REACH operates under ACTED in Jordan and is a joint initiative of ACTED, IMPACT Initiatives and the UN Operational Satellite Applications Programme (UNOSAT). REACH was established by ACTED in 2010 to strengthen evidence-based decision making by aid actors through efficient data collection, management and analysis before, during and after an emergency. This contributes to ensuring that communities affected by emergencies receive the support they need. All REACH activities are conducted in support of the Government of Jordan and UN partners, for the development of the Jordan Response Plan, and are within the framework of interagency aid coordination mechanisms.
EXECUTIVE SUMMARY

As the Syria crisis enters its fifth year, over 3.8 million registered Syrian refugees have fled the conflict, with Syria’s neighboring countries receiving the majority of these refugees.\(^1\) Jordan is currently hosting 1.4 million Syrians\(^2\), 646,700\(^3\) of which are registered with the Ministry of Interior (MOI), 624,385\(^4\) of which are registered refugees with UNHCR,\(^5\) with the remainder already living in Jordan prior to the crisis.\(^6\) The vast majority of these refugees (85%) live outside of formal refugee camps in host communities, creating challenges for the government of Jordan (GoJ) in meeting the needs of both its own citizens and the growing refugee population. Jordan is a resource-poor country, with high levels of domestic unemployment and rising rates of inflation\(^7\), therefore vulnerable Jordanians and Syrians are increasingly competing for employment, shelter, water and other basic necessities.\(^8\) With no immediate prospect of these refugees returning to Syria, there is growing concern that competition over scarce resources will lead to rising tensions and increased instability in the country.

In recognition of the protracted nature of the crisis, the humanitarian response has shifted toward long-term and sustainable approaches, with the GoJ increasingly emphasizing the need to build social cohesion and resilience in local communities, in partnership with international agencies.\(^9\) This is reflected throughout the Regional Refugee Resilience Plan (3RP), which combines the national response plans for Syria’s neighboring countries (Lebanon, Turkey, Jordan, Iraq, Egypt) to create ‘national plans and development initiatives’, which ‘build resilience among individuals, communities and institutions across sectors.’\(^10\) At the national level, in partnership with the United Nations (UN) agencies, international non-governmental organizations (NGOs), the GoJ created a three year National Resilience Plan (NRP) 2014-2016, with the objective ‘to successfully mitigate the impact of the Syria crisis on Jordan and Jordanian host communities.’\(^11\) Under the guiding strategy of the 3RP and NRP, the Jordan Response Plan (JRP) for the Syria Crisis 2015 is a one-year framework, which outlines sector specific responses to meet the needs of both the refugees and host communities. All three plans have social cohesion and resilience building initiatives tied into their framework; two areas deemed to be essential for facilitating the long-term peaceful co-existence of the refugee and host population.

In light of the need to better understand the factors impacting social cohesion and resilience in Jordan, the British Foreign and Commonwealth Office (FCO) commissioned REACH to conduct an assessment of the challenges to social cohesion and resilience, from August 2013 to March 2014.\(^12\) Through key informant interviews in 446 communities in the central and northern governorates of Ajloun, Balqa, Jerash, Irbid, Al Mafraq and Zarqa, 160 communities were identified as displaying indications of weakened social cohesion. Further surveys and focus group discussions were conducted within these communities, in which tensions were reported across multiple sectors including education services; healthcare; water supply; livelihoods; and shelter and housing. The report identified that challenges to social cohesion emerged at two levels, tensions between the host community and refugee population and limited communication between the citizens and local government. The report suggested there is a need for the international community to re-evaluate the way in which external support is provided, with findings

\(^1\) UNHCR Data Portal, 7 March, 2015 
\(^2\) Jordan Response Plan (JRP) for the Syrian Crisis, 20 February 2015, p. 6 
\(^3\) Ibid, p.11 
\(^4\) UNHCR Data Portal, 20th February, 2015 
\(^5\) JRP, p.6 
\(^6\) UNHCR Syria Regional Refugee Response Portal 
\(^8\) Jordan Response Plan (JRP) 2015, p.11 
\(^9\) Ibid. Regional Refugee Resilience Plan (3RP), National Resilience Plan (NRP) 2014-2016 p.11 
\(^10\) 3RP, p.8 
\(^11\) NRP, p.11
indicating that many respondents perceived that aid was not distributed to the most vulnerable. Additionally, this assessment identified employment and housing as the two primary sectors where Syrians and Jordanians reported high levels of tension; confirming the need to strengthen support for livelihood opportunities for both the refugee and host population as a means to mitigate further community-level discontent. As the majority of these services fall under the mandate of municipal authorities, this assessment prompted further interest in analyzing the key drivers of tensions within municipalities, in order to inform responses which target specific sectors and services perceived to be destabilizing social cohesion.

Currently, with support from the World Bank, the UK Department for International Development (DFID) and FCO, REACH is implementing an evaluation of support provided to municipalities in northern Jordan. This follow-up assessment builds upon the previous assessment by analyzing the findings from the household baseline component of this evaluation and through exploring potential drivers of tensions in the medium to long term between host communities and the refugee population, and between community residents and local services providers. Data collection was conducted in August and September 2014 in the northern governorates of Al Mafraq, Irbid, and Al-Zarqa, which host the largest numbers of refugees. Although the evaluation explores broader satisfaction with municipal services, this report focuses on key indicators of resilience and social cohesion by analyzing the prominent changes residents have witnessed in their community, the levels of discontent with services related to these changes, and the main coping mechanisms adopted at the household level to deal with poor access to municipal services. The aim of the research is to better understand whether prominent changes observed by community residents are linked to tensions and how this differs depending on nationality and/or municipality. This will ultimately serve to improve the planning and implementation of both regional and national response plans implemented by governments, UN agencies and NGOs.

In total, 6,166 questionnaires were conducted, with a minimum of 385 questionnaires per municipality. As a result, the findings are statistically significant at the municipal level, to a 95% level of confidence and with a 5% margin of error. Overall, 5,130 of the respondents were Jordanian (83%); 932 were Syrian (15%); and 2% of respondents reported other nationalities. An almost equal proportion of male (51%) and female (49%) respondents was interviewed, such that findings are representative of key population groups in the assessed municipalities.

**Key Findings**

The assessment found that three key sectors, WASH, solid waste management (SWM) and livelihoods (housing and employment) have been most affected by the large influx of refugees. Respondents reported the most prominent change in their community as either: water shortages (38%), waste accumulation (12%), rising cost of living (29%), or increased competition over jobs (8%). More than 72% of Jordanian respondents stated that these issues have led to tensions in the area where they live. The following section provides a summary of the key sector specific findings outlined in this report:

**WASH**

Due to ongoing drought and outdated infrastructure, water shortages are a common phenomenon in Jordan, predating the Syria crisis. According to the NRP, as a result of the influx of refugees increased demand for water in host communities has exacerbated water shortages and decreased the quantity supplied per capita. As a result of these challenges, 40% of Jordanian and 29% of Syrian households identified increased water shortages as the most prominent change they have witnessed in their community. Previous research conducted by Mercy Corps,

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13 In selected municipalities sample targets were slightly exceeded, totaling 386, 387 and 388 questionnaires.
14 Mercy Corps, TAPPED OUT: Water Scarcity and Refugee Pressures in Jordan, March 2014, p.4
15 Currently 30 l/p/d per household is being supplied whereas the Water Authority of Jordan (WAJ) standard is 100 l/p/d National Resilience Plan, p.64
demonstrates that decreasing availability of water can contribute to increased tensions between communities,\(^\text{16}\) is reinforced by this study, in which 79% of Jordanians and 60% of Syrians agreed that water shortages have led to discontent in their community.

Water shortages are also affecting the immediate welfare of the assessed population. **Almost half of the households (48%) reported facing a water shortage in the 30 days preceding the survey**\(^\text{17}\) which is driving 95% of households to adopt coping mechanisms to meet basic water needs. These strategies pose health and hygiene risks for households, exemplified by the 32% of households reporting that they reduce water consumption to cope with the lack of water.

According to assessed households, water shortages are the result of weak water pressure (39%), and infrequent delivery of water via the public water network (37%). Overall, nearly a fifth of households (19%) reported that they are not connected to the public water network. In addition, respondents reported that connection to the public water network is not evenly distributed. More Syrians (39%) than Jordanians (15%) reported not being connected to the public water network as did more rural residents (27%) than urban residents (7%). Low connectivity rates and weak water supply meant an overwhelming majority of the population (80%) were either ‘unsatisfied’ or ‘very unsatisfied’ with water services, and municipalities facing the most frequent water shortages reported higher levels of discontent.\(^\text{18}\) The importance of addressing this issue is recognized in the WASH sector component of the JRP, which outlines a number of interventions to rehabilitate water supply infrastructure, expand wastewater treatment plans and extend sewer systems in urban areas.\(^\text{19}\)

**SOLID WASTE MANAGEMENT**

In Jordan’s host communities the influx of refugees has resulted in an increase of an estimated 340 tons of waste to dispose of daily. In 2014, UNDP conducted an assessment which found that municipalities have reported difficulties in addressing this additional waste, as municipal waste management services have limited financial resources; insufficient equipment, such as vehicles, pesticides and containers; and a small workforce which lacks the capacity to carry out regular maintenance.\(^\text{20}\) The culmination of these factors has resulted in an accumulation of solid waste and an increase in pests in the municipalities of Northern Jordan.\(^\text{21}\) **Waste accumulation was reported by over a fifth of households as the second prominent change they had witnessed in their municipality and a large majority of surveyed households (69%) either agreed or strongly agreed that waste accumulation has led to discontent in their community.**

A majority of households rely on municipal authorities for their solid waste collection. In the municipalities assessed, 76% of respondents used public waste bins to dispose of their household solid waste. However, 23% of residents are resorting to dropping garbage ‘anywhere outside’ and currently 5% of residents are burning their garbage. Rural areas displayed more of this practice, with 9% reporting that they burnt their solid waste, compared to 0% of those living in urban areas. The use of environmentally damaging and unsustainable coping mechanisms to dispose of waste was attributed to poor municipal waste management services, such as infrequent garbage collection and poor pest control. Half of the assessed households (50%) reported that garbage collection was not frequent enough; for 45% of households, garbage collection occurred either once a week (33%), once every two weeks (6%), once a

\(^{16}\) REACH, *Understanding Social Cohesion and Resilience in Jordanian Host Communities*, April 2014

\(^{17}\) The survey was conducted during the hot season

\(^{18}\) A Chi-square test confirmed that water shortage is associated with level of discontent at a conventionally accepted level of significance, Chi square =1196.398, df=10, p<0.001, Phi=0.441, Crammer’s V=.331

\(^{19}\) JRP, p.9


\(^{21}\) Ibid.
month (2%) or never (4%). Findings suggest that infrequent garbage collection as well as the increase in population producing waste appears to have increased the prevalence of pests as almost three quarters of households (74%) reported there had been an increase in pests in the community and 64% of households were subsequently dissatisfied with municipal pest control.

Poor pest control and solid waste management services have led to 35% of households reporting they used strategies to cope with the lack of public bins. The two most commonly used coping strategies were dropping garbage by the roadside, at 49% of used strategies, and burning garbage, at 45% of used strategies. To prevent these environmentally damaging SWM practices and growing frustration over waste accumulation, there is a need for a concerted effort to build the capacity of municipal SWM services, reflected in the JRP, which outlines a strategy to strengthen municipal waste management capacity.  

Housing

The influx of Syrian refugees in Jordan has increased the demand for basic goods and services, resulting in price increases across sectors, such as the housing sector which has witnessed a rapid inflation in prices, approximately 100% to 200% inflation compared to pre-crisis prices. The NRP states that Syrians in Jordan are in need of approximately 120,000 housing units. In the municipalities assessed, 28% of households reported that the rising cost of living was the key prominent change they have witnessed in their community and CARE has found that the lack in the supply of affordable housing is one of two key causes of tensions between Jordanians and Syrians living in the host communities. These tensions are reaching a critical point, with 95% of Syrian and 87% of Jordanian households either ‘agreeing’ or ‘strongly agreeing’ that rising housing prices have led to discontent in their community.

Syrians are more vulnerable to housing insecurity. A large proportion of assessed Syrian households, 47%, reported spending over 46% of their income on housing, compared to only 3% of Jordanians. This is because the vast majority of Jordanians (87%) live in owned accommodation, whereas 80% of Syrians live in rented accommodation. Female-headed households are most vulnerable to rising rental costs. In the municipalities assessed, 73% of female-headed households spend over 46% of their income on housing, compared to 9% of male-headed households. High rental costs are most prevalent for households living in urban areas. The previous FCO-REACH assessment found that urban areas are most acutely affected by the influx of refugees and are having difficulties absorbing these waves, leading to increased community instability. This is attributed to the higher proportion of residents in urban areas (41%) living in rented accommodation compared to peri-urban (18%) and rural locations (17%).

High rental costs are forcing households to adopt extreme coping mechanisms. Nearly a quarter of households (24%) reported they had used a coping strategy to deal with challenges related to housing. The most commonly used coping strategies were borrowing money from family (27%), friends and neighbors, delaying the payment of rent (22%) and finally, taking out private loans (21%). The prevalence of these strategies demonstrates the vulnerability of Jordanians and Syrians living in the host community. In the longer term, the JRP makes provisions to increase the amount of affordable housing in the market. However, in the short term, the JRP has direct

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22 JRP, p.152
23 JRP, p.16
24 NRP, p.35
25 According to CARE, the second cause of tensions is competition over jobs. JRP, p.94
26 REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, April 2014, p.20.
27 Ibid. p.98
provisions for refugee housing, including the upgrading of shelters, completing unfinished shelters and conditional cash-for-rent for vulnerable households. This assessment confirms the need to urgently implement these short-term measures, to both reverse growing tensions and improve the resilience of Jordanians and Syrians.

**Livelihoods**

Vulnerability in Jordan, and the wider region, acknowledged in both the 3RP and JRP, is largely driven by ‘high unemployment and rising poverty’. In Northern Jordan, concern is growing that Syrians are increasingly competing with vulnerable Jordanians for jobs. A mapping exercise conducted by Mercy Corps (2013) in Ma’afraq, found that job competition is an ‘overt stress point between the two communities.’ This assessment substantiates this finding: 14% of Syrian and 7% of Jordanian assessed households cited job competition as the most prominent change they had witnessed in their communities. The overwhelming majority of households, 81%, agreed that this increase in job competition has led to discontent in their community.

Discontent over livelihoods is reflected in high rates of unemployment amongst the households assessed. In 40% of Syrian and 30% of Jordanian households, at the time of the assessment, a household member was looking for employment. Syrian households were most acutely affected, with 40% of households reporting that the main breadwinner had struggled to find employment in the last year, compared to a lesser 17% of Jordanian households. High levels of unemployment have meant that the majority of households (61%) relied on coping mechanisms in the 30 days preceding the assessment to cope with the lack of employment opportunities. At 50% of used strategies, borrowing money from family, friends and relatives was the most commonly used coping strategy.

The 3RP, NRP and JRP all acknowledge the importance of prioritizing initiatives promoting sustainable livelihoods, to prevent communities from resorting to unsustainable coping mechanisms, such as the accumulation of debt, and to address growing tensions, and weakened community resilience. The resilience section of the JRP includes provisions for the creation of employment opportunities; including demand based vocational training, job-placement and apprenticeships.

**Conclusion**

Increasingly scarce resources, overburdened infrastructure and growing competition for livelihoods, are placing strain on municipalities and communities alike. Municipalities are faced with the challenge of meeting the needs of both the Jordanian and Syrian populations, and the resilience of communities is negatively affected by livelihood insecurity and unsafe coping mechanisms. In order to reverse these trends, efforts to support municipal authorities in providing adequate services to citizens, across the four key sectors identified in this report, are critical to address these issues both in the short and long-term.

The programmes and initiatives outlined in the 3RP, JRP and NRP comprehensively address the most critical gaps, identified in this assessment in the sectors of WASH, SWM, Housing, and Livelihoods. This report recommends that aid actors implement the initiatives outlined in the 3RP, JRP and NRP, in order to upgrade outdated and overburdened municipal WASH and SWM infrastructure, to improve the availability of affordable housing units and to increase livelihood opportunities. Improved municipal services in the WASH, SWM, Housing, and Livelihoods sectors will increase the resilience of Jordanian citizens and Syrian refugees and bolster social cohesion at the community level.

