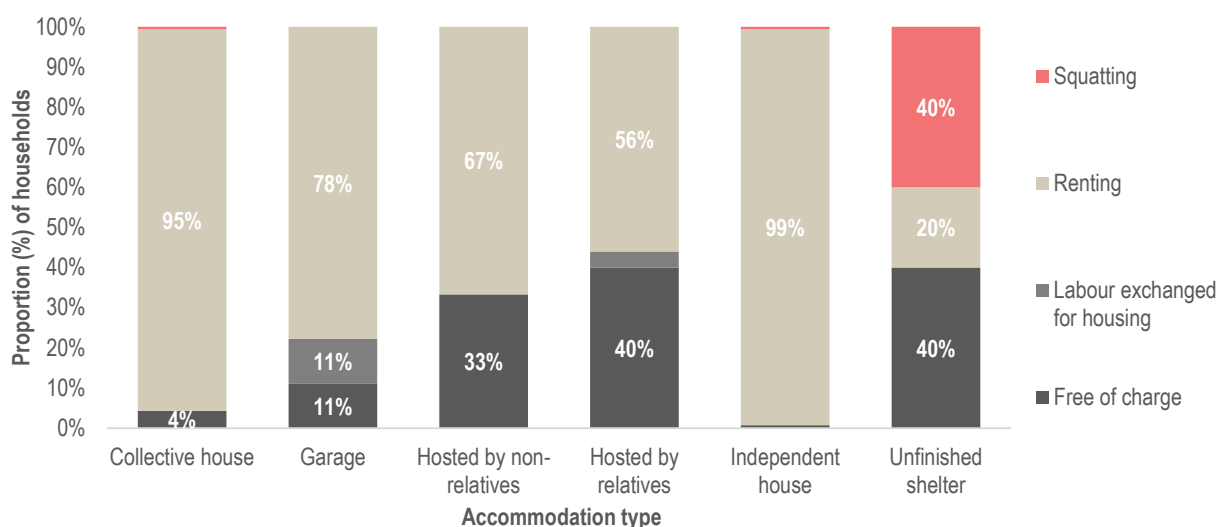
Figure 42: Proportion (%) of households by type of accommodation occupied



Overall, shared/collective forms of housing shared by two or more families were occupied by an estimated 17% of households across the KRI. Of the households who were found to occupy shared/collective housing, 67% were residing in Erbil governorate at the time of the assessment, with the majority (72%) in Erbil district, meaning that nearly a third (29%) of refugee households in Erbil governorate were sharing accommodation with two or more households. Further, approximately 1% were hosted by friends or non-relatives, whilst 3% were hosted by other family members or relatives, making hosted accommodation relatively uncommon across the KRI as a whole. Finally, 1% of households were found to be residing in garages or basements at the time of the assessment, with 3% of those residing across the Ninewa districts living in garages or basements. Conversely, of all the households found to reside in garages or basements, 44% were in Sulaymaniyah and 44% were in Erbil, meaning that these two governorates hosted the highest proportions of households found in this form of accommodation.

Given that nearly 80% were residing in independent housing, it is understandable that 95% were purportedly paying rent at the time of the assessment, but this does mean that even hosted households as well as those residing in garages and unfinished buildings were also paying rent.

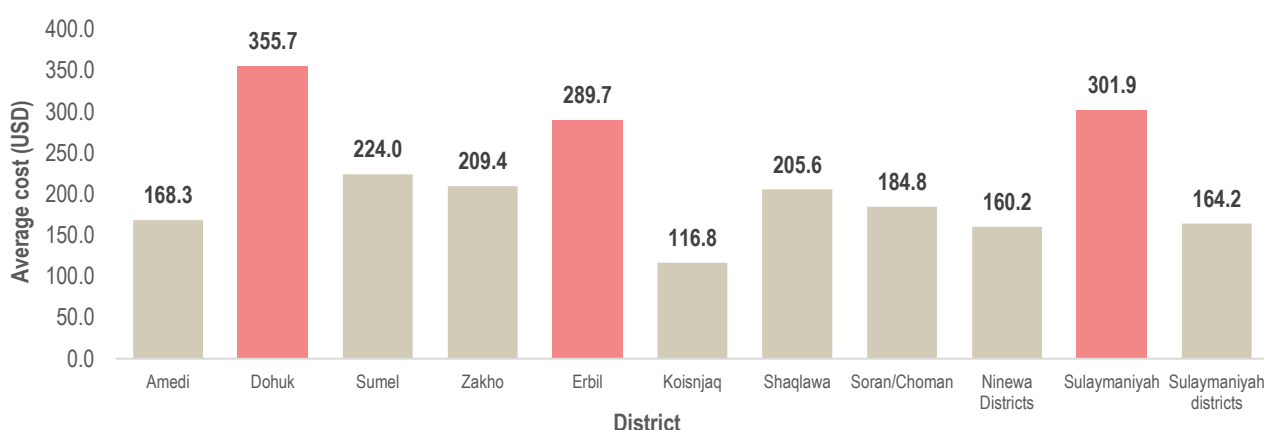
**Figure 43: Proportion (%) of households disaggregated by accommodation type and mode of provision**



Once findings are disaggregated by mode of provision and accommodation type, a predictable pattern emerges. Nearly all (99%) households residing in independent housing or shared/collective housing (95%) were paying rent, with only 1% reportedly providing labour and household services in exchange for housing. Sizeable proportions of those being hosted reside in their shelters free of charge; a third (33%) being hosted by non-relatives and 40% of those being hosted by relatives. The majority of those being hosted were paying rent, however. Furthermore, over three quarters (78%) of households occupying garages and basements were paying rent, whilst equal proportions (11%) were either living free of charge or providing labour and services in exchange for housing. Finally, the majority of those residing in unfinished shelters were reportedly residing there for free, either squatting (40%) or occupying free of charge (40%) with the consent of owners; a fifth (20%) were paying rent, however.

## Rent and Occupancy

**Figure 44: Average cost of rent (USD) by district**

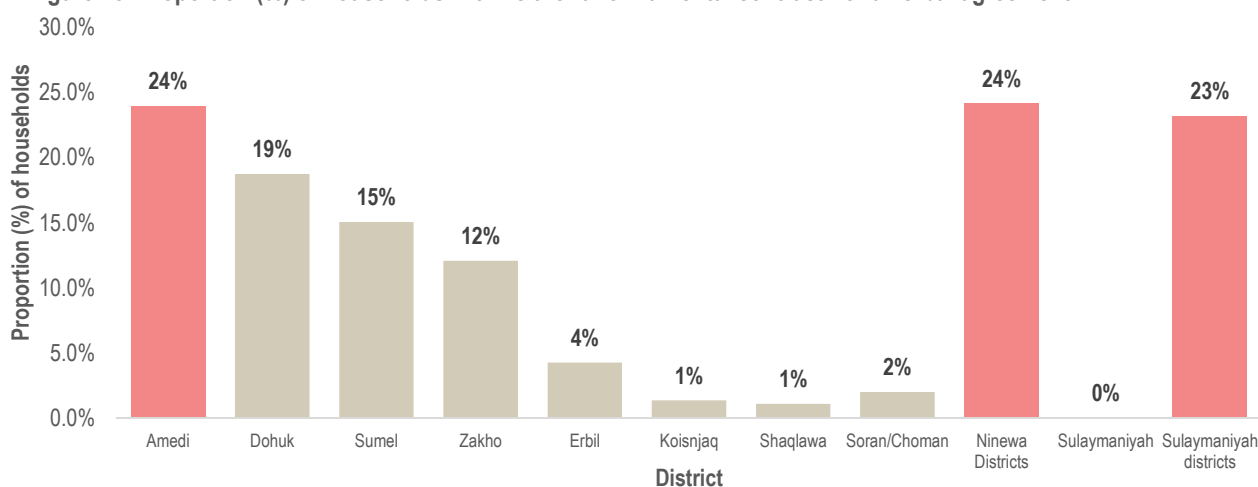


As with modes of provision for shelter, a predictable trend can be observed with rent prices, where the more urbanised provincial capitals, including Dahuk, Erbil and Sulaymaniyah city districts all record comparatively higher rent prices relative to the remaining districts. Interestingly, the cost of rent is higher in both Dahuk and Sulaymaniyah city districts than in Erbil, enabling us to infer two things. Firstly, given that rent is lower in Erbil but the proportion of households residing in shared/collective housing is higher than elsewhere, it is reasonable to assume that the aggregate cost of living and basic needs is higher in Erbil than elsewhere, thus offsetting any income or expenditure gains of lower rent. Secondly, more households are thus compelled to share shelters in lower-cost accommodation,

much as they collectivise water, food or money to overcome resource scarcity. Shared/collective housing should therefore be interpreted as a coping behaviour in and of itself.