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28 JRP, p.165
29 Mercy Corps 2013, p.10
30 JRP, p.143
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## Abbreviations and Acronyms

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<tr>
<td>CBO</td>
<td>Community-Based Organisation</td>
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<tr>
<td>DFID</td>
<td>The UK Department of International Development</td>
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<td>FCO</td>
<td>British Foreign and Commonwealth Office</td>
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<td>FSL</td>
<td>Food Security Livelihoods</td>
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<td>GoJ</td>
<td>Government of Jordan</td>
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<td>JRPs</td>
<td>Jordan Response Plan</td>
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<td>LRRD</td>
<td>Link Relief Rehabilitation and Development</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>NRP</td>
<td>National Resilience Plan</td>
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<td>ODK</td>
<td>Open Data Kit</td>
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<td>3RP</td>
<td>Regional Refugee and Resilience Plan</td>
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<td>SWM</td>
<td>Solid Waste Management</td>
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<td>UN</td>
<td>United Nations</td>
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## Geographical Classifications

- **Governorate**: In Jordan this is the highest administrative boundary below the national level.
- **District**: Governorates are divided into districts.
- **Municipality**: Districts are divided into municipalities.
- **Sub-Municipality**: Municipalities are divided into sub-municipalities.
- **Community**: Sub-municipalities are divided into communities.
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INTRODUCTION

The protracted Syria crisis has generated the largest refugee exodus in recent history, with close to 4 million registered refugees now living outside of Syria, the majority of which have sought refuge in the neighboring countries of Jordan, Iraq, Lebanon and Turkey. An estimated 1.4 million Syrians reside in Jordan, representing approximately 21.5% of the total population of 6.49 million people. Most Syrian refugees (85%) in Jordan live in host communities, placing strain on scare resources and intensifying competition in critical municipal services such as water, sanitation and hygiene (WASH), solid waste management (SWM), as well as the demand for housing, and competition for livelihood opportunities. A Municipal Needs Assessment conducted by UNDP (2014) echoed this finding, suggesting that the large influx of refugees has placed a sizeable burden on the service delivery capacity of the Jordanian government. This service delivery has been particularly stretched in the governorates which have received the highest proportion of Syrian refugees: Amman (27.7%), Irbid (23.3%), Al Mafraq (12.4%) and Zarqa (8.5%), leading to significant challenges to social cohesion and community resilience.

In response to the challenges faced by Syria’s neighboring countries, collaborative efforts between government bodies and humanitarian actors have led to the development of regional and national response plans. At the regional level, the 3RP was adopted to harmonize humanitarian and resilience national response plans into a single coordinated regional framework. The objective of this regional framework is to address refugee protection needs, the humanitarian needs of the most vulnerable, and the longer-term socio-economic impact of the Syrian crisis on neighboring countries. The 3RP acknowledges that increased competition for scarce resources, housing and employment, has led to a decline in the standard of living of communities and heightened tensions. As a result, in order to mitigate inter- and intra- community tensions, the 3RP targets livelihoods and socio-economic initiatives amongst refugee, vulnerable populations and affected communities.

At the national level, the Host Community Support Platform (HCSP) was created in 2013, which in turn informed the creation of the National Resilience Plan (NRP), a policy paper which identifies the primary sectors, locations and communities which have been most affected by the refugee crisis. The NRP serves as a policy tool which outlines the high priority investments that support relief, rehabilitation and development projects within the following sectors: education, energy, food security and livelihoods, health, housing, municipal support, social protection and WASH for Jordan’s host communities, with social cohesion identified as a cross-cutting issue, relevant to multiple sectors. The overall purpose of the NRP is to promote a more sustainable response that addresses short-term needs and the erosion of institutional and systemic capacities, and builds the resilience of households, communities and institutions to respond effectively to similar crises in the future. This same principle has been incorporated into the Jordan Response Plan (JRP), a one year framework that links the refugee response with long-term national development plans, addressing the needs of both refugees and vulnerable host communities. The JRP also emphasizes that municipal services have been severely stretched by over-populated host communities, suggesting

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31 UNHCR data portal, as of 13 May 2015.
32 750,000 Syrians were estimated to be living in Jordan prior to the crisis
33 JRP, p.11
34 UNDP, *Mitigating the Impact of the Syrian Refugee Crisis on Jordanian Vulnerable Host Communities*, Municipal Needs Assessment Report, 10th April 2014,
35 JRP, p.11
36 3RP, p. 8
37 Ibid. p.20
that greater pressure on public services and livelihoods is threatening social cohesion, particularly in northern governorates. The JRP stresses the need to ensure social cohesion considerations are streamlined into all projects, and states the importance of social cohesion analysis and adoption of monitoring tools to ensure interventions take into consideration tensions that may arise as a result of stress on the local community.

To further understand the role of social cohesion in Jordan’s host communities, the British Foreign and Commonwealth Office (FCO) and REACH conducted an assessment between August 2013 and March 2014 to establish the key challenges to social cohesion and resilience. Based on key informant interviews in 446 communities in the central and northern governorates of Jordan (Ajloun, Balqa, Jerash, Irbid, Al Mafraq, and Zarqa), 160 communities were identified for further investigation. Additional surveys and focus group discussions were conducted in these communities in order to identify key issues that presented challenges to social cohesion and resilience. The assessment found that challenges to social cohesion emerged at two levels: tensions between the host community and refugee population; and poor communication between citizens and local government. Additionally, this assessment identified employment and housing as the two primary sectors where Syrians and Jordanians reported high levels of tension, confirming the need to strengthen support for livelihood opportunities for both the refugee and host population, as a means to mitigate further community-level discontent.

This study builds upon the previous assessment, through a more in-depth analysis of the mechanisms that weaken levels of social cohesion between Jordanian host communities and the Syrian refugee population. The findings are taken from the household level baseline component of an on-going evaluation of support provided to municipalities by the World Bank and the UK Department for International Development (DFID), conducted by REACH. This study examines prominent changes identified by respondents in their communities; the level of access to the services associated with these changes; coping mechanisms adapted to meet household needs; and levels of discontent regarding the current state of public services. Data collection was conducted in August and September 2014, in the Northern governorates of Al Mafraq, Irbid, and Al-Zarqa, which host the largest number of refugees and display evidence of tensions and discontent both within and between communities. The questionnaire was developed in close coordination with the World Bank, DFID, FCO as well as water and sanitation experts at ACTED, who all provided input and feedback during the preparatory phase.

This report adds to a growing body of evidence that details significant changes to local resilience and social cohesion between Jordanians and Syrians living in host communities in Jordan. In order to establish which sectors face the most acute challenges, the ‘Prominent Changes’ section outlines how Jordanians and Syrians perceive their local community to have changed since the sudden influx of Syrian refugees into the country. Based on these findings, the report then focuses on the key sectors that are crucial for social cohesion and resilience: WASH, Solid Waste Management, Housing and Livelihoods. Indicators of social cohesion and resilience are analyzed for each sector, and key interventions, outlined in the 3RP, JRP and NRP, necessary to bolster the coping capacity of communities and local governmental authorities, are recommended for implementation.

38 Ibid. p.151
39 Ibid. p.32
METHODOLOGY

The previous FCO-REACH assessment on social cohesion used a purposive approach to sampling, which did not allow findings to be representative at the municipal or governorate level. To ensure data collected in this study was statistically significant at the municipal level, a random sampling approach was used at the household level, allowing for further inter-municipal comparisons. The sample size was based on a 95% level of confidence and a 5% margin of error, equaling 385 questionnaires in each municipality with a total of 6,166 questionnaires conducted, as illustrated in table 1 below.

Table 1: Sample size per municipality

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Municipality</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Mafraq</td>
<td>Al-Serhan</td>
<td>385</td>
</tr>
<tr>
<td>Al Mafraq</td>
<td>Al-Za’atri and Al-Mansheah</td>
<td>385</td>
</tr>
<tr>
<td>Al Mafraq</td>
<td>Bal’ama Al-Jadeedah</td>
<td>385</td>
</tr>
<tr>
<td>Al Mafraq</td>
<td>Hosha Al-Jadeedah</td>
<td>386</td>
</tr>
<tr>
<td>Al Mafraq</td>
<td>Mafraq Al-Kubra</td>
<td>385</td>
</tr>
<tr>
<td>Al Mafraq</td>
<td>Rhab Al-Jadeedah</td>
<td>387</td>
</tr>
<tr>
<td>Al Mafraq</td>
<td>Sabha and Dafianeh</td>
<td>385</td>
</tr>
<tr>
<td>Irbid</td>
<td>Al-Kfarat</td>
<td>385</td>
</tr>
<tr>
<td>Irbid</td>
<td>Al-Mazar Al-Jadeedah</td>
<td>385</td>
</tr>
<tr>
<td>Irbid</td>
<td>Al-Ramtha Al-Jadeedah</td>
<td>385</td>
</tr>
<tr>
<td>Irbid</td>
<td>Al-Sho’aleh</td>
<td>385</td>
</tr>
<tr>
<td>Irbid</td>
<td>Al-Yarmook Al-Jadeedah</td>
<td>385</td>
</tr>
<tr>
<td>Irbid</td>
<td>Gharb Irbid</td>
<td>385</td>
</tr>
<tr>
<td>Irbid</td>
<td>Irbid Al-Kubra</td>
<td>385</td>
</tr>
<tr>
<td>Irbid</td>
<td>Sahel Horan</td>
<td>385</td>
</tr>
<tr>
<td>Zarqa</td>
<td>Al-Zarqa</td>
<td>388</td>
</tr>
</tbody>
</table>

A team of 20 experienced enumerators and 4 field coordinators were trained for one day on the questionnaire and data collection methodology, with an additional four days used to pilot the questionnaire in the field. During the piloting phase, an hour was allotted each day to discuss the challenges faced in the field and ways to mitigate them.

Random sampling was undertaken using GIS capacity, through the generation of randomised GPS points in selected municipalities, with the distribution of points weighted, based on population density. In order to reach the GPS points, field teams used the smart phone app MapFactor, which enabled enumerators to enter GPS coordinates into the app.

41 FCO-REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, Assessment Report, June 2014
42 In selected municipalities sample targets were slightly exceeded, totaling 386, 387 and 388 questionnaires were conducted.
and provided directions to the selected destination. Field teams then administered questionnaires within a 125 meter radius of these coordinates using Open Data Kit (ODK) forms uploaded onto smart phones. This use of mobile data collection allowed for completed questionnaires to be uploaded directly from the phone to the online server, effectively allowing data entry directly following the interview and avoiding some of the problems associated with paper forms, such as blank or illegible responses (see Annex 2 for full questionnaire). A dedicated data entry focal point was assigned to monitor the data collected daily to ensure that any errors were identified and immediately addressed.

CHALLENGES AND LIMITATIONS

Reaching some of the randomized GPS points proved logistically challenging, as there were a number of GPS points that were in locations which were inaccessible to field teams. An additional challenge was that MapFactor did not always give the quickest route to each set of GPS coordinates, meaning that field teams unfamiliar with the area could not immediately seek an alternative route, which led to delays. In exceptional cases, when there was no household located within close proximity of the GPS coordinates, field teams would have to locate the next nearest household. When there was no household located within the defined 125 m, field teams randomly generated new points using a pin or a coin.

One question in the assessment tool was about location type (urban, peri-urban, and rural). Enumerators were provided with a definition of the varying location types and were trained to select the most appropriate option provided. As the location type was based on the perspective of the enumerators, this data was subjective. However, to verify the selected options, and ascertain the variance between location types—urban, peri-urban, rural—REACH used land use data to classify the GPS points and triangulate results. Analysis shows that only 1.2% of forms were within 100 meters of all 3 land type classifications, that is, there were very few cases where enumerators identified a wide variety of land types within a very small area, indicating that enumerators’ selections displayed anticipated patterns. Conversely, REACH found that 29% of the peri-urban forms were identified within 100 meters of either urban or rural, demonstrating more frequent variance between peri-urban and the other two location types.

DEMOGRAPHICS

In total, 6,166 randomly selected adults were interviewed across the 16 municipalities included in this study. The following section details key findings about the respondents assessed (see Table 2).

Table 2: Number assessed by nationality and gender

<table>
<thead>
<tr>
<th>Nationality</th>
<th># Male</th>
<th>% Male</th>
<th># Female</th>
<th>% Female</th>
<th>TOTAL #</th>
<th>% TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordanian</td>
<td>2661</td>
<td>43%</td>
<td>2469</td>
<td>40%</td>
<td>5130</td>
<td>83%</td>
</tr>
<tr>
<td>Syrian</td>
<td>414</td>
<td>7%</td>
<td>518</td>
<td>8%</td>
<td>932</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>78</td>
<td>1.30%</td>
<td>26</td>
<td>0.50%</td>
<td>104</td>
<td>2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3153</td>
<td>51%</td>
<td>3013</td>
<td>49%</td>
<td>6166</td>
<td>100%</td>
</tr>
</tbody>
</table>

Overall, in the municipalities assessed, a high proportion of the population were non-Jordanian, with 15% of the residents reporting Syrian nationality and 2% of another nationality. A few municipalities registered a very high proportion of Syrian residents, in Mafrak Al Kubra, for example 49% of the population were Syrian and in Al-Za’atri and Al-Mansheah, 24% of the population.
Equal proportions of male (51%) and female (49%) respondents were interviewed. The majority of households (82%) were headed by males and only 18% were headed by females. Given the well-researched vulnerability of Syrian female-headed households, it is concerning that municipalities containing the largest number of Syrian refugees, also contained the largest proportion of female headed households; in Mafraq al Kubra, a third of all households are headed by females and in Al Za’atri and Al-Mansheah, 28% of households are female-headed. When examined by nationality, 50% of all Syrian households in Mafraq Al Kubra are headed by females. Al Serhan had the highest proportion of male respondents (58%), whereas the municipality of Al Mazar Al Jadeedah reported the highest proportion of female respondents (57%).

Across the municipalities assessed, 56% of respondents had not completed secondary education. 12% reported having received no formal education, and 44% of the population had completed only primary education (see Figure 1). Education levels were lowest in Sabha and Al Daianeh and Al-Za’atri and Al-Mansheah, where over 70% of residents had not completed secondary education.

Table 3: Reported length residence in the community

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Less than 3 months</th>
<th>3-6 six months</th>
<th>6 months to 1 year</th>
<th>1 to 2 years</th>
<th>More than 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordanian</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>94%</td>
</tr>
<tr>
<td>Syrian</td>
<td>11%</td>
<td>12%</td>
<td>22%</td>
<td>38%</td>
<td>17%</td>
</tr>
</tbody>
</table>

**Figure 1**: Highest level of education completed

The vast majority of respondents reported that they had lived in the community for more than two years (82%), while 8% had been in the community for one to two years, and 10% had lived in the area for less than a year. As anticipated, Jordanians reported being resident in their communities for longer than Syrians, with the vast majority of Jordanians, 94%, having lived in their communities for more than two years, compared with 17% of Syrians (see Table 3). The municipalities with the highest number of recently arrived residents were the two municipalities with the highest proportion of Syrian respondents, Mafraq Al Kubra and Al Za’atri and Al Mansheah, where more than 30% of respondents arrived within the last two years. Al Ramtha Al Jadedeh and Al Serhan municipalities followed closely, where more than 20% of respondents reported they lived in the community for less than two years. Both of these municipalities were also found to have a high proportion of Syrian respondents compared to the other assessed municipalities at 24% (Al Serhan) and 21% (Al Ramtha Al Jadedeh) respectively. This is to be expected, as all these municipalities are located close to the Syrian border and therefore have been receiving a significant number of Syrian refugees since the onset of the crisis.

In terms of location type, 48% of respondents were reported to live in rural areas, followed by 33% in peri-urban areas, and 19% in urban areas. The municipalities classified as predominately rural locations were: Sabha and Al-Dafianeh, Al Serhan (97%), Rhab Al Jadeedah (91%), Al Za’atri and Al Mansheah (91%), Gharb Irbid (86%) and Hosha Al Jadeedah (80%). The municipalities identified as primarily urban locations were Al Zarqa (87%) Mafraq Al Kubra (65%) and Irbid Al Kubra (62%).

**Prominent Changes**

In order to identify potential drivers of tensions, respondents were asked to state the three most prominent changes they have witnessed in their community (see Table 4).

<table>
<thead>
<tr>
<th>Prominent changes</th>
<th>Prominent change 1</th>
<th>Prominent change 2</th>
<th>Prominent change 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcrowding schools</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Overcrowding medical centers</td>
<td>1%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Job competition</td>
<td>8%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Rising cost of living</td>
<td>28%</td>
<td>22%</td>
<td>14%</td>
</tr>
<tr>
<td>Traffic</td>
<td>2%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Crime</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Disease</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Waste</td>
<td>12%</td>
<td>22%</td>
<td>9%</td>
</tr>
<tr>
<td>Cultural/Moral deterioration</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Water shortage</td>
<td>38%</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>No change</td>
<td>6%</td>
<td>20%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Measure values

In Northern Jordan, three key prominent changes were witnessed in all municipalities; increase in water shortages (at 38% of first prominent changes observed), rising cost of living (at 29% of second prominent changes observed) and waste accumulation (at 12% of second prominent changes observed). These sectors were also the ones in which most respondents felt that tensions were rising and that social cohesion was being challenged, which suggests that there may be a correlation between the most prominent change observed and the respondents’ perceptions of community-level tensions. These specific issues have been well documented in research conducted by UNDP (2014), Mercy Corps (2013) and Becker (2013), which further reinforce that gaps in service provision and access challenges in the sectors of water, sanitation and hygiene (WASH), and food security and livelihoods (FSL) are contributing to reduced resilience and social cohesion in local communities.

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44 This was observed by data collectors, and definitions of peri urban, rural and urban may not be persistent in terms of their perceptions, although efforts were made to carefully train data collectors on the definitions of the three areas.

The following section outlines which demographic groups have been found to be most impacted by changes in water supply, increased waste, rising cost of living and job competition since the recent influx of Syrian refugees.

When disaggregated by nationality, Jordanian and Syrian households had different perceptions of how their community had changed. More Jordanian (40%) than Syrian (29%) households reported witnessing an increase in water shortages as the most prominent change as well as waste accumulation which was reported as the most prominent change by 13% of Jordanians compared to 5% of Syrians (see Figure 2). Syrian households were more likely to cite rising cost of living (35%) and job competition (14%) as the most prominent change they had witnessed compared to their Jordanian counterparts, at 26% and 7% respectively. This is reflective of the fact that most Syrian refugees who have recently arrived in Jordan have faced a change in the regulatory structure, resulting in reduced access to livelihood opportunities and, consequentially, reduced ability to cover living costs.

Figure 2: Most prominent change witnessed by communities, disaggregated by nationality

Rural and peri-urban areas were reported to suffer more than urban areas from water shortages, at 39% and 42% respectively (see Table 5). Similarly households in rural (31%) and peri urban (28%) areas reported the rising cost of living as a key change, compared to only 19% of urban locations.

Urban areas reported more frequently than their rural and peri-urban counterparts that waste accumulation (21%) was a prominent change they had witnessed in their community compared to peri-urban (12%) and rural (8%) locations. This is likely to be because there is a higher population density within urban areas, and that, more Syrian refugees live in urban areas than in rural areas, hence increasing the amount of waste. As a consequence of the influx of refugees into urban areas in Northern Jordan, job competition was cited by 14% of urban residents compared to 7% of peri-urban and 6% of rural locations, as the most prominent change observed.

Table 5: Most prominent change witnessed by communities, disaggregated by location type

<table>
<thead>
<tr>
<th>Location type</th>
<th>Water shortages</th>
<th>Rising cost of living</th>
<th>Waste accumulation</th>
<th>Job competition</th>
<th>No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>28%</td>
<td>19%</td>
<td>21%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>Peri-urban</td>
<td>42%</td>
<td>28%</td>
<td>12%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Rural</td>
<td>39%</td>
<td>31%</td>
<td>8%</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Overall, there appeared to be minimal discrepancy between the prominent changes reported by males and females. The exception was in the rising cost of living, where 31% of male respondents, compared to 24% of female respondents reported that the rising cost of living was a prominent change. This may be due to the fact that males are commonly viewed as the breadwinner of the family and therefore may be more aware of the reduced purchasing power of their income.

Finally, despite the changes witnessed by these different demographics, many residents reported that they had not witnessed any change in their community; 20% of respondents ranked ‘no change’ as their second response and 42% of respondents ranked no change as their third response. Unsurprisingly, as can be seen in figure 2, more Syrians than Jordanians stated they had not witnessed a change in their community likely due to the shorter periods of residence of Syrians, who have therefore have had less time to witness changes than their Jordanian counterparts.

The remainder of this report explores each of the sectors outlined as witnessing the most prominent change; WASH, Solid Waste Management (SWM), Housing and Livelihoods.
WASH

ACCESS TO WATER

As one of the most water scarce countries in the world\(^{46}\), water shortages are not a new phenomenon in Jordan.\(^{47}\) The overall state of the public water network is in poor condition, with water pipes in critical need of rehabilitation, repair, and maintenance to increase water quality and accessibility.\(^{48}\) A high percentage (40-50%) of water produced is non-revenue water (NRW) lost through network breakdowns, leakages and illegal consumption; all of which primarily occur in the northern governorates.\(^{49}\) Higher water exploitation than replenishment rates have caused water levels, especially in the northern governorates, to decrease at a rate of 1 metre - 1.2 metres per year, further deteriorating water quality.\(^{50}\)

The combination of ongoing drought, outdated infrastructure\(^{51}\) and rapid population increase with the influx of refugees, have exacerbated water shortages. The National Resilience Plan (NRP) acknowledges that a heightened demand for water in Jordan’s host communities has directly impacted the amount and frequency of water available for community residents, which has created an imbalance between demand and available resources.\(^{52}\) While almost all Jordanians can access drinking water; the quantity supplied per capita has decreased\(^{53}\), which has led households to increase their rationing. In addition to rationing, insufficient frequency of water delivery, due to the increase in demand, has forced households to purchase additional water to meet their basic needs.\(^{54}\) The previous FCO-REACH report (2014) found that the reduced supply of this critical resource has served as a point of contention amongst the refugee and host population. There is a belief that the presence of Syrian refugees has reduced the supply of water in Jordan, which has led to negative attitudes towards Syrians.\(^{55}\) The findings of the following section confirm the findings expressed in the previous report, namely that water scarcity and poor water networks are leading to tensions in host communities. This section details key indicators of water access and resulting tensions in 16 northern municipalities.

PRONOMENT CHANGE

38% of households cited increased water shortages as the most prominent change they had witnessed in their community. When disaggregated by nationality, 40% of Jordanian and 29% of Syrian households reported water shortages were the most prominent change they had observed in their community, highlighted as the most prominent overall change for Jordanian communities. Several municipalities were acutely affected by this.

\(^{46}\) IN News, \textit{UN expert urges long-term, rights-based approach to water crisis in Jordan}\ 13 January 2015
\(^{47}\) NRP, p.84
\(^{48}\) Ibid. p.183
\(^{49}\) Ibid. p.183
\(^{50}\) Ibid. p.183
\(^{51}\) Mercy Corps, \textit{TAPPED OUT: Water Scarcity and Refugee Pressures in Jordan}, March 2014 p.4
\(^{52}\) Ibid. p.84
\(^{53}\) Ibid. p.183
\(^{54}\) It is currently 30 l/p/d whereas the Water Authority of Jordan (WAJ) standard is 100 l/p/d NRP, p.84
\(^{55}\) JRP, p.17
\(^{56}\) REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, 2014
change, the majority of residents in Al Sho’aleh (67%), Al Kfarat (66%), Gharb Irbid (65%) and Hosha Al Jadeedah (57%) reported that water shortages was the most prominent change witnessed in their municipality.

**PERCEPTIONS OF COMMUNITY-LEVEL TENSIONS**

To further understand whether this perceived change has driven community tensions, respondents were asked whether water shortages were linked to discontent. A majority (76%) of respondents either ‘agreed’ or ‘strongly agreed’ that water shortages have led to discontent in their community. In every municipality, the majority of households confirmed this finding, except Al Zarqa where 46% of households agreed with this statement. In Al Sho’aleh, a municipality in which 67% reported water shortages as the most prominent change, 97% of residents confirmed water shortages were linked to tensions in the community, confirming that tensions are exacerbated by a perceived decrease of water supply in communities. With a higher number of Jordanians reporting that water shortages were the most prominent change in their community, it is unsurprising that more Jordanians (79%), than Syrians (60%), strongly agreed or agreed that water shortages had led to discontent in their community (see Table 6). Such high levels of reported tensions amongst Jordanians is likely to be because they have lived in the community for longer and therefore are more able to assess the degree of change in the quality and quantity of piped water services overtime.

Table 6: Proportion of households that ‘agree’ or ‘strongly agree’ water shortages have led to discontent in the community, disaggregated by nationality

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Agree and Strongly agree</th>
<th>Neutral</th>
<th>Disagree and Strongly disagree</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordanian</td>
<td>79%</td>
<td>7%</td>
<td>12%</td>
<td>2%</td>
</tr>
<tr>
<td>Syrian</td>
<td>60%</td>
<td>10%</td>
<td>19%</td>
<td>11%</td>
</tr>
</tbody>
</table>

The previous FCO-REACH (2014) assessment on social cohesion identified that ‘shortages in [water] supply, weak infrastructure, and deteriorating water quality’ were ‘fuelling intra-communal tensions’. In the present study, this link is reinforced: of those who ‘strongly agreed or agreed’ water shortages had led to discontent, 64% reported they were ‘unsatisfied’ or ‘very unsatisfied’ with water services provided by municipal authorities. This finding suggests that those who reported discontent were also likely to be unsatisfied with public water services, indicating a strong link between poor water services and discontent within communities, playing a critical role in creation community tensions. The next section will detail indicators of water access and water security amongst communities living in Northern Jordan.

**WATER ACCESS AND FREQUENCY OF DELIVERY**

A UNDP (2014) assessment found that the ‘water distribution network is dilapidated’, that ‘water purity is deteriorating’ and that in many areas, particularly those which are mountainous, water pressure is weak. This report substantiates these findings, and shows that a high percentage of households are either not connected to the public water network or face frequent water shortages.

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56 REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, Assessment Report, June 2014, p17
57 A Chi-square test confirmed that level of discontent with water shortages is associated with level of satisfaction with water services at a conventionally accepted level of significance Chi square = 4829.524, df=25, p<0.005, Phi=.885, Crammer’s V=.396
The majority (81%) of households reported they were connected to the public water network, receiving piped water to their homes. Syrian households were less frequently connected to the public water network, with 39% of Syrian households reporting they were not connected to the public water network, compared to 15% of Jordanian households. This was also reflected at the municipality level; those municipalities with higher proportions of Syrian households, such as Al Za’atri and Al Mansheah, had the greatest percentage of households which were not connected to the public water network.

Figure 3: Proportion of households connected to the public water network, disaggregated by nationality

Amongst the four municipalities (Al Sho’aleh, Al Kfarat, Gharb Irbid, and Hosha Al Jadeedah) where a majority of respondents cited an increase in water shortages as the most prominent change, Hosha Al Jadeedah also reported the highest percentage of respondents report not being connected to the public water network at 26%, confirming the importance of access to the public water network to address water needs and discontent. This is further reinforced by findings from Al Zarqa which had the second highest proportion of households (98%) reporting that they were connected to the public water network, serving as a feasible explanation as to why only a minority (46%) of respondents reported that water shortages have led to community-level discontent.
Amongst five municipalities, over one quarter of households reported they were not connected to the public water network: Al Za’atri and Mansheah (45%), Al Serhan (40%), Sabha and Dafianeh (38%), Sahel Horan (32%) and Hosha Al Jadeedah (26%) (see Figure 4 above). Low rates of connectivity in these municipalities are likely explained by their rural locations. More rural respondents (27%) than urban respondents (7%) reported not being connected to the public water network. This finding was corroborated by the finding that 57% of respondents in peri-urban locations reported they had faced a water shortage during the last month compared to 43% of urban and 45% of rural respondents. This suggests that rural areas are significantly less likely to have access to the public water network than their urban and peri-urban counterparts.  

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59 A Chi-square test confirmed that location type is associated with water shortages at a conventionally accepted level of significance, Chi-square=271.597, df=2, p < 0.005
Overall, almost half of households (48%) faced water shortages in the 30 days preceding survey, which was conducted in the hot season. Households reported that water shortages were much less frequent in the cold season, with only 8% reporting that they faced a water shortage. However, there were significant variations across municipalities, with the highest reported number of water shortages during the cold season at 21 (Al Yarmook Al Jadeedah) compared to only 2 in Al-Sarhan and Irbid Al-Kubra. Furthermore, the highest number of water shortages experienced in the hot season was 8 (Hosha Al Jadeedah and Al Ramtha Al Jadeedah). The high number of water shortages experienced during the hot season in Hosha Al Jadeedah and Al Ramtha Al Jadeedah could explain why a large proportion of households in these municipalities reported water shortages as the most prominent change observed in the community. In general, respondents in those municipalities facing a high frequency of water shortages, also more frequently cited water shortages as the most prominent change they had observed in their community.\(^6\)

\(^6\)A Chi-square test confirmed that water shortage is associated with level of discontent at a conventionally accepted level of significance, Chi square =1196.398, df=10, p<0.001, Phi=.441, Crammer's V=.331
Table 7: Average number of water shortages during the hot and cold season, disaggregated by municipality

<table>
<thead>
<tr>
<th>Municipality</th>
<th># times faced water shortage cold season</th>
<th># times faced water shortage hot season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Yarmook Al-Jadeedah</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>Hosha Al-Jadeedah</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Al-Ramtha Al-Jadeedah</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Ba’fama Al-Jadeedah</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Sabha and Dafianeh</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Al-Sho’aleh</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Al-Mazar Al-Jadeedah</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Gharb Irbid</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Al-Za’atri and Al-Mansheah</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Mafraq Al-Kubra</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Rhab Al-Jadeedah</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Al-Zarqa</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Al-Kfarat</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Sahel Horan</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Al-Serhan</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Irbid Al-Kubra</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

When disaggregated by nationality, 49% of Jordanian households reported facing a water shortage during the 30 days preceding the survey, compared to a slightly lower 46% of Syrian households. Syrian households reported a slightly higher average number of water shortages during the hot season (6) compared to Jordanian households (5). However, the reported average number of water shortages during the cold season was the same amongst both nationalities.

REASONS FOR WATER SHORTAGES

Respondents which faced a water shortage during the hot and/or cold season were asked to rank the three most common reasons for these shortages. The three most prominent reasons for household water shortages, as reported by households, were weak water pressure (an average of 39% of respondents across all municipalities reported this as the most important cause), infrequency of public water supply (an average of 37% of respondents across all municipalities reported this as the most important cause), and no connection to the public water network (an average of 12% of respondents across all municipalities reported this as the most important cause).

To ensure that interventions at the municipal level meet the specific requirements of the community, it is important to recognize the difference in challenges faced across within particular contexts. For example, in Al Yarmook Al Jadeedah, which had the highest proportion of households (64%) facing water shortages, households reported water shortages were mostly caused by weak water pressure, whereas Irbid Al Kubra had the largest proportion of households reporting they faced a water shortage because water delivery via the public network was not frequent enough, at 67%.

Of particular importance is connectivity with the public water network, as the municipalities which appear to have the most water shortages, reported that this was due to no connection to the public water network, this includes Hosha Al Jadeedah (29%), followed by Al Za’atri and Al Mansheah (22%), Sabha Al Dafianeh (18%), Ramtha Al Jadeedah (18%), and Al Yarmook Al Jadeedah (17%). This is particularly relevant to Syrian households where no
connection to the public water network was the key reason for facing water shortages, reported by 21% of Syrian’s compared to 10% of Jordanian households.

The main cause of water shortages for Jordanian households was reportedly **due to the weak water pressure of piped water at 41%, reported by 26% of Syrian households.** Similarly, a greater percentage of Jordanian households reported that water shortages were due to the public water supply not being frequent enough at 39% compared to 23% of Syrian households.

**Coping Mechanisms**

In order to examine the extent to which households have been affected by these frequent water shortages, households were asked how frequently, in the 30 days preceding the survey, they used a coping strategy to deal with water shortages and/or the poor water quality. An overwhelming **95% of households reported using a coping strategy to meet their household water needs**, which suggests that communities in Northern Jordan are facing high levels of water insecurity.