**The most interesting finding, however, is that average rent prices have increased by an estimated 20% in Dahuk governorate and 15% in Erbil governorate since April 2014, suggesting a rapid saturation of housing in less than a year.** This is undoubtedly attributable to the internal displacement crisis; although efforts have been made to establish parallel modes of housing provision in formal camps, the majority of IDPs still reside in non-camp settings. In Dahuk, where the caseload is the biggest of any region of the KRI, the effects of a rapidly saturated housing market are most acute as landlords seek to reap the benefits of increased competition. The same can be said of the situation in Erbil, although housing costs are also naturally higher here as it is the regional capital and economic hub which automatically exerts an upward pressure on prices.

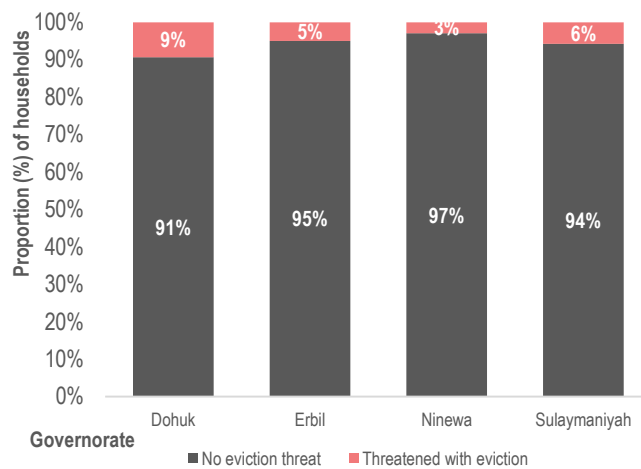
**Figure 45: Proportion (%) of households with neither a formal rental contract nor a verbal agreement**



The proportion of households with neither a written rental contract nor a verbal agreement was by far the lowest across districts in Erbil, suggesting that housing is subject to stricter regulations in Erbil governorate than elsewhere. Conversely, the proportion of households with neither arrangements was highest across the districts of Dahuk governorate and Dahuk-administered Ninewa districts, amounting to nearly a quarter (24%) in Amedi and Shekhan, Akre and Bardarash. Ultimately, this suggests that regulations which govern access to housing are either less stringent or not systematically enforced across Dahuk-administered areas.

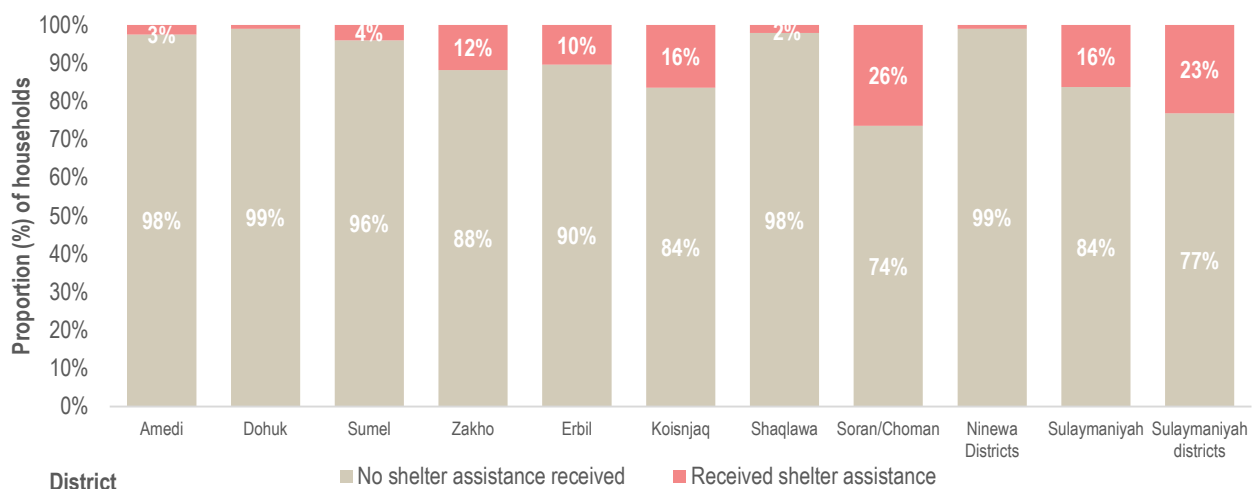
The consequences of this on shelter patterns and in particular rent prices cannot be significantly quantified at present, but district-level findings do suggest that households residing in Dahuk on average pay higher rent premiums than their counterparts residing in Erbil. So, whilst the effects of a lack of formal housing or tenancy arrangement cannot be quantified in monetary terms, it can be argued that households without some form of tenancy agreement are more vulnerable to predatory pricing. Furthermore, given that nearly one in five (20%) have no such agreement in Dahuk and Ninewa, it can also be argued that this is enough to inflate housing prices across these governorates. This is potentially further compounded by the fact that Dahuk and the Dahuk-administered Ninewa districts are host to over 60% of the total IDP population of the KRI. Such an exponential increase in aggregate demand for housing over the course of several months has not been met with a concomitant increase in the aggregate supply of housing infrastructure, thereby causing an inflationary effect on rent prices.

**Figure 46: Proportion (%) of households threatened with eviction at governorate level**



The effects of informal tenancy arrangements go beyond cost and predatory pricing, however. With no right to land ownership under Iraqi law and no formal, legally binding agreements to enshrine tenure, refugee households are more vulnerable to predatory behaviour and acute protection concerns such as arbitrary evictions and harassment. For instance, 10% of refugee households in Dahuk governorate report having been threatened with eviction in the 30 days prior to the survey and none of them had either a formal tenancy contract or a verbal agreement.

**Figure 47: Proportion (%) of household disaggregated by receipt of shelter assistance**



Although a small proportion of households reported receiving it, the provision of shelter assistance, including cash packages and shelter material (such as tarpaulin, plastic sheeting, wooden bars, plywood board, building materials and insulator foam), appears to be centralized in Erbil and Sulaymaniyah governorates, with only 4% of households residing in Dahuk-administered areas (including the Ninewa districts) reporting receipt of such assistance. That said, approximately a quarter of households residing in Soran/Choman (26%) and the surrounding Sulaymaniyah districts (23%) reported receiving shelter assistance. In Erbil, 10% received assistance, whilst 17% did in Koisanjaq.