**The most commonly used coping strategy was to buy bottled water from shops, at 26% of strategies used.** Mafraq Al-Kubra and Al-Zarqa had the highest proportion of households report they used this coping strategy at 38% and 35% respectively, followed by Bal'ama_Al-Jadeedah (34%) and Irbid Al-Kubra (33%) (see Table 8). This represents additional household expenditure to meet necessary household water demands. The second most commonly used coping strategy is to reduce water consumption, at 24% of strategies used. The high number of households reducing water consumption suggests many households are not consuming enough water to meet their basic water and sanitation needs. A high proportion of respondents in Al Za’atri and Al Mansheah reported that they were not connected to the public water network which provides a strong link to this extreme coping strategy.
### Table 8: Proportion of used coping strategies, by type

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Reduce water consumption</th>
<th>Buy bottled water from shops</th>
<th>Rely on well water</th>
<th>Buy water from private trucks</th>
<th>Collect water from unsafe water sources</th>
<th>Share water tanks with neighbours</th>
<th>Borrow water from neighbours</th>
<th>Tap into the public water network</th>
<th>Collect rainwater</th>
<th>Use water purifying tablets chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Yarmook Al-Jadeedah</td>
<td>32%</td>
<td>14%</td>
<td>11%</td>
<td>20%</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>11%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Hosha Al-Jadeedah</td>
<td>29%</td>
<td>23%</td>
<td>13%</td>
<td>23%</td>
<td>0%</td>
<td>4%</td>
<td>1%</td>
<td>0%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Al-Zarqa</td>
<td>29%</td>
<td>35%</td>
<td>3%</td>
<td>10%</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Gharb Irbid</td>
<td>28%</td>
<td>19%</td>
<td>13%</td>
<td>13%</td>
<td>0%</td>
<td>8%</td>
<td>0%</td>
<td>2%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Al-Za’atri and Al-Mansheah</td>
<td>27%</td>
<td>25%</td>
<td>3%</td>
<td>33%</td>
<td>0%</td>
<td>5%</td>
<td>1%</td>
<td>0%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Al-Ramtha Al-Jadeedah</td>
<td>27%</td>
<td>30%</td>
<td>10%</td>
<td>21%</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>1%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Sabha and Al-Dafianeh</td>
<td>26%</td>
<td>25%</td>
<td>13%</td>
<td>27%</td>
<td>0%</td>
<td>6%</td>
<td>1%</td>
<td>0%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Mafraq Al-Kubra</td>
<td>25%</td>
<td>38%</td>
<td>4%</td>
<td>22%</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Al-Serhan</td>
<td>23%</td>
<td>29%</td>
<td>8%</td>
<td>28%</td>
<td>0%</td>
<td>4%</td>
<td>1%</td>
<td>0%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Al-Mazar Al-Jadeedah</td>
<td>22%</td>
<td>11%</td>
<td>39%</td>
<td>17%</td>
<td>0%</td>
<td>5%</td>
<td>0%</td>
<td>2%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Bal’ama Al-Jadeedah</td>
<td>21%</td>
<td>34%</td>
<td>8%</td>
<td>26%</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Rhab Al-Jadeedah</td>
<td>20%</td>
<td>32%</td>
<td>17%</td>
<td>13%</td>
<td>0%</td>
<td>3%</td>
<td>9%</td>
<td>0%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Irbid Al-Kubrah</td>
<td>20%</td>
<td>33%</td>
<td>14%</td>
<td>15%</td>
<td>0%</td>
<td>7%</td>
<td>0%</td>
<td>3%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Al-Kfarat</td>
<td>18%</td>
<td>14%</td>
<td>28%</td>
<td>28%</td>
<td>0%</td>
<td>6%</td>
<td>0%</td>
<td>2%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Sahel Horan</td>
<td>17%</td>
<td>34%</td>
<td>18%</td>
<td>19%</td>
<td>0%</td>
<td>2%</td>
<td>7%</td>
<td>1%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Al-Sho’aleh</td>
<td>17%</td>
<td>19%</td>
<td>19%</td>
<td>20%</td>
<td>1%</td>
<td>5%</td>
<td>9%</td>
<td>8%</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

**Measure Values**

![Measure Values](image)

The third most common coping strategy was to buy water from private water trucks, at 21% of strategies used. Al-Za’atri and Al-Mansheah (33%), Al Serhan (28%) and Al Kfarat (28%) were the three municipalities which had a high proportion of households report using this strategy.

Relying on well water was another commonly used coping strategy, at 15% of strategies used. Al-Mazar Al-Jadeedah was the municipality with the highest number of respondents reporting to use this strategy, at 39% of
strategies used, a finding that warrants further investigation. Finally, the overall percentage of households that used rain water to meet household water needs was extremely low, at 2%. However, in the municipality of Al Yarmook Al Jadeedah 11% of households reported they employed this strategy, which warrants further investigation, particularly given low levels of rainfall within Jordan.

**Recommendations**

In order to improve the quantity, quality and efficiency of safe drinking water delivery the NRP and the JRP identify the need to enhance the capacity of the Government of Jordan and host communities to meet the increased demand for WASH services. The JRP outlines a plan to improve and expand the existing water infrastructure to ensure essential water services are provided for both Jordanians and Syrian refugees in the host communities. More specifically, in the refugee component of the JRP a key identified water project is to support the water supply through the delivery of water tanks and household improvements for Syrian and Jordanian homes in the host communities. For the resilience component of the JRP, the priority is to restructure transmission and main distribution systems and to conduct network reinforcement and rehabilitation of the Yarmook Water Company in the governorates of Ajloun, Irbid, Jerash, and Al Mafraq. The findings of this report provide further evidence of the need for these interventions.

In particular, the map at the end of this section highlights municipalities which are most in need of interventions, both in terms of increasing community resilience and improving social cohesion. Al Sho’aleh, Al Kfarat, and Hosha Al Jadeedah are municipalities where a majority of households cited water shortages as a prominent change, at 67%, 66% and 57% respectively. These municipalities had a majority of households (72%, 68%, 53% respectively) reporting that they faced water shortages in the 30 days preceding the survey, and had a high proportion of households (97%, 83% and 77% respectively) confirming that water shortages have led to community level tensions. While Al Za’atri and Al Mansheah did not have a majority of households citing access to water as the most prominent change observed in the community, it was the municipality with the highest proportion of households reporting that they were not connected to the public water network (45%) and a high percentage of households were found to link water shortages to tensions (81%). Therefore, these four municipalities are of critical concern with regards to water insecurity and perceived level of vulnerability. This vulnerability could potentially erode social cohesion and community resilience in these areas if water infrastructure interventions are not prioritized.

% households with water shortage (last 30 days)

- 51.92% YES
- 48.08% DON'T KNOW

% Syrian/Jordanian households with water shortages

- 45% Syrian
- 33% Jordanian

Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by the REACH partners, associates or donors mentioned on this map.
SOLID WASTE MANAGEMENT

ACCESS TO SOLID WASTE MANAGEMENT SERVICES

Solid waste accumulation and related pests are critical issues in Jordan that have been compounded by the increase in population following the Syria crisis. The JRP suggests that “water, soil, and air pollution have increased due to the inability of municipalities to cope with increased waste, including illegal dumping and the inappropriate disposal and burning of solid waste”, affecting ecosystems, biodiversity, air pollution, and waste management. This has resulted in a critical need to better understand the impact of the crisis on Jordan’s environmental resources.

Solid waste management (SWM) falls under the auspice of municipalities, with a recent UNDP (2014) needs assessment citing that SWM is now “the number one priority” for municipal services in Jordan. However, municipalities report significant challenges to adequate service provision and waste management, attributing this to limited financial resources, a lack of equipment - such as vehicles, pesticides, containers - as well a workforce which lacks the capacity to conduct regular maintenance. This is in line with findings of the 2014 FCO-REACH assessment which outline that ‘local administrators are finding it increasingly difficult to respond to the widening gap between the provision of municipal services and the growing demands of new refugee arrivals.

As a result, waste accumulation has become a common source of frustration amongst both host and refugee populations. The findings of this assessment demonstrate the link between the increase in waste accumulation in Jordan’s host communities and the increase in discontent amongst its residents. The following section will examine solid waste management services and the subsequent perceived community tensions caused by this issue.

PROMINENT CHANGE

Waste accumulation was one of the most frequently cited prominent changes, reported by 12% of households in Northern Jordan. Several municipalities were highly affected by this change, the majority of residents in Ramtha Al Jadeedah (30%), Al Zarqa (30%), Al Mazar Al Jadeedah (21%), and Mafraq Al Kubra (20%) reported that waste accumulation was a key change witnessed in their municipality, with two out of the four of these municipalities (Al Zarqa and Mafraq Al Kubra) classified as predominately urban localities.

When disaggregated by sex, equal percentages (12% respectively) of male and female respondents reported waste accumulation as the most prominent change observed since living in the community. However, there was variation in responses amongst males and females when disaggregated by municipality. For example, in Ramtha Al Jadeedah 37% of male respondents reported that waste accumulation was the most prominent change compared to 22% of female respondents. In Mazar Al Jadeedah 24% of female respondents cited waste accumulation as the most prominent change compared to only 16% of male respondents.

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65 UNDP, Mitigating the Impact of the Syrian Refugee Crisis on Jordanian Vulnerable Host Communities, Municipal Needs Assessment Report, 10 April 2014
66 JRP, p.118
67 UNDP, Mitigating the Impact of the Syrian Refugee Crisis on Jordanian Vulnerable Host Communities, Municipal Needs Assessment Report, 10 April 2014
68 FCO-REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, Assessment Report, June 2014
FREQUENCY OF GARBAGE COLLECTION

Almost half of the sampled households (48%) reported that garbage collection takes place at least once every two days. Garbage collection is most frequent in the two predominately urban municipalities of Al Zarqa and Irbid Al Kubra with 52% of respondents indicating garbage collection is conducted daily. However, when asked whether garbage collection was frequent enough, 55% of households in both these municipalities answered ‘no’ indicating that the frequency in collection is still not perceived to be sufficient to meet the waste disposal needs of the community.

In addition, 45% of households reported garbage collection occurred less frequently: once a week (33%), once every two weeks (6%), once a month (2%), or never (4%). Bal'ama Al Jadeedah municipality has the least frequent garbage collection system with 19% of respondents reporting that garbage collection takes place only “once every two weeks” and 8% of respondents reporting only “once a month”, reflected in the high percentage of households (56%) stating that this was not frequent enough. Further, 12% of respondents in Sabha and Al Dafianeh municipalities reported that garbage collection “never” occurs in their community, with 52% of households reporting that this is not frequent enough. The perception that garbage collection was not frequent enough, was particularly acute in Gharb Irbid (72%), Al Mazar Al Jadeedah (70%), and Al Ramtha Al Jadeedah (65%) (see Figure 6). The fact that a majority of households (55%) in Gharb Irbid reported using more environmentally harmful waste disposal methods could be directly linked to household perceptions of infrequent garbage collection.

When disaggregated by sex, there was limited variation amongst responses regarding the perception of garbage collection: a slightly higher percentage of female respondents, 51%, reported that garbage collection does not occur frequently than male respondents, 49%. However, when disaggregated by nationality, more Jordanian households (53%) than Syrian households (44%) reported that garbage collection does not occur frequently enough, and 11% of Syrian respondents reported that they did not know if garbage collection occurred frequently enough, which can be
explained by the fact that Syrians are relatively new in these communities and feel less able to assess the adequacy of frequency with limited past experience within municipalities, relative to Jordanian residents (see Table 9).

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordanian</td>
<td>44%</td>
<td>53%</td>
<td>3%</td>
</tr>
<tr>
<td>Syrian</td>
<td>54%</td>
<td>35%</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Perceptions of Pest Increase in the Community**

Although there is a general link between higher frequency of garbage collection, and perceptions of sufficiency of garbage collection, this was not always found to be the case, as exemplified in figure 7, by findings from Al Zarqa and Irbid Al Kubra where frequency was high and sufficiency was perceived as low. Therefore, frequency alone is only an indication of potential factors which could be addressed to alleviate community discontent. To create further links, this assessment explored the common narrative in the host communities that increased waste accumulation has caused an increase in pests.

A large majority of households, 74%, reported there had been an increase in pests in the community. This was cited by the majority of both Jordanians (76%) and, to a lesser extent, Syrians (62%). This finding was most prominent in Mafraq governorate where 76% of respondents agreed with this statement, however, this was relevant to all municipalities in which a majority of households ‘strongly agreed’ or ‘agreed’ that there had been an increase in pests in the community. Sabha Dafianeh had the highest proportion of households stating that they ‘agree’ or ‘strongly agree’ with this statement, at 86%, followed by Gharb Irbid, at 84%. The high levels of perceived pest increase in these municipalities could be linked to poor waste disposal methods, with 32% of respondents in Gharb Irbid reporting to dispose of solid waste anywhere outside, and 22% of households in Sabha and Dafianeh reporting to burn their trash. Gharb Irbid also had a high proportion of respondents reporting that waste accumulation is linked to community level discontent (83%), suggesting that the perceived increase in pests and levels of discontent with waste accumulation are related.69

Given that the increase in pest presence was noted by a majority of households, respondents were asked about their perceptions regarding how the municipality is dealing with pest control. A majority (64%) of households reported the way the municipality is dealing with pest control to be ‘poor’ or ‘very poor’. This finding was most acute was in the municipalities of Sabha Dafianeh (82%) and Gharb Irbid at (80%): both municipalities with the highest percentage of respondents reporting an increase in pests in the community (see Figure 8).

Gharb Irbid also had a high proportion of respondents linking waste accumulation to community level discontent. The results suggest that an increase in waste accumulation, pests, and subsequent community discontent, are linked to the perception that the municipality is not doing enough to enforce pest control.70

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69 A Chi-square test confirmed that level of discontent with waste accumulation is associated with perception of pests increase at a conventionally accepted level of significance, chi square=5629.306, df=25, p<0.001, phi=.995, crammer’s v=.427

70 A Chi-square test confirmed that level of discontent with waste accumulation is associated with perception of how the municipality is handling pest control at a conventionally accepted level of significance, chi square=3230.026, df=25, p<0.001, phi=.724, crammer’s v=.324
All location types had a majority of households report that the way the municipality is dealing with pest control as ‘poor’ or ‘very poor’, however a greater percentage of rural respondents (68%) agreed with this statement compared to peri-urban (66%) and urban (53%) respondents, with a significant proportion (25%) of urban residents disagreeing that there had been an increase in pets in their community.

The perception that the way the municipality is dealing with pest control is poor or very poor is more pronounced amongst Jordanians (68%) than Syrians (46%) and this difference in responses amongst the two communities could be largely due the differing level of expectations of municipal services of Jordanians, who have lived in these communities longer. Likewise, a higher percentage of Jordanian households (43%) than Syrian households (27%) perceived the level of cleanliness of the area around their accommodation as either poor or very poor.

Overall, **41% of households perceived the level of cleanliness around their accommodation to be either ‘poor’ or ‘very poor’, a perception that was particularly strong amongst respondents in Gharb Irbid (59%) and Al**
Ramtha Al Jadeedah (59%). In both municipalities, a large percentage of households reported insufficiency in frequency of garbage collection (72% Gharb Irbid, and 69% in Al Ramtha Al Jareeda), and a high percentage of households stated that municipal response to pest control was ‘poor’ or very poor’, 80% in Gharb Irbid and 69% in Al Ramtha Al Jareeda. As outlined below, perceptions of increased pests, infrequent garbage collection and inadequate municipal response, contribute to higher levels of community discontent.

**PERCEPTIONS OF COMMUNITY-LEVEL TENSIONS**

To further assess whether increased waste accumulation has heightened community tensions, households were asked whether thought that waste accumulation was linked to discontent. A majority (69%) of households in all districts reported that waste accumulation and an increase in pests have led to discontent in their community, with the exception of Al Yarmook Al Jadeedah, where 42% of households agreed that waste accumulation has led to community-level discontent. Although still a large proportion, the lower reporting of perceived discontent could be linked to Al-Yarmook Al Jadeedah having the lowest proportion of households in all municipalities that perceive garbage collection as not frequent enough (24%). However, this municipality also had the highest number of households (78%) stating that they dumped garbage by the roadside or in a landfill, which indicates that further exploration is required to verify whether garbage collection is deemed as frequent enough due to residents adopting alternative means of waste disposal, due to reduced dependence on, or expectations of, municipal garbage collection.

In contrast, the municipality where the highest proportion of respondents reported they ‘agreed’ or ‘strongly agreed’ that waste accumulation has led to discontent in the community was Gharb Irbid at 83%, followed by Al Mazar Al Jadeedah at 81%. This is linked with the finding that Gharb Irbid had high levels of reporting of insufficient frequency of garbage collection (72%) and inadequate municipal response to pest control (80%), with similar findings in Al Mazar Al Jareedah where 70% of households reported that garbage collection was not frequent enough, and 69% of households reported that municipal response to pest control was ‘poor or very poor’. Mazar Al Jadeedah also had one of the highest proportions of respondents citing that they were ‘unsatisfied’ or ‘very unsatisfied’ with municipal solid waste management services, which suggests there is a relationship between waste accumulation and level of satisfaction with municipal solid waste management services. A higher percentage of Jordanian households (72%) reported perceiving this link, than Syrian households (54%) (see Figure 8).

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Figure 8: Proportion of households that ‘agree’ and ‘strongly agree’ waste accumulation has led to discontent, disaggregated by nationality

[Diagram showing proportions for Jordanian and Syrian households]

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71 A Chi-square test confirmed that level of discontent with waste accumulation is associated with level of satisfaction with municipal solid waste management services at a conventionally accepted level of significance, chi square=3463.423, df=25, p=0.005, phi=0.748, crammer’s v=.335
Coping Mechanisms

In order to assess how waste accumulation and infrequent garbage collection is affecting households, respondents were asked how frequently they used a coping strategy to deal with the lack of municipal solid waste management services in the community and the number of times they used these strategies in the 7 days preceding the survey.

35% of households reported using a coping strategy to deal with limited municipal waste management provision. While residents reported coping with the lack of municipal solid waste management services in a variety of ways, the two most common strategies used were to dispose of trash in a landfill or by the roadside (49%) or by burning (45%). The municipality where the greatest proportion of respondents reported disposing of waste in a landfill or by the roadside was Al-Yarmook Al-Jadeedah, at 67%, followed by Irbid Al-Kubrah, at 64%, Gharb Irbid, at 63%, and Al Shoa'leh and Al-Ramtha Al-Jadeedah, both at 62% (see Table 11). The municipality where the highest percentage of respondents reported to burn trash was Al-Kfarat at 70% of strategies used, Sabha and Dafianeh at 68%, followed by Al-Za'atri and Al-Mansheah and Al-Mazar Al-Jadeedah both at 65% of strategies used. All of these coping mechanisms are concerning and demonstrate that poor waste management services have negative impacts on the households and the communities and environments which they live in.
Table 11: Proportion of used coping strategies by type

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Burn trash</th>
<th>Bury trash</th>
<th>Dump waste by roadside landfill</th>
<th>Dump waste in river nearby water</th>
<th>Retain garbage indoors for longer than usual</th>
<th>Recycle waste</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Kfarat</td>
<td>70%</td>
<td>0%</td>
<td>18%</td>
<td>1%</td>
<td>9%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Al-Shoa'leh</td>
<td>33%</td>
<td>0%</td>
<td>62%</td>
<td>0%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Yarmook Al-Jadeedah</td>
<td>26%</td>
<td>0%</td>
<td>67%</td>
<td>0%</td>
<td>6%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Al-Za'atri and Al-Mansheah</td>
<td>65%</td>
<td>1%</td>
<td>28%</td>
<td>0%</td>
<td>6%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Bal'amara Al-Jadeedah</td>
<td>53%</td>
<td>0%</td>
<td>44%</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Gharb Irbid</td>
<td>34%</td>
<td>1%</td>
<td>63%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Hosha Al-Jadeedah</td>
<td>46%</td>
<td>1%</td>
<td>50%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Irbid Al-Kubrah</td>
<td>32%</td>
<td>1%</td>
<td>64%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Mafraq Al-Kubra</td>
<td>49%</td>
<td>0%</td>
<td>46%</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Mazar Al-Jadeedah</td>
<td>65%</td>
<td>1%</td>
<td>27%</td>
<td>0%</td>
<td>5%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Al-Zarqa</td>
<td>55%</td>
<td>0%</td>
<td>35%</td>
<td>2%</td>
<td>5%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>Al-Ramtha Al-Jadeedah</td>
<td>31%</td>
<td>0%</td>
<td>62%</td>
<td>2%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Rhab Al-Jadeedah</td>
<td>58%</td>
<td>1%</td>
<td>36%</td>
<td>0%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Sabha and Dafianeh</td>
<td>68%</td>
<td>1%</td>
<td>28%</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Sahel Horan</td>
<td>38%</td>
<td>0%</td>
<td>60%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Serhan</td>
<td>58%</td>
<td>0%</td>
<td>18%</td>
<td>1%</td>
<td>23%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Public waste bins were the most commonly cited method used to dispose of household solid waste, with 76% of households reporting to use this method. Gharb Irbid was the only municipality where less than half (43%) of households reported using this disposal method, instead, 32% reported disposing of solid waste anywhere outside (32%) or in informal dumping areas (23%) (see Figure 9). The use of more environmentally harmful waste disposal methods in Gharb Irbid could provide an explanation as to why this municipality had the highest proportion of households (83%) report waste accumulation and the increase in the presence of pests has led to discontent in the community.

This report shows that in general, Syrian communities are more likely to burn their waste (12%) than Jordanians (3%), whereas Jordanians are more likely to dispose of their waste in informal dumping areas (10%) in comparison to Syrians (4%). Burning solid waste has negative health effects for those living in the immediate vicinity, therefore this practice may be resulting in harmful health implications for both Syrian refugees and those in close proximity.
Almost a quarter (23%) of households reported using the following environmentally harmful disposal methods: dropping garbage anywhere outside (9%), dropping waste in informal dumping areas (9%), or burning waste (5%). Informal dumping areas are mostly used in Irbid Al-Kubra municipality (26%), whereas burning solid waste outside is more commonly used in Sabha and Dafianeh municipalities (22%). The difference in methods used could be explained by the fact that the former is an urban municipality, whereas the latter is rural. Burning waste was found to be more common in rural areas (9%), and was not reported in urban areas, likely attributed to the feasibility in these contexts where there are more open spaces. Urban residents were more likely to dispose of garbage in informal dumping areas (13%), compared to rural residents (6%), which demonstrates the need for municipalities to adopt context specific responses which reflect the differing waste disposal practices of each community (see Figure 10).
Recommendations

In order to improve SWM services in the host communities, the JRP outlines a plan to strengthen municipal waste management capacity, through the design of a SWM cycle (collection, transfer, landfills, recycle and re-use), the purchase of maintenance support (equipment and technology), and funding for recycling activities.\textsuperscript{72} The findings outlined in this report support the need for aid actors to implement interventions targeted at addressing environmentally damaging and unsustainable waste disposal resulting from insufficient alternative mechanisms for garbage collection and waste disposal. This has been shown to be directly linked with discontent and therefore an inability to address this issue could undermine social cohesion both within and between communities.

The following map highlights municipalities most vulnerable to poor solid waste management services: Gharb Irbid, Irbid Al Kubra, Al Mazar Al Jadeedah, Al Ramtha Al Jadeedah and Al Zarqa. These municipalities had a high proportion of respondents cite waste accumulation as a prominent change, with the majority of households in these municipalities reporting that waste accumulation and the increase in pests as directly related to discontent in the community. In particular, Gharb Irbid municipality could potentially be monitored with regards to tensions associated with solid waste services. This municipality had the highest proportion of households (55%) report using environmentally harmful waste practices (litter, use informal dumping areas, and burn trash) as their main disposal method. While the municipality of Sabha and Dafianeh did not have a high proportion of respondents indicate waste accumulation was a prominent change, this municipality contained the highest percentage of households reporting there had been an increase in pest presence (86%) and the highest percentage of households reporting dissatisfaction with the way the municipality is dealing with pest control (82%). Aid Actors aiming to prevent tensions from further escalating should consider targeting waste management interventions in these specific municipalities.

\textsuperscript{72} JRP, p.152
RISING COST OF LIVING

The influx of Syrian refugees in Jordan has resulted in higher demand for basic goods and services, most notably seen in the housing sector which has contributed to rising inflation.73 According to the NRP, the Syria crisis has exacerbated the shortage of affordable housing in Jordan, raising rental prices, increasing social tension, straining urban infrastructure and services and contributing to unsustainable settlement growth.74

With the majority of refugees living in host communities, competition for affordable housing has become a leading source of community tension. According to the NRP, Syrians in Jordan are in need of approximately 120,000 housing units.75 A previous CARE Rapid Participatory Community Assessment, conducted in April 2013, found that the lack of adequate and affordable housing has emerged as one of the two main causes of social tension between Syrian refugees and host communities, with competition for jobs reported as the second biggest cause of social tension.76 The JRP references REACH-FCO’s previous assessment on social cohesion, which echoes the findings of the CARE assessment: namely that competition for affordable housing and livelihoods opportunities are the two main sources of tension between refugees and host communities.77 These two issues are related, since high rents have prompted refugees and vulnerable Jordanians to seek work in the informal sector, and the increase in informal labor has lowered salaries, thereby affecting the ability of families to cover rising housing costs.

According to the NRP, the depletion of household savings is a key issue that has surfaced due to the increase in rental prices, particularly in the North where the average expenditure for housing previously stood at JOD50 per month (70 USD) but has now risen to approximately JOD101-200 per month (140-280 USD).78 Inflated rental prices—between 100-200% higher than before the crisis—have forced Syrian refugees and vulnerable Jordanians to live in inadequate accommodation and have prompted the growth of informal settlements.79 This rapid increase in housing costs has made rent the single largest household expenditure.80 As a result, according to the 3RP “more than half of all refugees live in sub-standard shelters, with challenges related to tenure, privacy, over-crowding, and risks of sexual exploitation.”81 FCO-REACH (2014) found that housing shortages resulted in tensions within and between communities, stating that “this acute lack of housing has meant that urban neighborhoods have been unable to absorb the waves of Syrian refugees coming across the border, leading to increased community instability and intra-communal tensions”.82 The increase in tensions linked to housing also reflects concern amongst some Jordanians that Syrians were prepared to pay higher rents, hence pushing poor Jordanians out of the housing market.

An assessment by Mercy Corps in 2013 echoed these findings, particularly in Mafrqa, noting that ‘housing and rent prices were primary concerns’.83 This section of the report will examine the issue of the rising cost of living and the way in which housing related challenges were found to create tensions in the assessed communities.

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73 JRP, p.14
74 NRP, p.54
76 CARE: Rapid Participatory Community Assessment, April 2013, p.52
77 JRP, p.94
78 Ibid, p.47
79 JRP, p.16
80 NRP, p.47
81 3RP, p.35
83 Mercy Corps (2013), Mapping of Host Community-refugee tensions in Mafrqa and Ramtha, Jordan, May 2013,
PRONOMENT CHANGE

According to 28% of households, the rising cost of living was the most prominent change observed in their community, with higher reporting by Syrian households (35%) compared to Jordanians (25%). Moreover, this change was reported by a greater proportion of women (31%) than men (24%). The municipalities with the highest percentage of households reporting this change were Al Yarmook Al Jadeedah (47%), Rhab Al Jadeedah (47%), Al Za’atri Al Mansheah (41%) and Al Serhan (41%).

PERCEPTIONS OF COMMUNITY-LEVEL TENSIONS

Housing was widely seen as a key issue causing tensions within and between the communities. The majority of Syrian (95%) and Jordanian (87%) households either ‘agreed’ or ‘strongly agreed’ that increased housing prices had led to discontent in their community. Although more women (31%) than men (24%) reported rising house prices as a prominent change, this was only marginally reflected in reporting tensions resulting from rising housing costs: reported by 89% of females and 87% of males. Furthermore, while Al Yarmook Al Jadeedah (47%), Rhab Al Jadeedah (47%), Al Za’atri Al Mansheah (41%) and Al Serhan (41%) have the highest percentage of households reporting rising house prices as the most prominent change, this has led to varying degrees of tensions within these municipalities (see Figure 11). A significant majority of households, in all municipalities, report that housing prices are linked to tensions in the community, yet Al-Yarmouk Al-Jadeedah had the lowest percentage reporting this (71%) while Sahal Horan had the highest percentage of households linking rising house prices with increasing tensions (97%). Further exploration is required to understand the conditions in which rising house prices are more likely to result in tensions within communities, in order to facilitate the development of mitigation measures to address this.

Figure 11: Proportion of households that ‘agree’ or ‘strongly agree’ housing prices have led to discontent in the community, disaggregated by municipality
Respondents living in rented accommodation reported the highest levels of tension with 96% of households in this
group stating that they ‘agreed’ or ‘strongly agreed’ that house prices have led to discontent in their community.
Although still sizeable, this compares to 84% of respondents who own their accommodation, and 84% of respondents
living in informal settlements. The greater reporting of discontent amongst those who rent accommodation may be
explained by the fact that households living in rented accommodation are more sensitive to changing housing prices,
as this is reflected in their monthly payments, which is not applicable to households who own their accommodation,
nor to most households living in informal settlements, who typically do not pay for their accommodation. Linked with
this, the type of accommodation is also associated with urban or rural location, and, subsequently, reported
tensions.84 Households in urban areas are more likely to rent (41%) than those in rural (17%) and peri-urban areas
(18%), and were also found to be more commonly affected by rising tensions. This further explains why 95% of
Syrians, compared to 87% of Jordanians, reported that rising house prices have led tensions; Syrians are more likely
to rent their own accommodation, and there are a higher percentage of Syrian households in assessed urban
municipalities, than in other localities.

Households were also asked whether they lived with non-relatives of a different nationality; no respondents reported
this, indicating that tensions between communities within households are not currently an issue.

HOUSING INSECURITY INDICATORS
The following section outlines key indicators of access to housing; housing expenditure levels and associated coping
mechanisms.

HOUSING VULNERABILITY
Syrians were found to be the most vulnerable households assessed with regards to housing vulnerability, with 7% of Syrian households reported spending over 46% of their income on housing, compared to only 3% of Jordanian households. This may be explained by the fact that 87% of Jordanians live in owned housing, compared to 4% of Syrians, while only 11% of Jordanians live in rented accommodation, compared to 80% of Syrians.85 As outlined above, renters are more sensitive to fluctuating and rising, house prices than those who own their own accommodation. The difference between Syrian and Jordanian housing expenditure illustrates the vulnerability of Syrian households and the associated higher levels of discontent reported by Syrians.86

When disaggregated by sex; 73% of female-headed households spent over 46% of their income on housing, compared to 9% of male-headed households. In addition, female-headed households were more likely to live in rented accommodation than male-headed households; 11% of Jordanian female-headed households and 85% of Syrian female-headed households were found to live in rented accommodation, compared to 9% of Jordanian male-headed households, and 79% of Syrian male-headed households. These findings confirm that female-headed households, and particularly Syrian female-headed households, are highly vulnerable to housing insecurity, and without intervention, will be the least resilient to external social shocks. However, female-headed households did not perceive higher levels of intra-community tensions than male-headed households, suggesting that this vulnerability has not yet translated into decreased social cohesion.

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84 A Chi square test was conducted and confirmed that type of accommodation is associated with level of discontent with housing prices at a conventionally accepted level of significance chi square =228.381, df=4, p <0.005
85 2% of Jordanians reported living in ‘informal shelter’ or ‘other types’ of shelter, compared to 16% of Syrians.
86 A Chi square test was conducted and confirmed that level of discontent with shelter prices and the percentage of household income that was spent on housing at a conventionally accepted level of significance. chi square =322.830, df=14, p <0.005
Coping Mechanisms

FCO-REACH (2014) previously found that due to rising housing prices and the lack of adequate accommodation "a large number of residents have been forced to adopt various coping mechanisms such as living with extended family, relocating to other areas, or selling valuables to cover rental costs". To examine the extent of communities’ housing vulnerability, respondents were asked how frequently, in the 6 months preceding the survey, they used coping mechanisms in response to housing costs. This assessment found that 24% of households had adopted a coping mechanism to address housing challenges.