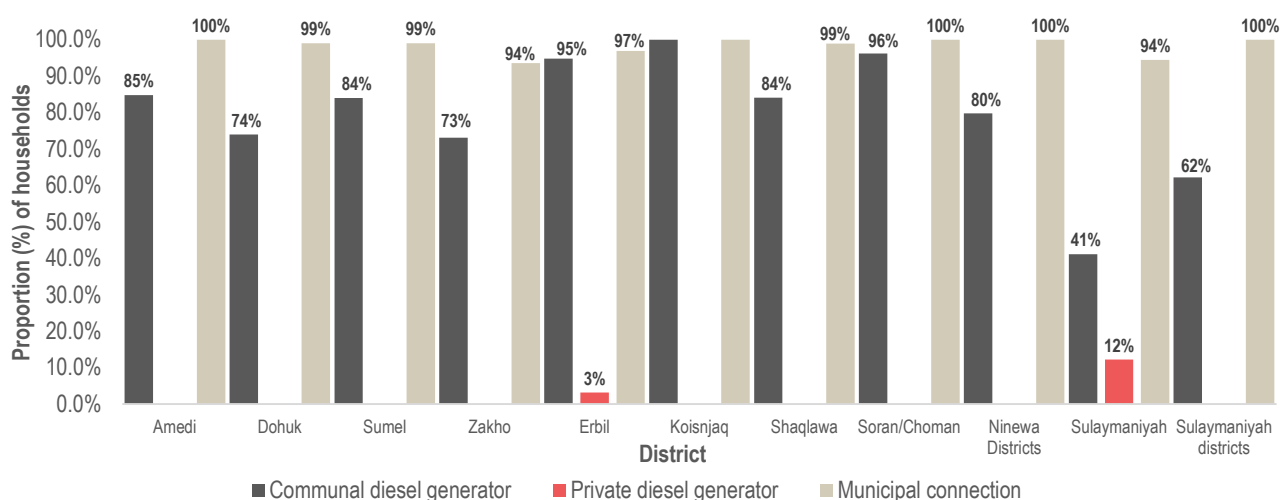
That said, the most common forms of shelter assistance were shelter material, reported by nearly all households who reported receiving shelter assistance. The only exceptions were Erbil district, where 90% received shelter material, and Sumel district, where 75% received it. Cash assistance targeted at shelter improvement was far less prevalent and appears to have followed no particular pattern. For instance, whilst all households who received



shelter material also received cash assistance in Dahuk district, only a quarter did in Sumel whilst 30% did in Erbil district.

All refugee households residing in host community settings had access to electricity, regardless of income levels or types of accommodation. The source of electricity varied greatly however, with varying proportions of households reporting multiple sources of electricity across the assessed districts. Similar to the diversification of food sources, diversifying electricity supply can be considered a coping behaviour designed to mitigate intermittent service provision. Again, the manner in which households cope with intermittent supply is communal in nature, with the vast majority reporting access to and usage of communal diesel generators.

**Figure 48: Proportion (%) of households by primary source of electricity**



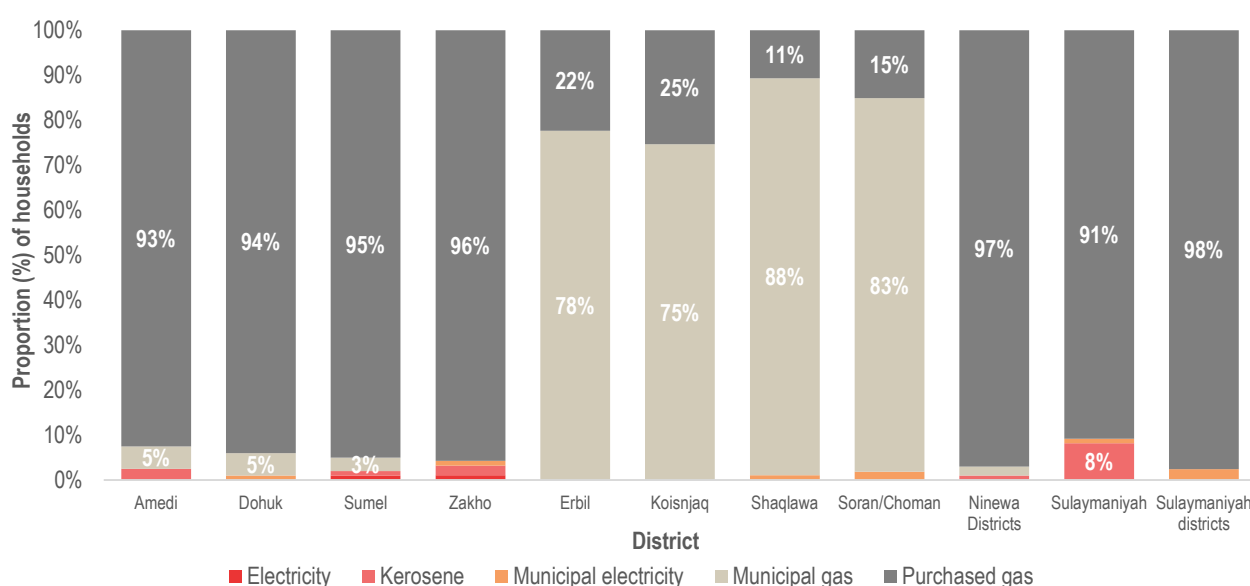
Over 90% of households made use of municipal connections to source electricity, indicating that this is the preferred choice across the KRI. Less than 1% of households reported having access to or using a private diesel generator, whilst the majority of households appear to supplant municipal provision with communal diesel generators instead. Sulaymaniyah city district was the only exception to this trend, where a comparatively higher proportion of households (12%) reported usage of a private diesel generator in addition to a municipal connection. This might ascribed to the fact that the maintenance and operational costs of a private generator cannot be sustained by a single household, compelling households to yet again pool resources and minimise cost by dispersing it across a community.

## Non-Food Items

### Cooking and Heating Fuel

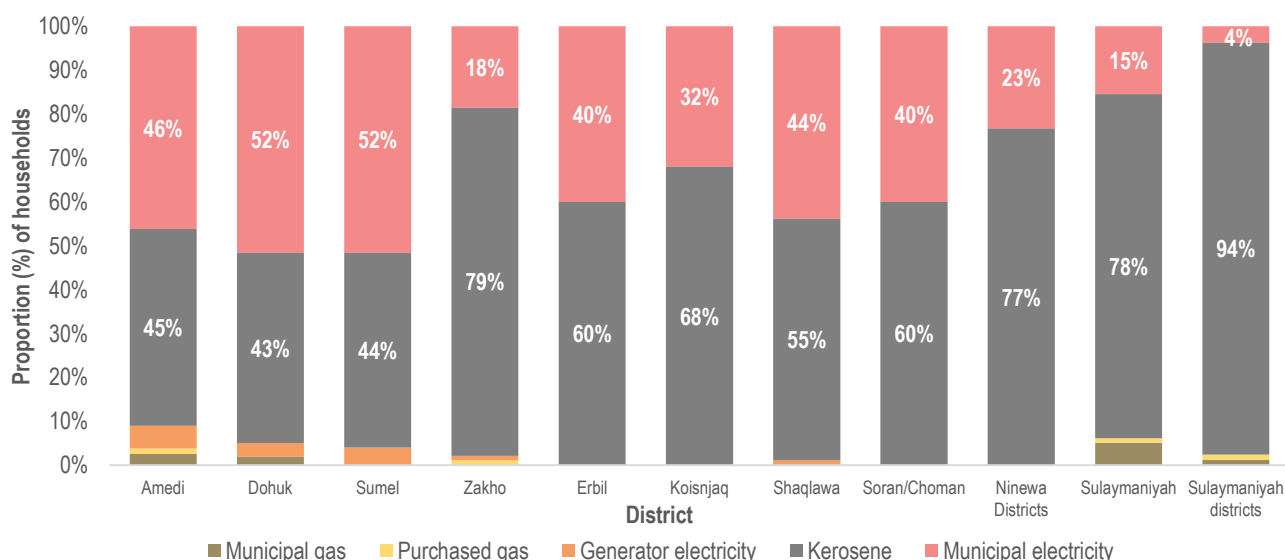
The majority of refugee households do not appear to face any major barriers to accessing non-food items, although sourcing strategies do appear to vary by district and by governorate. In Dahuk, Ninewa and Sulaymaniyah, cooking fuel is primarily sourced through private purchases, whilst in Erbil, the primary source of fuel appears to be publicly subsidised and distributed gas, reportedly used by an estimated 80% of households across the governorate. Alternatively, approximately 3% used publicly subsidised gas across Dahuk and Ninewa, suggesting that either public authorities do not distribute across these governorates as a matter of policy, or that refugee households do not have access to it. The same appears to be the case in Sulaymaniyah governorate, although nearly a tenth (8%) of households in Sulaymaniyah city district reported also relying on kerosene for cooking fuel.