Of the coping mechanisms used, the most common coping mechanism was to borrow money from family, friends and neighbors to cover rental costs (27 %). The municipalities where the highest proportion of respondents reported borrowing money from family, friends and/or neighbors to cover housing expenses were Al Mazar Al Jadeedah at 37% of used strategies, as well as Mafraq Al-Kubrah and Al-Serhan at 36% both (see Table 12). The second most common coping mechanism was to borrow money from a landlord or to delay payment of rent (22 %). Al Za’atri and Al Mansheah municipalities had the highest percentage of households delaying the payment of rent or borrowing money from a landlord (37%), followed by Mafraq Al Kubra, at 34%.

Syrian and Jordanian households living in urban areas are particularly vulnerable, as exemplified by the finding that the municipalities with the highest percentages of households adopting the two most common coping mechanisms were Al Mazar Al Jadeedah, Sabha and Daflaneh, Al Za’atri, Al Mansheah and Mafraq Al Kubra. These municipalities also have the highest proportion of Syrian respondents. The need to resort to such coping mechanisms is also reflected in rising tensions, as over 80% of households in these municipalities reported tensions relating to housing.

Finally, taking out loans to cover rental expenditure, at 21% of used strategies, was the third most common coping mechanism. The municipality with the greatest proportion of households reporting taking out loans or incurring debt was Al-Kfarat, at 37% of used strategies. A plausible explanation for this finding could be due to the relatively high cost of housing in this urban municipality.

All the above coping mechanisms represent unsustainable responses to housing insecurity, undermining community resilience and social cohesion. Eventually funds available through borrowing from friends and family are likely to be reduced, whilst borrowing from landlords and delaying payments causes unbalanced power relations with landlords, potentially increasing the vulnerability of tenants to exploitation or sudden loss of their accommodation. Additionally, a worrying number of respondents reported using more extreme coping mechanisms to cover housing costs, including strategies such as selling personal possessions (9%), and postponing marriages (9%). Gharb Irbid (43%) and Al Yarmook Al Jadeedah (39%) are the two municipalities with the highest proportion of households reporting postponing marriage in order to delay buying property.
Table 12: Proportion of used strategies by type of coping strategy

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Take out loans incurring debt to cover rental expenditure</th>
<th>Borrow from landlord and or delay payment of rent</th>
<th>Borrow money from family friends or neighbours to cover rental expenditure</th>
<th>Sell personal belongings or valuables to cover rental expenditure</th>
<th>Postpone marriage to put off buying renting property</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Kfarat</td>
<td>37%</td>
<td>11%</td>
<td>28%</td>
<td>14%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Shoa'leh</td>
<td>27%</td>
<td>17%</td>
<td>24%</td>
<td>18%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Yarmook Al-Jadeedah</td>
<td>16%</td>
<td>21%</td>
<td>18%</td>
<td>3%</td>
<td>39%</td>
<td>3%</td>
</tr>
<tr>
<td>Al-Za'atri and Al-Mansheah</td>
<td>16%</td>
<td>37%</td>
<td>33%</td>
<td>8%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Bal'am Al-Jadeedah</td>
<td>26%</td>
<td>18%</td>
<td>25%</td>
<td>15%</td>
<td>16%</td>
<td>1%</td>
</tr>
<tr>
<td>Gharb Irbid</td>
<td>13%</td>
<td>20%</td>
<td>17%</td>
<td>8%</td>
<td>43%</td>
<td>0%</td>
</tr>
<tr>
<td>Hosha Al-Jadeedah</td>
<td>12%</td>
<td>28%</td>
<td>25%</td>
<td>11%</td>
<td>24%</td>
<td>0%</td>
</tr>
<tr>
<td>Irbid Al-Kubrah</td>
<td>20%</td>
<td>19%</td>
<td>25%</td>
<td>11%</td>
<td>26%</td>
<td>0%</td>
</tr>
<tr>
<td>Mafra'q Al-Kubrah</td>
<td>18%</td>
<td>34%</td>
<td>36%</td>
<td>9%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Mazar Al-Jadeedah</td>
<td>20%</td>
<td>14%</td>
<td>37%</td>
<td>14%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Zarqa</td>
<td>24%</td>
<td>28%</td>
<td>25%</td>
<td>9%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Ramtha Al-Jadeedah</td>
<td>22%</td>
<td>17%</td>
<td>30%</td>
<td>10%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>Rhab Al-Jadeedah</td>
<td>17%</td>
<td>23%</td>
<td>25%</td>
<td>15%</td>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>Sabha and Al-Dafianeh</td>
<td>26%</td>
<td>15%</td>
<td>28%</td>
<td>9%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>Sahel Horan</td>
<td>19%</td>
<td>24%</td>
<td>25%</td>
<td>15%</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>Al-Serhan</td>
<td>20%</td>
<td>26%</td>
<td>36%</td>
<td>11%</td>
<td>6%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Measure Values

| Measure Values | 0% | 43% |

0% | 43% |
Recommendations

The lack of affordable and adequate housing poses a significant challenge to social cohesion. This issue is increasingly affecting both Syrian refugees as well as vulnerable Jordanian households who do not have the resources needed to pay rent. Affected households are adopting harmful and unsustainable coping mechanisms, such as borrowing money from friends and family, delaying payments, borrowing from landlords or selling personal belongings. This can lead to cycles of debt and increase the vulnerability of households to the influence and power of landlords to whom they owe money. Syrian households are particularly vulnerable, as they most often do not own property and therefore live in rented accommodation, increasing their vulnerability to rising house prices. Syrian households, who have spent less time in Jordan, are also likely to have less access to traditional support networks such as friends and family.

According to the JRP, securing access to adequate accommodation is the main priority for vulnerable Jordanians and Syrian refugees, particularly in urban areas. The JRP stresses the need to continue upgrading substandard housing and to increase the number of affordable housing units in the market for the longer term. For the refugee component of the JRP, the immediate housing priorities include the completion of unfinished housing units, the provision of conditional cash-for-rent to vulnerable households, and the upgrading of existing shelters to adequate standards. In the longer term, the priority is to ensure affordable housing through the Jordan Affordable Housing Programme, in order to foster social cohesion and local economic development.

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87 JRP, p.68
88 Ibid. p.66
89 Ibid. p.71
90 Ibid. p.162
LIVELIHOODS

ACCESS TO LIVELIHOOD OPPORTUNITIES

There is a growing concern in northern Jordan that Syrians are increasingly competing with vulnerable Jordanians in the labour market. As outlined in the JRP “vulnerability in Jordan is driven in large part by high unemployment and rising poverty”. Many Syrian refugees have been cut off from their livelihoods for years, and face increasing vulnerability as savings are depleted or assets they once possessed have been sold. Furthermore, low and limited income remains the most restraining factor to food access, and is compounded by greater national demand for food and non-food items.

Competition over livelihood opportunities amongst Syrian refugees and vulnerable Jordanians is particularly acute in the informal sector (construction, agriculture, retail, food services, wholesale), where Syrian refugees are employed for lower wages than the national minimum wage, without access to social security and protection. The previous FCO-REACH (2014) assessment substantiated these findings and discussed a common Jordanian narrative that Syrians were accepting lower wages and poor working conditions, which ‘priced out’ Jordanian workers from the market. This was reported to contribute to tensions between the two communities.

This has also been reinforced through previous research such as that of Mercy Corps (2013), which found that in the governorate of Mafraq, employment “has become an overt stress point between the two [Jordanian and Syrian] communities.”

The 3RP identifies the urgent need to expand livelihood and employment opportunities for vulnerable men and women, especially youth, and suggests social cohesion can be ‘indirectly’ attained through livelihood and socio-economic initiatives which target both refugee and vulnerable populations. This section compares this rhetoric with perceived tensions to establish the extent to which tensions can be attributed to unemployment and perceived job insecurity.

PROMINENT CHANGE

Job competition was cited by 8% of households as the most prominent change they had observed since living in the community. When disaggregated by nationality; more Syrians (14%) than Jordanians (7%) reported this change.

‘The Syrian crisis has had a significant impact on Jordan’s labor market, exacerbating conditions for the already informal workforce, and intensifying competition for employment opportunities, especially in rural areas.’


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91 Ibid. p.165
92 JRP, p.11
93 Ibid. p.17
94 Ibid. p.138
95 REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, 2014
96 Mercy Corps (2013), Mapping of Host Community-refugee tensions in Mafraq and Ramtha, Jordan, May 2013, p.10
The municipalities where the highest proportion of households reported job competition as a prominent change, were Mafraq Al Kubra at 19%, followed by Al Zarqa (15%) (see Figure 13). These are predominately urban municipalities where competition over livelihood opportunities is often more acute due to higher population density; in urban municipalities, 14% of households reported that job competition was the most prominent change they had witnessed compared to 7% in peri-urban and 6% in rural localities. In addition, Mafraq Al Kubra was the only municipality where the majority of respondents were Syrian and the responses therefore reflected mostly those of the Syrian community.

Education levels were also found to affect the perception of whether job competition was a prominent change. Head of households with vocational training were the most likely to report this (25%), followed by respondents with no formal education (11%) and those with primary education only (8%). Further exploration is required to understand the specific dynamics of job competition, particularly the skill-sets and backgrounds which are more likely to face increased job competition. This will facilitate the development of programming to enhance access to livelihoods for these groups.

Job competition was cited as a prominent change to varying degrees, from 19% of households in Mafraq Al-Kubra to only 1% in Hosha Al-Jadedah and Gharb Irbid. However, as will be outlined in the section below, despite this variation, the degree to which households in municipalities reported job competition as a prominent change is not reflected in the extent to which this was reported as causing tensions, with high levels of consistency in reporting that competition for livelihoods has led to discontent. Finally, marginally more female (9%) than male respondents (7%) reported that job competition was the most prominent change they had witnessed in their community, indicating that this is a concern across sexes.

Figure 12: Proportion of respondents citing job competition as a prominent change, disaggregated by municipality

**Perceptions of community-level tensions**

81% of households reported that job competition has led to discontent in their community; 83% of Syrian and 81% of Jordanian households agreeing or strongly agreeing with this statement. In Mafraq governorate, more Jordanians (83%) than Syrians (80%) reported that job competition was leading to tensions within the community. In Irbid and Zarqa, more Syrians (86% Irbid, 91% Zarqa) felt that job competition was leading to tensions than their Jordanian counterparts (81% Irbid, 75% Zarqa). Disaggregated by municipality, Sahel Horan (at 93%),
followed by Al Sho’aleh (at 91%), is the municipality where the highest proportion of respondents ‘agree’ or ‘strongly agree’ that discontent had been created by limited livelihoods opportunities (see Figure 14).
COPING MECHANISMS

To better understand how households are meeting their basic needs, respondents were asked how frequently they used a coping strategy in the 30 days preceding the survey, due to limited livelihood opportunities. The majority (61%) of households reported using a coping mechanism. The findings below reflect the responses of these households.

The most common coping mechanism, at 49% of used coping mechanisms, was to borrow money from family, friends, and/or neighbors. This coping mechanism was adopted by the highest percentage of households in the municipalities of Al Yarmook Al Jadeedah (69%), and Al-Za'atri Al-Mansheah (62%) (see Table 13). The second most common coping strategy is to take out a loan (20%), followed by the third most common strategy of selling personal belongings (7%). In general, the most common combination of strategies for municipalities was to borrow money from friends, family and/or neighbors, as well as to take out loans. Bal'ama Al-Jadeedah, at 27% of used coping mechanisms, had the highest percentage of respondents reporting to take out loans as a way to meet basic needs.

However, Irbid Al-Kubra (12%) and Al-Ramtha Al-Jadeedah (11%) had the highest number of respondents reporting to endure poor working conditions in order to meet their basic needs.
Table 13: Proportion of used strategies by type of coping strategy

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Borrow money from family/ friends/neighbours</th>
<th>Take out loans incurring debt</th>
<th>Rely on savings or remittances</th>
<th>Endure poor working conditions</th>
<th>Work illegally</th>
<th>Work multiple jobs</th>
<th>Sell personal belongings or valuables</th>
<th>Sell food vouchers or NFIs received from humanitarian organizations</th>
<th>Send children to work</th>
<th>Accept marriage proposals for financial compensation</th>
<th>Increased economic security for daughters</th>
<th>Coping Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Kfarat</td>
<td>39%</td>
<td>24%</td>
<td>11%</td>
<td>1%</td>
<td>10%</td>
<td>9%</td>
<td>1%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>-------------</td>
</tr>
<tr>
<td>Al-Shoa'aleh</td>
<td>45%</td>
<td>16%</td>
<td>10%</td>
<td>6%</td>
<td>2%</td>
<td>8%</td>
<td>10%</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Al-Yarmook Al-Jadeedah</td>
<td>69%</td>
<td>23%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Al-Za'atri Al-Mansheah</td>
<td>62%</td>
<td>18%</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>5%</td>
<td>5%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Bal'amer Al-Jadeedah</td>
<td>50%</td>
<td>27%</td>
<td>4%</td>
<td>6%</td>
<td>2%</td>
<td>4%</td>
<td>5%</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Gharb Irbid</td>
<td>38%</td>
<td>22%</td>
<td>5%</td>
<td>6%</td>
<td>3%</td>
<td>16%</td>
<td>8%</td>
<td>3%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Hosha Al-Jadeedah</td>
<td>56%</td>
<td>22%</td>
<td>5%</td>
<td>3%</td>
<td>2%</td>
<td>5%</td>
<td>3%</td>
<td>3%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Irbid Al-Kubrah</td>
<td>28%</td>
<td>16%</td>
<td>9%</td>
<td>12%</td>
<td>3%</td>
<td>18%</td>
<td>9%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Mafrak Al-Kubrah</td>
<td>47%</td>
<td>14%</td>
<td>3%</td>
<td>7%</td>
<td>3%</td>
<td>2%</td>
<td>7%</td>
<td>15%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Al-Mazar Al-Jadeedah</td>
<td>52%</td>
<td>26%</td>
<td>7%</td>
<td>1%</td>
<td>1%</td>
<td>5%</td>
<td>7%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Al-Zarqa</td>
<td>50%</td>
<td>24%</td>
<td>4%</td>
<td>3%</td>
<td>3%</td>
<td>5%</td>
<td>6%</td>
<td>4%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Al-Ramtha Al-Jadeedah</td>
<td>46%</td>
<td>14%</td>
<td>6%</td>
<td>11%</td>
<td>5%</td>
<td>3%</td>
<td>7%</td>
<td>6%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Rhab Al-Jadeedah</td>
<td>53%</td>
<td>25%</td>
<td>7%</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
<td>10%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Sabha and Al-Dafianeh</td>
<td>57%</td>
<td>21%</td>
<td>5%</td>
<td>4%</td>
<td>1%</td>
<td>2%</td>
<td>6%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Sahel Horan</td>
<td>54%</td>
<td>14%</td>
<td>9%</td>
<td>1%</td>
<td>0%</td>
<td>2%</td>
<td>13%</td>
<td>5%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Al-Serhan</td>
<td>46%</td>
<td>22%</td>
<td>6%</td>
<td>7%</td>
<td>2%</td>
<td>3%</td>
<td>8%</td>
<td>4%</td>
<td>3%</td>
<td>1%</td>
<td>0%</td>
<td>-------------</td>
</tr>
<tr>
<td>Measure Values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>69%</td>
</tr>
</tbody>
</table>
Finally, Mafraq Al-Kubra had the highest percentage of households (15%) reporting to sell food vouchers or non-food items (NFIs) from humanitarian organizations, as a coping mechanism. This was reported to a much lesser extent in other municipalities, ranging from 1 to 6% of households. Although further exploration is required, the proximity to Za’atari refugee camp may contribute to this higher percentage as the flow of NFI goods out of the camp may be interacting with market dynamics of the local host community economy. In addition, the majority of households interviewed in Mafraq A-Kubra were Syrian refugees, with greater access to food vouchers and NFIs than Jordanian counterparts, increasing the feasibility of adopting this coping mechanism.

However, despite the severity of the harmful and unsustainable coping mechanisms deployed there appears to be no correlation between job insecurity, as measured by coping mechanisms, and the propensity for communities to report that job competition causes tensions. To explain this further the following section explores other indicators for livelihood and employment security which may contribute to an understanding of why high levels of discontent were reported consistently across municipalities.