**Figure 49: Proportion (%) of households by primary source of cooking fuel**



Equally, significant variation can be observed across districts in heating fuel sources. Although over 60% reported using privately purchased kerosene to heat their homes across the KRI, less than half used this source of fuel across the districts of Amedi (45%), Dahuk (43%) and Sumel (44%), whilst nearly 80% used it in Zakho district. As with incomes or food, this might be due to the fact that an exponential increase in demand across the Amedi, Dahuk and Sumel has led to price inflation, compelling households to use an alternative source of fuel, in this case municipal electricity. In turn, this may well exert extra pressure on an already over-stretched and ill-equipped electricity network, leading to poorer service delivery across Dahuk as a whole. Indeed, anecdotal evidence does seem to suggest that since the IDP influx, the provision of electricity has become more intermittent, with power cuts occurring more often and for longer periods of time than they used to prior to the crisis.

**Figure 50: Proportion (%) of household by primary source of heating fuel**



Across the districts of Erbil governorate, comparatively smaller but nonetheless sizeable proportions of households relied on publicly provided electricity to heat their homes, whilst the majority relied on privately purchased kerosene. In Sulaymaniyah, on the other hand, over 85% of households relied on privately purchased kerosene, suggesting a governorate-wide preference for kerosene rather than publicly provided electricity. This might be ascribed to the higher cost incurred by using the service for prolonged periods of time as well as lower incomes across the

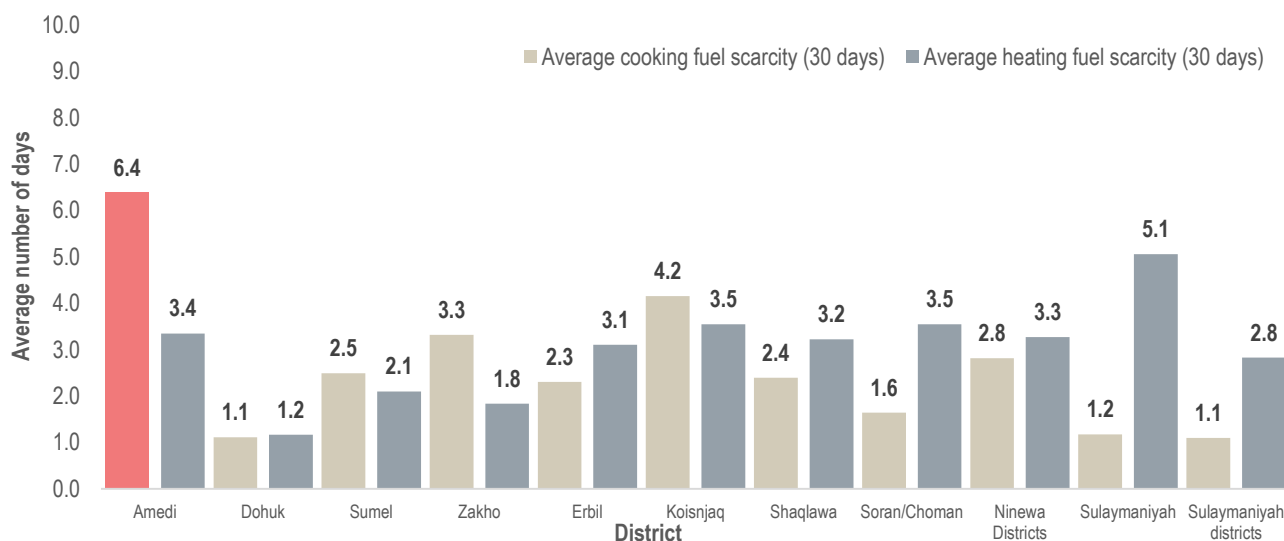
governorate. As such, prices are higher in Sulaymaniyah than elsewhere in relative terms, indicating that households are unwilling to accept a trade-off and reallocate funds from other basic needs. Overall, however, it appears that **most services and resources are acquired or accessed using private funds by households residing in Erbil and Sulaymaniyah governorates, with food, water, heating and – to a lesser degree – cooking fuel all sourced predominantly by private means.**

Although it is beyond the scope of this assessment to gauge supply barriers, some can nonetheless be inferred through scrutiny of demand-side usage data. Overall, easily acquired, tangible commodities and natural resources (such as kerosene, for instance) which can be used to substitute public services are often the most widely available sources of fuel in a complex displacement setting such as Iraq. In the KRI in particular, such commodities are likely to have witnessed an exponential increase in demand as a result of the IDP crisis. This, in turn, might be exerting an upwards pressure on prices, causing refugee households to resort to coping behaviours such as switching to alternative fuel sources to service needs.

Whilst purchased gas remains the primary source of cooking fuel in Dahuk – which also hosts the highest proportion of IDPs in the KRI – the actual amount of propane required for cooking is relatively small in comparison to the amount of kerosene needed to heat one or two rooms at a time for prolonged winter periods. Furthermore, once we take into consideration that average incomes are also higher in Dahuk than Sulaymaniyah, for example, it may explain why households are willing to pay for cooking fuel, but are, or will become, increasingly unable to pay higher premiums to purchase kerosene to heat the home, turning instead to publicly provided electricity. This is a trend which will likely continue unless increased demand is met with a concomitant increase in supply to stabilize prices, and, as can be seen below, is already having a tangible impact on fuel scarcity.

## Fuel Sufficiency

Figure 51: Average cooking and heating fuel scarcity in days (30 days)



Cooking and heating fuel scarcity was widespread and varied from an average of 1 to 6 days, depending on district and type of fuel used. Fuel shortages were highest in Dahuk governorate overall; households residing in Amedi district – where the primary source of cooking fuel was purchased gas – experienced, on average, 6 days' worth of fuel shortages<sup>21</sup> and over 3 days' worth of heating fuel shortages. It is worth noting that 80% of the households who experienced shortages in Amedi were relying on kerosene to heat their homes, suggesting that: a) households residing in Amedi seem to be more vulnerable to fuel shortages, especially if they rely primarily on kerosene, a

<sup>21</sup> For the purpose of this assessment, shortages were defined as entire days spent without access to a given resource.

purchased and mostly traded – not distributed – commodity and b) kerosene may well be in short supply, unaffordable, or both.

The same pattern emerges in Zakho, albeit on a smaller scale, where those relying primarily on purchased gas for cooking make up the majority (88%) of those who experienced shortages. As the urban and commercial hub of Dahuk governorate, Dahuk city appears to be well served relative to the other districts (including the Ninewa districts), with an average of 1 day spent without cooking and heating fuel. Conditions appear to be similar in Sulaymaniyah city district where an estimated 78% of households relied on kerosene to heat their homes, but spent an average of 5 days without heating fuel. Although REACH cannot attribute this to any single determining factor, it is possible that a combination of comparatively lower incomes and similar kerosene prices to Erbil or Dahuk act as demand and supply gluts, pushing aggregate fuel scarcity higher.

In Erbil governorate, Koisanjaq clearly emerges as the locus of fuel shortages with, on average, approximately 4 days spent without either cooking or heating fuel. In Erbil district, both cooking and heating fuel scarcity was higher than in Dahuk district, another provincial capital, despite the fact that Dahuk governorate hosts a higher proportion of both Syrian refugee and IDP households and is thus experiencing more pressure on its already beleaguered public service infrastructure. Ultimately, it may be due to the fact that the majority are relying primarily on publicly subsidised and distributed gas for cooking, making access potentially intermittent. Alternatively, it may just be that prices are higher in the more urbanized capital of the KRI, making access to privately purchased cooking fuel or kerosene for heating contingent on incomes.

## Clothing and NFIs

Table 7: Average number of non-food items per household

Governorate/district	Blankets	Mattresses	Heaters	Winter jackets	Winter shoe sets
Dahuk	7.4	5.7	1.4	4.9	5.0
Amedi	7.9	6.1	1.5	5.0	5.0
Dahuk	7.0	5.6	1.4	5.2	5.3
Sumel	7.3	5.6	1.4	4.8	5.0
Zakho	7.6	5.8	1.4	4.6	4.7
Erbil	6.5	5.3	1.3	4.9	4.9
Erbil	6.3	5.1	1.2	5.1	5.3
Koisanjaq	6.8	5.2	1.2	4.8	4.7
Shaqlawā	6.7	5.5	1.2	4.9	4.6
Soran/Choman	6.0	5.6	1.4	4.9	4.8
Ninewa	6.6	5.3	1.2	4.6	4.8
Ninewa Districts	6.6	5.3	1.2	4.6	4.8
Sulaymaniyah	4.8	4.4	1.0	3.6	3.5
Sulaymaniyah	4.8	4.2	1.0	3.4	3.1
Sulaymaniyah districts	4.9	4.6	1.1	3.9	4.1

Households residing in Dahuk appear to have, on average, the highest number of winterization-based NFIs of any other governorate, with residents of Amedi reportedly in possession of the most blankets and heaters. Winter clothing figures were slightly higher in Dahuk district, however. This is closely followed by Erbil, where the numbers of blankets, mattresses and heaters varied slightly by district, but with winter jackets and sets of shoes higher in Erbil district than elsewhere. The Ninewa districts of Shekhan, Akre and Bardarash displayed similar figures to Erbil.

Residents of Sulaymaniyah governorate reported possessing, **on average, 2 blankets, approximately 1 mattress, 1 jacket and 1 pair of winter shoes less than residents of other governorates.** Interestingly, Sulaymaniyah city district actually registered fewer NFIs than the surrounding Sulaymaniyah districts.

Although this does not automatically mean that residents of Sulaymaniyah are ill-equipped for winter, with household size and demographic attributes determining whether these were enough, it does mean that the scope of assistance in Sulaymaniyah governorate is limited in comparison to Dahuk or that lower incomes make multiple purchases of these items unaffordable and thus inaccessible to a large proportion of households.

## CONCLUSION

The humanitarian situation in Iraq, including the focus and scope of the response, has become exceedingly complex since the first round of the MSNA was conducted in April and May of 2014. Although the full effects of the internal displacement crisis on Syrian refugees and the wider KRI are not likely to emerge in such a short time span, the findings presented here do indicate nascent but nonetheless rising levels of vulnerability. Although displaced sub-populations will invariably continue to compete and vie for finite employment, competition is not limited to the confines of the labour market. Exponential increases in demand for public and private services (namely health, education and housing) are a case in point; although provision has undoubtedly scaled up, funding remains finite and unpredictable, meaning that refugees do not only compete for jobs, but a share of the humanitarian response, too. With the Regional Refugee and Resilience Plan (3RP) in Iraq currently underfunded by 59%,<sup>22</sup> the impact of this competition for a chronically aid-dependent population such as this should not be underestimated.

Before a summary is pieced together, however, it is worth to take note of a generic but nonetheless key trend which emerged through this assessment. Across ostensibly all indicators and outcomes measured in this assessment, coverage, access and welfare displayed a clear spatial inequality. Although the conventional rural/urban gap is at times visible, it is often trumped by the inequality which emerges as we move from Dahuk to Sulaymaniyah. The former consistently displays higher incomes, better food consumption and better access to basic services, for instance, whilst the latter often scores the worst across most welfare indicators. This is all the more significant in light of the fact that Dahuk has firstly, a much higher caseload of refugees than either Sulaymaniyah or Erbil and secondly, is host to a much higher proportion of IDPs than Erbil or Sulaymaniyah combined. Although this might be due to the locus of both responses being in Dahuk, this still leaves refugees residing in Sulaymaniyah effectively at the fringes of the common response and ultimately makes both highly vulnerable to the roll-back of aid (albeit at varying degrees). That said, the following paragraphs will not summarise findings for each and every sector assessed during this exercise; rather, the focus will be on key and emergent trends which signify gaps or are believed to be of concern, based on current data.

The pressure on livelihoods and incomes is clear even now; average incomes appear to have decreased by approximately 15% across the KRI and up to 20% in areas such as Dahuk which are disproportionately affected by the internal displacement crisis. Furthermore, competition is the single most frequently cited barrier to accessing gainful employment regardless of area of residence. Refugees are thus clearly aware that they are contending for much the same segment of the labour market, or at least perceive to be doing so. This has, in turn, lead to a clear increase in the rate of use and severity of coping behaviours. When faced with dwindling incomes, refugee households are applying more extreme and irreversible coping strategies including fire-sales of household and productive assets, both of which are commonly associated with poverty traps and sharp reductions in productivity. This naturally pushes households towards more aid dependency at a time when aid is actually being curtailed and rolled back, making the need for a comprehensive and well targeted response all the more greater.

Whilst food insecurity is by no means prevalent, the analysis presented here has identified pockets of nascent or rather potential food insecurity. Although closely tied to incomes, food consumption also appears to be determined by geography. Where incomes – and thus purchasing power – are lower and prices potentially higher, food consumption remains acceptable but nonetheless lower than what it would otherwise be. These include the districts of Amedi, Koisanjaq, Shaqlawa, Soran/Choman, Ninewa and Sulaymaniyah, all of which could benefit from a package of targeted food or livelihoods assistance to arrest further deterioration. One of the most significant findings, though, was the rate of exclusive breastfeeding for infants, which stood at just over 20% across the KRI and dipped as low as 17% in Sulaymaniyah.

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<sup>22</sup> UNHCR, note 1 *supra*

This is indicative of a severe nutritional deficit for infants and poses acute negative consequences for long-term child health and development, including compromised immune systems and stunted growth<sup>23</sup>.

The prevalence of health issues and chronic diseases, including their distribution amongst demographic groups, followed a well-established trend reflective of lifestyle differences. Children were more affected by asthma and diarrhoea, for instance, whilst older cohorts displayed far greater reported rates of heart diseases, diabetes and blood pressure problems. The real issue which this assessment highlighted was not the health of the refugee population as a whole, but its access to specialised care and services including vaccinations and obstetric care. Immunisation rates against polio for at-risk minors aged 0-59 stood at 70% across the KRI and dipped as low as 50% in Sulaymaniyah governorate. The same pattern holds true for measles and conforms to the running trend of spatial inequality highlighted at various stages throughout this report. Finally, although reproductive care is clearly available and accessed by the vast majority of pregnant women, key gaps still remain. Interestingly, Dahuk governorate hosted the highest proportion of women not accessing ante-natal care, whilst Erbil had the lowest.

To summarise, the findings and analyses presented in this report indicate a trend towards rising vulnerability and a shift towards poverty traps, especially if the current deflation of incomes is not arrested. Whilst no significant relationships between the IDP influx and these trends can be established or quantified at present, they can nonetheless be inferred. For instance, food insecurity may not be an issue now, but the conditions for its potential development are there and any exogenous shock, particularly the cessation of food assistance or rapid and widespread losses in livelihoods, may precipitate its sudden and widespread onset. Similarly, whilst the IDP influx does have direct effects on the IDP population – including increased competition for labour and housing – it is the externalities which aid actors need to be aware of if their effects are to be mitigated. These include cost inflation, wage deflation and housing saturation, to name but a few. Together, they can foster rising levels of poverty and aid dependence at a time when it is fast becoming scarce, making a concerted, common response all the more necessary.