**EMPLOYMENT INSECURITY INDICATORS**

If a household member was looking for employment, or if the main breadwinner was struggling to find employment, were both found to contribute to levels of discontent. At the time of the assessment, 40% of Syrian and 30% of Jordanian respondents reported that a household member was looking for employment, while 42% of Syrian and 17% of Jordanian households reported that the main breadwinner had struggled to find employment in the last year. A higher percentage of Syrian respondents reported that discontent has been caused by limited livelihood opportunities in the governorates of Mafraq, Irbid and Zarqa. Particularly Mafraq Al Kubra, the only municipality with a majority of Syrian respondents, had the highest proportion of respondents reporting a household member was looking for employment. In line with this finding, the assessment found that 84% of Jordanians indicated the main breadwinner’s job security as ‘secure’ or ‘very secure’ compared to 60% of Syrian respondents, while 17% of Syrian respondents rated the main breadwinner’s job security as either ‘insecure’ or ‘very insecure’ compared to only 4% of Jordanian respondents.

When findings were disaggregated by highest level of education achieved, over 30% of respondents that had received no formal education, or only primary education or vocational training, struggled to find employment in Al Mafraq and Irbid (see Figure 1).

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68 A Chi-square test confirmed that whether a household had a member looking for employment is associated to level of discontent with limited employment opportunities/increased job competition, chi square =337.559, df=4, p<0.005

69 A Chi-square test confirmed that whether the main breadwinner of the household had struggled to find employment is associated to level of discontent with job competition, chi square =210.44, df=4, p<0.005
Table 14: Proportion of households who are struggling to find employment, disaggregated by education level and governorate

Across the municipalities, male and female respondents were struggling to find employment at different levels. Mafraq Al Kubra municipality had the highest percentage of both male and female respondents' who were reporting that they were struggling to find employment at 31% and 41% respectively, followed by Bal'ama Al Jadeedah (41%, 30%) and Al Sho'aleh (41%, 39%) (see Figure 15).

Figure 14: Proportion of households struggling to find employment (disaggregated by sex and municipality)
Recommendations

High poverty and high unemployment in Jordan are issues which predate the onset of the crisis, but have been further exacerbated by the influx of refugees particularly in Jordan’s Northern governorates. Syrian refugees have limited access to the formal labor market and are increasingly competing with Jordanians for low skilled employment opportunities in the informal sectors (construction, agriculture, retail, food services, wholesale). Many Syrian refugees work for lower wages than the national minimum wage, without social security, which increases their vulnerability and limits their ability to provide for their families in the long term. Evidence suggests that increased job competition between low skilled Jordanians and Syrians is heightening tensions between the two communities.

The 3RP identifies the urgent need to expand livelihood and employment opportunities for vulnerable men and women, especially youth; and suggests social cohesion can be ‘indirectly’ attained through livelihood and socio-economic initiatives which target both refugee and vulnerable populations. The increased attention placed on social cohesion could be explained by the 3RP’s budget increase for livelihood programs from 7% under the RRP6 to 10% of the financial requirements. According to the NRP, a main priority in the FSL sector is to ensure that “the capacity of poor and vulnerable households in host communities is strengthened to cope with and recover in a sustainable way from the impact of the Syrian crisis, and to mitigate future effects on their employment and livelihoods.”

The JRP highlighted the level of vulnerability of female-headed households amongst Jordan’s poor families as women predominately face higher levels of unemployment and lower wages than men, and are less protected by Social Security. This was supported the finding in this report that females face higher levels of unemployment than men, especially in the municipalities of Mafraq Al-Kubra, Al-Zarqa and Al-Ramtha Al-Jadeedah. Therefore, the JRP emphasizes the need to create employment opportunities that specifically target vulnerable women and men through the growth of sustainable micro small and medium enterprises (MSMEs), the revival of local economies of the most affected areas for sustainable employment, and income generation using a value chain development approach. In the resilience component, the JRP outlines initiatives that target vulnerable Jordanian households in the host communities through short-term and permanent employment opportunities by supporting the labor market through demand-based vocational training, job-placement, and apprenticeship.

This assessment reinforces the priorities outlined in the 3RP and the JRP and its findings have shown that long term sustainable livelihoods opportunities are crucial to reducing tensions and vulnerabilities of Syrian and Jordanian households. More generally, the governorates of Irbid, Mafraq and Zarqa could all benefit from livelihood initiatives that target both vulnerable Syrian and Jordanian households in an attempt to improve social cohesion and prevent the escalation of tensions between the two communities. This is particularly important in the Northern municipalities of Al Kfarat, Al Mazar Al Jadeedah, Rhab Al Jadeedah, and Sahel Horan, where 75% of households reported that limited livelihood opportunities were linked to tensions in the community.

100 Ibid. p.138
101 3RP, p.20
102 3RP, p.40
103 NRP, p.12
104 Ibid. p.165
105 JRP, p.40
106 Ibid. p.143
% HHs agreeing that the employment situation leads to community discontent

Municipality

- Sahel Horan
- Al-Sho’aleh
- Al-Kfarat
- Al-Yarmook
- Al-Jadeedah
- Al-Ramtha
- Al-Jadeedah
- Hoshah
- Al-Jadeedah
- Al-Serhan
- Al-Mazar
- Al-Jadeedah

Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by the REACH partners, associates or donors mentioned on this map.
CONCLUSION

As the population of Jordan increases, competition over scarce resources has resulted in growing tensions within and between communities in the country. This is most acute in northern Jordan, which hosts the largest proportion of Syrian refugees in the country. A prevalent narrative, which has started to grow, is that the influx of Syrian refugees has resulted in a reduction in access to basic services and economic opportunities and is thus perceived to be hampering social cohesion and increasing tensions at the governorate, municipal, and community level. The findings have shown that access to basic services, such as water and solid waste management, coupled with heightened livelihood challenges have increased tensions in the assessed municipalities.

Water shortages serve as a point of contention amongst host communities in northern Jordan, with an overwhelming majority of households (76%) reporting that water shortages have led to discontent in the community. With the increase in water shortages cited as the most prominent change by 38% of households, particularly in the municipalities of Al-Sho’aleh, Al-Kfarat, Gharb Irbid, Hosha Al-Jadeedah and Al-Za’atri and Al-Mansheah, it will be essential to ensure that targeted interventions are pursued in these municipalities in an effort to ensure tensions amongst community residents do not increase.

While a majority (81%) of households reported they were connected to the public water network, the quantity of water delivered was not sufficient enough to meet households needs, as nearly half of households (48%), reported they had faced a water shortage in the 30 days preceding the survey, which was conducted during the hot season. To deal with water shortages, the vast majority (95%) of households have adopted numerous unsustainable coping mechanisms. These coping mechanisms ranged from common place measures such as purchasing water at private water shops, to more severe strategies such as reducing daily water consumption. Nationality served as a critical indicator regarding the severity of water-related issues. While water shortages have affected both Jordanian and Syrian households, a greater proportion of Jordanian (79%) than Syrian households (60%) believed these shortages had led to higher levels of discontent in the community. Household water shortages and level of discontent with water shortages are two variables that have a relationship, suggesting that if a household had experienced water shortages, they were more likely to believe that water shortages are linked to community tensions.

Poor solid waste management across some northern municipalities has caused tensions amongst the assessed communities and has the potential to further deteriorate social cohesion in the absence of targeted interventions. Half of the assessed households reported that garbage is not collected frequently enough and 69% of households feel that solid waste accumulation and associated increase in pests contribute to community-level discontent. Limited garbage collection has forced over one-third (35%) of households to adopt negative coping mechanisms, such as burning solid waste and disposing of trash by the roadside and/or landfill, to deal with the poor solid waste management services in the community.

Similar to water access, nationality served as an indicator regarding level of discontent with waste accumulation and perceptions of municipal pest control. A higher percentage of Jordanian households (72%) than Syrian households (54%) agreed that waste accumulation and the increase in pest presence have directly led to increased levels of discontent in the community. The fact that several solid waste indicators (level of cleanliness, pest increase, level of satisfaction with waste management services, perceptions of pest control) are related suggests that sanitation is a critical sector which deserves greater attention in the host communities of northern Jordan. Gharb Irbid, Irbid Al

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108 REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, Assessment Report, June 2014. p2
Kubra, Al Mazar Al Jadedah Ramtha Al Jadedah and Sabha and Dafianeh were the most vulnerable municipalities when it comes to increased waste accumulation and tensions created by this.

The rising cost of living was the second most frequently cited change observed amongst communities. The overwhelming majority of Jordanians (87%) and Syrians (95%) confirmed that increased housing prices were leading to discontent within their community. In terms of housing insecurity, there were different levels of vulnerability across separate demographics, with Syrian and female-headed households reported as being the most vulnerable. Unsurprisingly, urban areas, where a large proportion of Syrian refugees have settled, were most acutely affected by rising housing prices. Four municipalities; Mafraq Al Kubra, Al Mazar Al Jadedah, Sabha and Dafianeh, Al Za'atri and Al Mansheah, are experiencing increased tensions linked to housing as well as high levels of housing insecurity. This report outlines the urgent need for aid agencies to target housing interventions in these municipalities, to improve social cohesion and limit the effects of the rising cost of living and the shortage of adequate and affordable housing.

In addition to the rising cost of living, increased job competition was cited frequently as a visible change arising from the influx of refugees in the host communities. A majority of Jordanian (81%) and Syrian (83%) households agreed that job competition has led to tensions in their community. While both populations are struggling to find employment, a greater proportion of Syrian households (40%) than Jordanian households (30%) included a household member who at the time of the assessment was searching for employment. Likewise, more Syrians (14%) than their Jordanian counterparts (7%) cited job competition as a key change that they had witnessed. In addition to Syrian households, female heads of households were the most acutely affected by poor employment opportunities. The municipalities of Al Kfarat, Al Mazar Al Jadedah, Rhab Al Jadedah, Sahel Horan, which all experience high levels of tensions and where job competition is a significant challenge, should be targeted by aid agencies in order to limit the escalation of tensions and to foster social cohesion in these communities.

Respondents in this assessment tended to link prominent changes to the perception of tensions. However, it remains unclear whether these tensions are between refugees and host communities or rather community residents and local services providers, or both. This merits further investigation. The regional and national response plans (NRP, 3RP, and the JRP) complement one another to adequately address the WASH needs of both Syrian refugees and vulnerable Jordanian households. With regards to water access it will be important to monitor the support provided for expanding the public water network in the Northern governorates to assess whether this has increased the frequency of water delivery and thereby possibly decreasing community-level tensions.

This report recommends that the strengthening of solid waste management infrastructure is monitored in order to verify whether or not this has reduced the negative coping mechanisms used by communities in some municipalities. In addition, it will be essential to monitor whether strengthening the municipalities’ capacity to collect garbage has decreased the presence of waste and pests which are both seen as a primary source of tension in the host communities.

With regards to shelter initiatives, this report proposes to examine whether the housing priorities identified in the JRP such as the completion of unfinished housing units, the provision of conditional cash-for-rent, and the upgrading of shelters, has reduced community level tensions for Syrian refugees and vulnerable Jordanians in the host communities.

The JRP outlines specific short-term and permanent employment projects identified for vulnerable Jordanian households, especially for women, however, although livelihoods is recognized as key to building social cohesion
and resilience in host communities, there are currently a lack of projects adequately planning for sustainable job creation and livelihood opportunities for both Syrians and Jordanians.

With the Syrian crisis entering its fifth year, with no sign of the conflict abating, the urgent need to consider long-term solutions which address the vulnerabilities faced by Jordanian and Syrian communities is critical. While the regional and national response plans do take into account the key sectors which have the ability to strengthen social cohesion between both populations (Syrian refugees and vulnerable Jordanians) in host communities, the implementation of proposed short term and longer term interventions should be closely monitored.
ANNEX 1: SAFETY

SAFETY

This section was placed as an annex rather than incorporated into the body of the report as safety was not identified as a prominent change in the assessed communities. However, it does highlight key pockets of vulnerable areas where if mitigation measures are not implemented levels of tension could potentially increase undermining social cohesion efforts highlighted in the regional and national response plans.

This report understands perceptions of safety as a proxy for the levels of social cohesion and the severity of tensions. Respondents were asked how often they felt unsafe at night in their community. A majority of Syrian (77%) and Jordanian (73%) respondents reported ‘never’ feeling unsafe at night in their community, thus demonstrating a high level of perceived safety amongst assessment communities.

Coupling this finding with the large number of respondents who reported they had witnessed no change in their community, suggests that, although tensions may have arisen as a result of the Syrian refugee crisis regarding specific services such as access to water, solid waste management and livelihoods, the population in Irbid, Al Mafraq and Zarqa governorates are not witnessing large-scale deteriorating safety at the household and community level.

However, despite a large number of respondents reporting they felt safe, there was still a visible percentage of respondents (15%) which reported they either ‘sometimes’, ‘always’, or ‘most of the time’ feel unsafe at night in their community. The municipalities with the highest proportion of households reporting to feel unsafe ‘always’, ‘most of the time’ or ‘sometimes’ at night in their community were Sabha and Al Dafianeh (28%), Al Serhan (24%), and Al Ramtha Al Jadeedah (22%) (see Figure 14).

Figure 15: Proportion of respondents that ‘always’ or ‘most of the time’ feel unsafe at night

![Figure 15: Proportion of respondents that ‘always’ or ‘most of the time’ feel unsafe at night](chart)
REASONS FOR SAFETY CONCERNS

When respondents were asked the reasons behind feeling unsafe at night, the two key reasons were **poor street lighting** (44%) and **fear of criminal activity** (20%). Provided that almost half of respondents which reported they felt unsafe stated it was due to poor public lighting, inventions strengthening municipalities’ capacity to either expand public lighting services or strengthen existing public lighting infrastructure should be prioritized. Amongst the six municipalities with the highest percentage of respondents reporting they felt unsafe at night, Al Kfarat had the greatest proportion of households report they felt unsafe due to poor street lighting at 79% (see Figure 18).

However, within the municipality of I Ramtha Al Jadeedah a high percentage of respondents reported that they felt unsafe due to criminal activity at 41%, demonstrating the need to tailor responses to the specific challenges of each municipality. The third and fourth reasons provided for feeling unsafe at night were due to the **presence of gangs** (9%) and **substance abuse in the streets** (9%). The municipality with the highest percentage of respondents citing the presence of gangs as a reason for feeling unsafe at night was Al Zarqa at 19%. Al Serhan had the greatest proportion of households report substance abuse in the streets as a cause for feeling unsafe (24%), which calls for further exploration.

Figure 16: Reported reasons for safety concerns in most vulnerable municipalities

47% of Jordanian and 23% of Syrian respondents reported they felt unsafe because of ‘poor street lighting’. Poor street lighting was the most common reason for feeling unsafe. However, despite the high frequency of Jordanians and Syrians citing poor public lighting as a safety concern, satisfaction levels with the availability of public lighting provided by the municipality was not as low as expected. 50% of Jordanian and 61% of Syrian respondents reported that they were either ‘satisfied’ or ‘very satisfied’ or with the availability of public lighting.

Amongst the 15% of all respondents that reported they felt unsafe ‘sometimes’ ‘most of the time’ or ‘always’ at night, a majority of these (55%) indicated they were ‘unsatisfied’ or ‘very unsatisfied’ with the availability of public lighting in their community. Whereas, amongst respondents that reported they felt unsafe at night ‘rarely’ or ‘never’ an overwhelming majority (95%) reported they were ‘satisfied’ or ‘very satisfied’ with the availability of public lighting.
The relationship between these two variables suggests that the more frequently a respondent’s reported feeling unsafe the more likely they were to report they were unsatisfied with the availability of public lighting. Consequently, street lighting should be seen as a key municipal service that can serve to improve perceptions of safety within the community.

When the findings are disaggregated by sex, 53% of female respondents compared to 31% of male respondents cited ‘poor street lighting’ as a reason for feeling unsafe. In addition more female (22%) than male (17%) respondents reported that they felt unsafe because of ‘criminals’. Noticeably more male respondents cited substance abuse (14%), and gangs (14%) as a reason for feeling unsafe, than their female counterparts (6% and 5% respectively).

COPING MECHANISMS

In order to assess how safety concerns are affecting local populations, respondents were asked how frequently they deployed strategies in the 30 days preceding the survey to cope with poor public lighting (used as a proxy for safety) in the community. The findings below reflect the responses amongst households which reported to use housing-related coping mechanisms.

22% of households reported using a coping strategy to deal with a lack of public lighting. The most common coping strategy to deal with poor public lighting in the community was to avoid going out at night (37%). Al Serhan had the highest percentage of households report using this coping strategy at 59%. The second most common strategy to deal with limited public lighting was to avoid public areas at 23%. The municipalities where the highest proportion of respondents reported adopting this strategy were Sahel Horan and Rhab Al-Jadeedah at 56% respectively.