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<sup>23</sup> Although mixed-sex teams of enumerators administered the survey, conservative cultural norms mean that some respondents may have been reticent to report actual breastfeeding instances, meaning that the rate is likely to be under-reported.



## Annex 1: Questionnaire

## Household Profile

1. 1a. Governorate  
1b. District
2. 2a. Including yourself, how many people live in your family/household?  
2b. Including yourself, how many household members do you have in each of these age-groups?  
Male ☐ 0-2y ☐ 3-5y ☐ 6-11y ☐ 12-14y ☐ 15-17y ☐ 18-59y ☐ 60+y  
Female ☐ 0-2y ☐ 3-5y ☐ 6-11y ☐ 12-14y ☐ 15-17y ☐ 18-59y ☐ 60+y
3. 3a. Is this a male or a female-headed family/household? ☐ Male ☐ Female  
3b. What is the marital status of the head of household/family? **(select one)**  
☐ Married ☐ Divorced ☐ Single ☐ Widowed  
4c. What is the age of the head of this household? ☐  
4c. What is the sex of the head of this household? ☐ Male ☐ Female  
4d. Does the head of this household suffer from a chronic illness? ☐ Yes ☐ No  
4e. If yes, then which chronic illness do they suffer from? **(select multiple)**  
a) Diabetes  
b) Ashtma  
c) Heart disease  
d) High blood pressure  
e) Other (specify)

## Education

4. 5a. How many children between the ages of 6-17 attend **formal education** full time?  
Male ☐ 6-11y ☐ 12-14y ☐ 15-17y  
Female ☐ 6-11y ☐ 12-17y ☐ 15-17y
5. If some children do not attend **formal education**, then which children are they?  
Male ☐ 6-11y ☐ 12-14y ☐ 15-17y  
Female ☐ 6-11y ☐ 12-17y ☐ 15-17y
6. Of the children who **do not attend formal education**, then how many have **dropped out of school altogether**?  
Male ☐ 6-11y ☐ 12-14y ☐ 15-17y  
Female ☐ 6-11y ☐ 12-17y ☐ 15-17y
7. Of the children who **do not attend formal education**, then how many attend informal education activities at least 4 days per week?  
Male ☐ 6-11y ☐ 12-14y ☐ 15-17y  
Female ☐ 6-11y ☐ 12-17y ☐ 15-17y
8. For those children **who do not attend formal education**, what is the primary reason they do not attend? **(select multiple: group for each school-aged child)**  
a) Schools have not re-opened for the new year  
b) The child works to support the household  
c) Lack of funds for school equipment  
d) The school is too far away  
e) Schools are overcrowded

- f) Because of the curriculum in KRI
  - g) Differences in language used
  - h) The child is married and cannot attend school anymore.
  - i) Safety issues
  - j) The children missed more than 3 years of school and are no longer eligible
  - k) Other (specify)
9. Have you been able to afford school supplies and equipment (books, stationery, bags, uniforms, etc.) for all of the children in this household? ☐ Yes ☐ No
10. Do the children in this household attend a single-shifted, double-shifted or a triple-shifted school? **(group for each child reported as attending formal education)**  
☐ Single-shifted ☐ Double-shifted ☐ Triple-shifted
11. Are you willing to contribute to school fees for your children's education, including the cost of materials, book and uniforms? ☐ Yes ☐ No

### Protection

12. How many children aged 3-17 do **not** have access to a safe, child-friendly space outside of the home? ☐ Children
13. 13a. Including yourself, how many members of your household hold a KRI residency card?  
 Male ☐ 12-14y ☐ 15-17y ☐ 18-59y ☐ 60+y  
 Female ☐ 12-14y ☐ 15-17y ☐ 18-59y ☐ 60+y
14. Have any members of your household experienced difficulties in obtaining civil documents such as birth and/or marriage certificates? ☐ Yes ☐ No  
 14b. Do you know where to obtain civil documents such as these? ☐ Yes ☐ No
15. Including yourself, how many people in this household are registered with UNHCR? ☐ People
16. Do you have regular and personal access to your local community leader? ☐ Yes ☐ No
17. How would you rate the degree of support you have received from your local community upon arrival, including both the host and refugee communities?  
 a) Extremely helpful and welcoming  
 b) Good: welcoming and supportive with problems  
 c) Neither good nor bad  
 d) Bad: the community is not welcoming at all  
 e) Extremely bad: the community is hostile
18. 18a. Is this household caring for any separated and/or unaccompanied minors under the age of 18? ☐ Yes ☐ No  
 18b. If yes, then how many:  
 a) Separated minors: ☐  
 b) Unaccompanied minors: ☐

### Livelihoods

19. 19a. What was your household's primary livelihood source over the last 30 days?  
 a) Unskilled/agricultural waged labour  
 b) Low-skill service industry (janitor, waiter, etc.)  
 c) Skilled wage labour (eg. construction)  
 d) Practitioner of trade or vocation (carpenter, electrician, etc.)  
 e) Owner of small commercial business

- f) Skilled service labour (lawyer, bank clerk)
  - g) Household is economically inactive
  - h) Other (specify)
- 19b. What type of salary arrangement do you have for this livelihood?
- a) Daily salary
  - b) Monthly salary
  - c) Ad hoc payments based on need
  - d) Labour exchanged for shelter
  - e) Labour exchanged for basic services (water, electricity).
20. If your household did not generate enough income to meet everyone's needs, then which of the following did you do to supplement your income? (0 = No, 1 = Yes, 2 = No, because I have already used this up)
- a) Spent savings
  - b) Bought food on credit or borrowed money to buy food
  - c) Spent less money on other needs (eg. education/health)
  - d) Sold household assets (jewelry, phone, furniture, etc)
  - e) Sold productive goods/assets (sewing machine, tools/machinery, car, livestock, etc)
  - f) Taken jobs that are high risk, and/or socially degrading
  - g) Sent adult household members to beg
  - h) Travelled long distances via insecure areas to get food
  - i) Sent children household members to work
21. Which members of your household were engaged in some form of livelihood or income generating activity over the last 7 days?
- Male ☐ 6-11y ☐ 12-14y ☐ 15-17y ☐ 18-59y ☐ 60+y
- Female ☐ 6-11y ☐ 12-14y ☐ 15-17y ☐ 18-59y ☐ 60+y
22. 22a. What was your household's total income (from all sources including humanitarian assistance, but **excluding savings**) over the last 30 days? ☐ Iraqi Dinars
- 22b. In total, how much did you spend on basic needs over the last 30 days? ☐ Iraqi Dinars
23. 23a. Is your household currently in debt? ☐ Yes ☐ No
- 23b. If yes, then how much debt do you currently hold? ☐ Iraqi Dinars
24. 24a. Has your household been able to afford all basic needs in the past 30 days? ☐ Yes ☐ No
- 24b. If no, then which basic needs were you not able to afford?
- a) Food
  - b) Water
  - c) Shelter
  - d) Medical assistance
25. 25a. Has your household experienced problems accessing employment opportunities in this area? (prompt) ☐ Yes ☐ No
- 25b. If yes, then why do you think you have experienced problems?
- a) Increased competition for jobs; not enough for everyone
  - b) Distance
  - c) Only low-skilled, socially degrading or low-paid jobs are available
  - d) We are denied certain jobs because we are refugees
  - e) Other (specify)

26. 26a. Has your household received any livelihoods-based assistance in the last 3 months? ☐
- Yes ☐ No
- 26b. If yes, then what type of assistance was this?
- a) Cash assistance to aid with business start-up costs
  - b) Information on where to seek employment
  - c) Vocational training
  - d) Professional skills training (IT, etc.)
  - e) Other (specify)

### Social Cohesion

27. 27a. Have you noticed a change in levels of hospitality of the host community over the last 3 months?
- ☐ Yes ☐ No
- 27b. If yes, then have levels of hospitality:
- a) Increased a lot
  - b) Increased a little
  - c) Stayed the same
  - d) Decreased a little
  - e) Decreased a lot
28. If yes, then do you feel that rates of small and petty crime have:
- a) Increased a lot
  - b) Increased a little
  - c) Stayed the same
  - d) Decreased a little
  - e) Decreased a lot
29. 29a. How would you describe your household's access to public services such as education, shelter, health and other services in the area in which you currently reside?
- a) Excellent: we experience no problems whatsoever
  - b) Good: access is good but we experience minor delays
  - c) Neutral
  - d) Bad: we experience delays and problems
  - e) Very bad: delays and denial of access from local community and authorities
- 29b. If you feel that your household's access to public services is bad overall, then why do you feel that this is happening?
- a) Public services are bad in general in this area
  - b) There are more people accessing these services so authorities cannot cope
  - c) Insufficient funds to access high quality services
  - d) Host community gets preferential treatment
  - e) We experience problems because we are refugees
  - f) Other (specify)
30. Over the last 3 months, do you feel that the cost of basic needs such as shelter, health and food has: **(prompt)**
- a) Increased a lot
  - b) Increased a little bit

- c) Stayed the same
  - d) Decreased a little bit
  - e) Decreased a lot
31. 31a. Have you been involved in any civil or legal disputes over the last 3 months? ☐ Yes ☐ No
- 31b. If yes, then what were these disputes over?
- a) Land ownership
  - b) Shelter and housing
  - c) Family/social issues
  - d) Employment/jobs
  - e) Other (specify)

### Shelter and Non-food Items

32. 32a. What type of shelter does this household live in? **(select one)** ☐ Independent house/apartment ☐ Hosted by relatives in house/apartment ☐ Hosted by non-relatives in house/apartment ☐ Collective house/shelter ☐ Garage or basement ☐ Collective centre/public unused building ☐ Unfinished building ☐ Other (specify)
- 31b. How do you support yourself in this accommodation?
- ☐ Renting (paid in cash) ☐ Renting (in exchange for services) ☐ Owner ☐ Squatting ☐ Provided for free by host family ☐ Other (specify)
33. 33a. If rented accommodation, then how much do you pay every month? ☐ Iraqi dinars
- 33b. Do you have a written rental contract? ☐ Yes ☐ No
- 33c. If yes, then what is the length of this contract in months? ☐ Months
- 33d. If no, do you have a verbal agreement? ☐ Yes ☐ No
- 33e. If yes, then what is the length of this verbal agreement? ☐ Months
34. Have you been threatened with eviction over the last 30 days? ☐ Yes ☐ No
35. 35a. Does your household have an electricity connection? ☐ Yes ☐ No
- 35b. If yes, what is the source of this electricity?
- a) Diesel generator
  - b) Municipal connection
  - c) Other (specify)
- 35c. How many hours per day do you have access to electricity? ☐ Less than 2 hours ☐ 2-6 hours ☐ 6-10 hours ☐ More than 10 hours
36. 36a. What is this household's main source of cooking fuel?
- ☐ Municipal gas ☐ Gas – purchased canister ☐ Municipal electricity connection ☐ Electricity from diesel generator ☐ Kerosene ☐ Burning wood ☐ Coal ☐ Oil ☐ Other (specify)
- 36b. Over the last 30 days, how many days did you spend without access to cooking fuel? ☐ Days
37. 37a. What is this household's main source of heating fuel?
- ☐ Municipal gas ☐ Gas – purchased canister ☐ Municipal electricity connection ☐ Electricity from diesel generator ☐ Kerosene ☐ Burning wood ☐ Coal ☐ Oil ☐ Other (specify)
- 37b. Over the last 30 days, how many days did you spend without access to heating fuel? ☐ Days
38. If you did not have access to your main source of fuel at some point, then what did you do to overcome this shortage?
- ☐ Used an alternative source of fuel ☐ Borrowed from family/friends ☐ Received fuel on credit ☐ Did not heat household ☐ Burned household assets to heat ☐ Other (specify)

39. 39a. How many of the following do you have in your household?
- a) Blankets: ☐
  - b) Mattresses: ☐
  - c) Heaters: ☐
  - d) Winter jackets: ☐
  - e) Winter shoes: ☐
- 39b. For each of the above, please specify how each was acquired:  
☐Purchased ☐Received as assistance ☐Both
40. 40a. Have you received plastic sheets through a distribution? ☐Yes ☐No
- 40b. If yes, what was this sheeting used for?
- ☐ Reinforce shelter ☐ Improve privacy of shelter ☐ Improve latrines ☐ Reinforce kitchen ☐
  - Nothing ☐ Gave away ☐ Used for livelihood purposes ☐ Other (specify)

### Water and Sanitation

41. Currently, what is your household's primary source of drinking water?
- a) Water supplied by a private vendor (water trucks and shops)
  - b) Municipal connection (private, in the home)
  - c) Municipal connection (communal, outside of home)
  - d) Purchased from shop
  - e) Borehole
  - f) Open well
  - g) River/spring
  - h) Other (specify)
42. Currently, what is your household's primary source of water for the household?
- a) Water supplied by a private vendor (water trucks and shops)
  - b) Municipal connection (private, in the home)
  - c) Municipal connection (communal, outside of home)
  - d) Purchased from shop
  - e) Borehole
  - f) Open well
  - g) River/spring
  - h) Other (specify)
43. Over the course of the last 30 days, how many days did you spend without access to drinking water? ☐ Days
44. If you did not have access to **drinking** water at some point over the last 30 days, what did you do to cope with this? (**select one**)
- a) Borrowed from family/neighbours
  - b) Reduced consumption of water
  - c) Borrowed money to buy water
  - d) Spent money usually spent on other things to buy water
  - e) Shop credit
  - f) Nothing (stayed without water)
  - g) Other (specify)
45. 45a. Do you think that the water you drink is safe for drinking? ☐ Yes ☐ No

- 45b. If no, then do you do anything to the water to make it safer?  
☐ No ☐ Boil it ☐ Add chlorine ☐ Use a filter ☐ Other (specify)
46. How does your household dispose of waste?  
☐ Rubbish pit ☐ Burn ☐ Dump next to household ☐ Dump in open space/street ☐ Collected by municipality ☐ Other (specify)
47. 47a. Does this household have access to functional latrines? ☐ Yes ☐ No  
 47b. If yes, then are they separated by gender? ☐ Yes ☐ No
48. 48a. Does this household have access to functional showers? ☐ Yes ☐ No  
 48b. If yes, then are they separated by gender? ☐ Yes ☐ No

### Food Security

49. What were the top 3 sources of food for your household over the last 7 days? For each of the 3 food sources, please indicate how much each contributes to this household's total consumption **(select and rank top 3 options)**
- a) WFP assistance
  - b) Non-WFP humanitarian assistance from local NGO, mosque, etc.
  - c) Store/market food bought with own cash
  - d) Bought store/market food on credit
  - e) Gifts from family and friends
  - f) Exchanged/borrowed food
50. How much did you spend on food over the last 30 days? ☐ Iraqi Dinars
51. Over the last 7 days, how many days did you consume the following foods? **(no value can be greater than 7, ie. 7=7 days)**
- a) Cereals (bread, pasta, wheat flour, bulghur)
  - b) White tubers and roots (potato, sweet potato)
  - c) Vegetables, yellow tubers, leaves
  - d) Fruits
  - e) Meat
  - f) Eggs
  - g) Fish and other seafood
  - h) Pulses, nuts and seeds (beans, chickpeas, etc.)
  - i) Milk and dairy products
  - j) Oil and fats
  - k) Sweets (sugar, honey, jam, cakes, sweet coffee)
  - l) Spices and condiments
52. During the last 7 days, how many times (in days) did your household do any of the following in order to cope with lack of food? **(no value can be greater than 7, ie. 7=7 days; 0 = None, 1 = 1 day, 2 = 2 days, 3 = 3 days, 4 = 4 days, 5 = 5 days, 6 = 6 days, 7 = Everyday)**
- a) Eat cheaper food that is not as good as normal
  - b) Borrowed food or received help from friends or relatives
  - c) Eaten less meals a day than normal
  - d) Eaten smaller amounts of food than normal at meals
  - e) Adults eat less so younger children can eat
  - f) Women eat less so men and small children can eat



- g) Men eat less so women and small children can eat
- h) Sent adult household members to beg
- i) Sent children household members to work
- j) Exchanged food with others to increase food diversity

## Health

53. 53a. Do any members of your household suffer from a chronic illness (such as diabetes, heart disease, asthma)? ☐ Yes ☐ No
- 53b. If yes, then how many people suffer from each of the following:
- a) Diabetes: ☐ Under 5 years of age ☐ Over 5 years of age
  - b) Asthma: ☐ Under 5 years of age ☐ Over 5 years of age
  - c) Heart disease: ☐ Under 5 years of age ☐ Over 5 years of age
  - d) High blood pressure: ☐ Under 5 years of age ☐ Over 5 years of age
  - e) Other (specify): ☐ Under 5 years of age ☐ Over 5 years of age
- 50c. For those people with a chronic illness, have you been able to obtain the medication you need to treat it? ☐ Yes ☐ No
54. 54a. Have any members of your household suffered from health issues such as diarrhoea, fever and physical injuries over the last 2 weeks? ☐ Yes ☐ No
- 54b. If yes, then which members of your household suffered from these health issues over the last 2 weeks?
- a) Psychosocial distress: ☐ Under 5 years of age ☐ Over 5 years of age
  - b) Diarrhoea: ☐ Under 5 years of age ☐ Over 5 years of age
  - c) Minor physical injuries: ☐ Under 5 years of age ☐ Over 5 years of age
  - d) Serious physical injuries: ☐ Under 5 years of age ☐ Over 5 years of age
  - e) Fever: ☐ Under 5 years of age ☐ Over 5 years of age
  - f) Skin disease: ☐ Under 5 years of age ☐ Over 5 years of age
  - g) Other (specify): ☐ Under 5 years of age ☐ Over 5 years of age
55. 55a. Do any people with disabilities reside in this household? ☐ Yes ☐ No
- 55b. If yes, then how many people have any of the following disabilities?
- a) Physical disability: ☐ People
  - b) Mental disability: ☐ People
  - c) Visual disability: ☐ People
  - d) Speech impediment: ☐ People
  - e) Hearing disability: ☐ People
56. 56a. Did you seek professional treatment when members of your household were sick? ☐ Yes ☐ No
- 56b. If yes, then where did you receive this treatment?
- a) Public hospital/clinic
  - b) Private hospital/clinic
  - c) NGO clinic
  - d) Other (specify)
57. 57a. Did you experience any problems in accessing healthcare when you needed it? ☐ Yes ☐ No
- 57b. If yes, then what problems did you experience?
- a) Problems with civil documents
  - b) Relevant medical services were not available
  - c) Medical staff refused treatment without any valid explanation
  - d) The cost of healthcare was too high
  - e) The hospital/clinic was too far away

- f) Other (specify)
- 57c. In minutes, how long did you wait to see a doctor last time you visited a medical centre?  
☐ Minutes
58. 58a. Are any female members of this household pregnant or nursing? ☐ Yes ☐ No  
 58b. If yes, then how many:  
 a) Pregnant women:  
 b) Nursing women:  
 58c. If yes, then do pregnant women visit ante-natal clinics? ☐ Yes ☐ No
59. 59a. How would you rate the quality of healthcare services in KRI?  
 a) Very good  
 b) Good  
 c) Neutral  
 d) Bad  
 e) Very bad
- 59b. Since your arrival in KRI, have you gone back to Syria to seek medical treatment? ☐  
 Yes ☐ No
60. 60a. How many children aged 0-59 months (0-4 years, 11 months) have received polio vaccinations (polio to be described as 2 drops)? **(insert constraint: value entered cannot be greater than value for Q2b for the 0-4 years range)** ☐ Children  
 60b. How many children aged 6-59 months (0-4 years, 11 months) have received measles vaccinations (polio to be described as 2 drops)? **(insert constraint: value entered cannot be greater than value for Q2b for the 0-4 years range)** ☐ Children  
 60c. How many children aged 0-59 months (0-4 years, 11 months) have received DTP3 vaccinations (polio to be described as 2 drops)? **(insert constraint: value entered cannot be greater than value for Q2b for the 0-4 years range)** ☐ Children
61. How many children aged less than 3 years have been exclusively breastfed for at least 6 months?  
☐ Children

## Needs and Assistance

62. What assistance, if any, have you received in the last 30 days? **(select all)**  
 a) Cash  
 b) Food  
 c) Water  
 d) Fuel (gas, kerosene, diesel)  
 e) Shelter and winterization assistance  
 f) Winterization items  
 g) No assistance  
 h) Other (specify)
63. What are the household's top 3 priority needs at this moment in order of importance? **(select all; "None" if no third need reported).**  
 a) None  
 b) Drinking water  
 c) Cash assistance for housing (rent)  
 d) More food

- e) Better quality of food
- f) Shelter improvement (winterization, drainage, etc)
- g) Cooking fuel
- h) Heating fuel
- i) Electricity
- j) Education
- k) Psychosocial support
- l) Medical assistance
- m) Kitchen utensils
- n) Blankets
- o) Clothing
- p) More living space
- q) Access to income generating opportunities
- r) Support to restart closed business
- s) Other (specify)

### Intentions

64. 64a. Does your household intend to move within the KRI? ☐ Yes ☐ No
- 64b. If yes, where do you intend to move? ☐ Within the same district ☐ Same governorate, but different district ☐ Another governorate
- 64c. If yes, then why do you intend to move? ☐ Cost of living is too high in this location  
☐ To be closer to family ☐ Better employment opportunities elsewhere ☐ Safety concerns ☐  
 Weather conditions ☐ Better access to essential services ☐ Other (specify)
- 64d. If yes, then when do you intend to move? ☐ Now ☐ 0-2 weeks ☐ 2 weeks – 1 month ☐  
 1-3 months ☐ 3-6 months ☐ Do not know
65. 65a. Do you plan to return to your area of origin in Syria? ☐ Yes ☐ No
- 65b. If yes, then why do you intend to return? ☐ To join friends and relatives ☐ To check on status of property ☐ Employment opportunities ☐ Security has improved in the area of origin ☐  
 Other (specify)

### Location

66. Please collect the GPS coordinates of this household to an accuracy of 5 metres.

## Annex 2: Sampling Frame

Governorate	District	Sample size - district level 95/10	District population as % of governorate population	Sample size - governorate level	Sample size - district weighted	Total to be collected per district
Duhok	Duhok	94	12.1	385	47	94
	Sumel	96	68.6		264	264
	Amedi	79	1.9		7	79
	Shekhan	99	8.9		34	93
	Akre					
	Bardarash					
	Zakho	93	9		35	93
Erbil	Erbil	96	94.9	385	365	365
	Koisanjaq	80	1.3		5	80
	Shaqlawa	90	3.5		13	90
	Soran	52	0.3		1	52
	Choman					
Sulaymaniyah	Sulaymaniyah	96	96.3	385	371	371
	Halabja	78	3.7		14	78
	Kalar					
	Darbandikhan					
	Dokan					
	Rania					
	Penjwin					
	Chamchamal					
	Total district	953	Total governorate	1,155	Total cumulative	1,659

\*Districts highlighted in yellow were fused as single sampling unit