MUNICIPALITY HOTSPOTS

On the whole, safety did not appear to be a commonly reported concern across the assessed municipalities in northern Jordan. However, there were still vulnerable pockets in the assessed municipalities where respondents reported feeling unsafe ‘sometimes’, ‘most of the time’, or ‘always’ (Sabha and Al Dafianeh (28%), Al Serhan (24%), Al Ramtha Al Jadeedah (22%)). These three municipalities call for further investigation in order to better assess the specific reasons behind respondents safety concerns and possible way to mitigate the frequency of households using negative coping mechanisms.

109 A chi-squared = 535.023, df = 16, p<0.005
ANNEX 2: HOUSEHOLD SURVEY

MUNICIPAL SERVICES – BASELINE ASSESSMENT TOOL

Introduction:

Hello, my name is ____________ and I am working for REACH. We are conducting a survey of households in your community. We would like to ask you some questions about general satisfaction with public services on behalf of FCO/DFID/the World Bank. What you will say will be kept confidential and will not be revealed to any other group. This survey will take around 30 minutes to complete.

GPS Location (coordinates): ________
Date (DD/MM/YY): _______
Respondent’s sex: □ 1 Male □ 2 Female

Demographics:
1.1 Governorate
□ 1 Irbid
□ 2 Mafraq
□ 3 Zarqa
1.2 Municipality [add drop down menu] – list of 16 municipalities
1.3 Location type:
□ 1 Urban □ 2 Peri-urban □ 3 Rural
1.4 What is your nationality?
□ 1 Jordanian
□ 2 Syrian
□ Other, please specify: _______
1.5 Please provide phone number (optional)___

Household Profile:
1.6 How many families share this accommodation?
□ 1 One family only
□ 2 Two
□ 3 Three
□ 4 More than three
□ 98 Other, please specify: _______
1.7 Please list the number of males and female family members according to age
□ 1 Male: ___ 0-3y ___ 4-11y ___12-17y ___18-30y ___31-59y ___60y and over
□ 2 Female: ___ 0-3y ___ 411y ___1217y ___18-30y ___31-59y ___60y and over
1.8 What is the sex of the head of household (HH)? □ 1 Male □ 2 Female
1.9 What is the marital status of the head of the HH? □ 1 Single □ 2 Married □ 3 Divorced □ 4 Widowed
1.10 Does anyone in your HH have a permanent physical disability? □ 1 Yes □ 2 No
Specify disability for males: □ 1 Physical □ 2 Mental □ 3 Visual □ 4 Auditory □ 5 Speech □ 6 None
Specify disability for females: □ 1 Physical □ 2 Mental □ 3 Visual □ 4 Auditory □ 5 Speech □ 6 None
1.11 What is the highest education level of your head of HH? Choose only one.
□ 1 No formal education
□ 2 Primary
□ 3 Secondary
□ 4 Vocational training
□ 5 University degree
□ 6 Post graduate
□ Other, please specify:________
1.12 Please state the length of time you have lived in this community. Choose one.
□ 1 Less than three months
□ 2 Three to six months
□ 3 Six months to one year
□ 4 One to two years
□ 5 More than two years
1.13 Since you arrived / have lived in this community what are the three most prominent changes that you have witnessed due to population increase? Rank first three most important (1=most important).
□ 1 Overcrowding in schools/deterioration in the quality of education
□ 2 Overcrowding in medical centers/deterioration in the quality of medical service
□ 3 Increased competition for job opportunities
□ 4 Rising cost of living (food prices/cost of rent)
□ 5 Traffic congestion/road accidents
□ 6 Increase in the rate of crime/emergence of new crimes
□ 7 The spread of disease/emergence of new diseases
□ 8 Waste accumulation in public spaces/spread of pests
□ 10 Cultural/moral deterioration
□ 11 Water shortage
□ 12 Have not witnessed any changes
□ 98 Other, please specify:_______

1.14 If 1.13 answered 1 ask the questions in the table below.

In the last six months what coping strategies did your HH employ to cope with the deterioration in the quality of educational services in your community? (Check box)

- □ 1 Home school children/adolescents
- □ 2 Attend a split school day

1.14 If 1.13 answered 2 ask the following questions in the table below.

Coping Mechanisms: During the last 6 months, how many times did your household have to employ one of the following strategies to cope with the deterioration in the quality of health services/inability to finance health expenditures?

- □ 1 Rely on high-cost private clinics
- □ 2 Use the health facilities of NGOs/charitable organizations/seek financial support from private donors/organizations
- □ 3 Borrow money from family/friends/ neighbours
- □ 4 Sell food vouchers or NFIs received from humanitarian organizations
- □ 5 Self-medicate
- □ 6 Travel to other communities
- □ 7 Take out a loan
- □ 8 Sell assets
- □ 9 Avoid seeking medical attention
- □ 10 Seek medical attention without insurance or sufficient finances
- □ 98 Other, please specify:

Frequency: Number of times out of the last six months: (use numbers 0-30 to answer number of times)

<table>
<thead>
<tr>
<th>Coping Mechanism</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rely on high-cost private clinics</td>
<td>□ 1</td>
</tr>
<tr>
<td>Use the health facilities of NGOs/charitable organizations/seek financial support from private donors/organizations</td>
<td>□ 2</td>
</tr>
<tr>
<td>Borrow money from family/friends/ neighbours</td>
<td>□ 3</td>
</tr>
<tr>
<td>Sell food vouchers or NFIs received from humanitarian organizations</td>
<td>□ 4</td>
</tr>
<tr>
<td>Self-medicate</td>
<td>□ 5</td>
</tr>
<tr>
<td>Travel to other communities</td>
<td>□ 6</td>
</tr>
<tr>
<td>Take out a loan</td>
<td>□ 7</td>
</tr>
<tr>
<td>Sell assets</td>
<td>□ 8</td>
</tr>
<tr>
<td>Avoid seeking medical attention</td>
<td>□ 9</td>
</tr>
<tr>
<td>Seek medical attention without insurance or sufficient finances</td>
<td>□ 10</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>□ 98</td>
</tr>
</tbody>
</table>

Housing/Accommodation:

2.1 What type of accommodation is your HH currently living in?

- □ 1 Rented house/apartment
- □ 2 Owned house/apartment
- □ 3 Informal shelter
- □ 98 Other, please specify: __________

2.2 How does your HH cover the cost of housing? [Check box] Rank three

- □ 1 Pay out of income
- □ 2 Borrow money from family
- □ 3 Take out a loan
- □ 4 Sell vouchers
- □ 5 Share housing and costs with other families
- □ 6 Sell valuables/possessions
- □ 7 Pay from pension
- □ 8 No housing costs/provided free by family/host family
- □ 98 Other, please specify: __________

2.3 In the last six months what percent of the HH income was spent on housing expenses (rent)?

- □ 1 0%   □ 6 61-75%

2.4 Increased shelter prices have led to discontent within your community.

- □ 1 Strongly agree
- □ 2 Agree
- □ 3 Neutral
- □ 4 Disagree
- □ 5 Strongly disagree
- □ 99 don’t know

2.5 What challenges is the HH facing in relation to your current housing? [Check box] Rank three

- □ 1 No challenge
- □ 2 Overcrowding/Lack of space
- □ 3 Unclean/Unhealthy environment (eg. Damp, dirty, lack of ventilation)
- □ 4 Partially constructed/unsafe building

2.6 Who do you share the HH with? [Check box] Choose all that apply.
- □ 1 Live alone
- □ 2 Immediate family
- □ 3 Extended family
- □ 4 Jordanian non-relatives
- □ 5 Syrian non-relatives
- □ 98 Other, please specify: __________

2.7 (Skip logic) If 2.6 you live with Jordanian/Syrian non-relatives or other, please rate the level of personal safety in the HH.
- □ 5 Very safe
- □ 4 Safe
- □ 3 Moderately safe
- □ 2 Unsafe
- □ 99 Don’t know / Prefer not to answer

2.8 What safety concern/s have you experienced in the HH, if any? [Check box] Rank three
- □ 1 Confrontation with neighbours / Bad relationships with neighbours
- □ 2 Break-ins/robberies
- □ 3 Inadequate wash facilities for females
- □ 4 Domestic violence
- □ 5 Ill fit for children
- □ 6 Overcrowding/lack of privacy
- □ 7 Unhygienic living conditions (ex: presence of rodents, pests, damp)
- □ 8 No safety issues
- □ 98 Other, please specify: __________
- □ 99 Don’t know / Prefer not to answer

2.9 Coping mechanisms:

<table>
<thead>
<tr>
<th>During the last 6 months, how many times did your HH have to employ one of the following strategies to cope with housing-related issues?</th>
<th>Frequency: Number of times in the past 6 months: (use numbers 0-30 to answer number of times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□1 Take out loans/incurring debt to cover rental expenditure</td>
<td></td>
</tr>
<tr>
<td>□2 Borrow from landlord and/or delay payment of rent</td>
<td></td>
</tr>
<tr>
<td>□3 Borrow money from family/friends/neighbours to cover rental expenditure</td>
<td></td>
</tr>
<tr>
<td>□4 Sell personal belongings/valuables to cover rental expenditure</td>
<td></td>
</tr>
<tr>
<td>□5 Postpone marriage to put off buying/renting property</td>
<td></td>
</tr>
<tr>
<td>□98 Other, please specify:</td>
<td></td>
</tr>
</tbody>
</table>

3. Water:

3.1 Are you connected to the public water network?
- □1 = Yes □2 = No □99 = Don’t know

3.2 If 3.1 yes, over the past month how often did you receive water from the public network (hot season)?
- □1 = Never □2 = Every day □3 = Three times a week □4 = Twice a week □5 = Once a week □6 = Once every two weeks; □7 = Once a month □99 = Don’t know

3.3 If 3.1 yes, last winter how often did you receive water from the public network over a one month period?
- □1 = Never □2 = Every day □3 = Three times a week □4 = Twice a week □5 = Once a week □6 = Once every two weeks; □7 = Once a month □99 = Don’t know

3.4 Have you ever received public water delivered by the municipal public water trucks?
- □1 = Yes □2 = No □99 = Don’t know

3.5 If yes, over the past month how often did you receive water from the public water trucks (hot season)?
- □1 = Never □2 = Every day □3 = Three times a week □4 = Twice a week □5 = Once a week □6 = Once every two weeks; □7 = Once a month □99 = Don’t know

3.6 If yes, last winter over a one month period how often did you receive water from the public water trucks?
3.7 Have you ever faced a water shortage over the past one month (hot season)?
☐ 1 = Yes ☐ 2 = No ☐ 99 = Don’t know

3.8 If yes, how many times?
_____ # of times (restrict number to 30)

3.9 Last winter (cold season) over the period of one month did you face a water shortage?
☐ 1 = Yes ☐ 2 = No ☐ 99 = Don’t know

3.10 If yes, how many times?
_____ # of times (restrict number to 30)

3.11 If 3.7 yes OR 3.9 yes, In case you faced a shortage/s, rank the three most important causes:
☐ 1 Public water supply is not frequent enough
☐ 2 Not enough storage capacity
☐ 3 More people joined the household and the water was not enough for everyone
☐ 4 Cannot afford to buy water from water shops and water trucks
☐ 5 Private water vendors cannot be trusted
☐ 6 The private well dried up
☐ 7 The water flow/pressure (pumped through pipes) is weak
☐ 8 None of the above
☐ 98 Other: ______________
☐ 99 Don’t know

3.12 Coping mechanisms:

<table>
<thead>
<tr>
<th>During the last one month, how many times did your household have to employ one of the following strategies to cope with a lack of and/or poor quality of water?</th>
<th>Frequency: Number of times during the last 30 days: (use numbers 0-30 to answer number of times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1 Buy bottled water from shops</td>
<td></td>
</tr>
<tr>
<td>☐ 2 Buy water from private trucks</td>
<td></td>
</tr>
<tr>
<td>☐ 3 Share water tanks with neighbours / Borrow water from neighbours</td>
<td></td>
</tr>
<tr>
<td>☐ 4 Rely on well water</td>
<td></td>
</tr>
<tr>
<td>☐ 5 Use water purifying tablets/chemicals, boil water, use water filter</td>
<td></td>
</tr>
<tr>
<td>☐ 6 Collect rainwater</td>
<td></td>
</tr>
<tr>
<td>☐ 7 Collected water from unsafe water sources (rivers, open wells, etc.)</td>
<td></td>
</tr>
<tr>
<td>☐ 8 Tap into the public water network</td>
<td></td>
</tr>
<tr>
<td>☐ 9 Reduce water consumption</td>
<td></td>
</tr>
<tr>
<td>☐ 10 Travel to another community to receive water</td>
<td></td>
</tr>
<tr>
<td>☐ 98 Other, please specify:</td>
<td></td>
</tr>
</tbody>
</table>

3.13 If 3.12 buy bottled water OR buy water from private trucks <>0, then ask How much have you spent on buying private water over the past 30 days?
_____ JODs

3.14 Are you satisfied with the services provided by the water public authority/municipality in your community?
☐ 5 Very Satisfied
☐ 4 Satisfied
☐ 3 Moderately Satisfied
☐ 2 Unsatisfied
☐ 1 Very Unsatisfied
☐ 99 Don’t know

3.15 If unsatisfied OR very unsatisfied, why?
☐ 1 Water services are poorly managed
☐ 2 Water distribution / delivery is dependent upon personal relationships
☐ 3 Not connected to the public water network
☐ 4 Water pipes are old and poorly maintained
☐ 5 Water shortages
☐ 6 Water is not clean
☐ 7 High cost of water
☐ 8 The water flow / pressure (pumped through pipes) is weak
☐ 98 Other, please specify:
3.16 Are you aware of where to make a complaint in regards to your water supply?
   □ 1 Yes □ 2 No

3.17 (Skip logic) If 3.16 yes, have you ever made a complaint to the water authorities?
   □ 1 Yes □ 2 No

3.18 (Skip logic) If 3.17 yes, how satisfied were you with the outcome of the complaint?
   □ 5 Very Satisfied
   □ 4 Satisfied
   □ 3 Moderately Satisfied
   □ 2 Unsatisfied
   □ 1 Very Unsatisfied

3.19 If 3.18 unsatisfied OR very unsatisfied, why?
   □ 1 There is no response from the authorities
   □ 2 The authorities took a long time to respond
   □ 3 Did not receive a trustworthy response
   □ 4 The response was not helpful
   □ 98 Other, please specify:
   □ 99 Don’t know / Prefer not to answer

3.20 Water shortages have led to discontent within your community.
   □ 1 Strongly agree
   □ 2 Agree
   □ 3 Neutral
   □ 4 Disagree
   □ 5 Strongly disagree
   □ 99 Don’t know / Prefer not to answer

4. Livelihoods / Employment:
4.1 How many members of the HH are employed? _____

4.2 Are there members of the HH currently looking for employment?
   □ 1 Yes □ 2 No

4.3 If yes, how many members?
   _____ females _____ males

4.4 Has the main breadwinner of the HH struggled to find adequate employment over the past year?
   □ 1 Yes
   □ 2 No

4.5 What were the primary (1), secondary (2), and tertiary (3) sources of income to cover HH expenditures in the last 30 days?
   □ 1 Formal wage labour
   □ 2 Informal wage labour
   □ 3 Military personnel
   □ 4 Pension
   □ 5 Agricultural labour
   □ 6 Business owner
   □ 7 Formal Loans/informal loans
   □ 8 Cash from humanitarian orgs.
   □ 9 Sale of food /non-food assistance
   □ 10 Self-employed/freelance worker
   □ 11 Begging
   □ 12 Illegal activity
   □ 13 Selling personal items/valuables
   □ 14 Savings
   □ 15 Remittances
   □ 98 Other (please specify)_______
   □ 99 Don’t know
   □ 97 Not Applicable (N/A)

4.6. Rate the breadwinner’s level of job security.
   □ 5 Very secure
   □ 4 Secure
   □ 3 Moderately secure
   □ 2 Insecure
   □ 1 Very insecure
   □ 99 Don’t know

4.7 The current employment situation has lead to discontent within your community.
   □ 1 Strongly Agree
   □ 2 Agree
   □ 3 Neutral
   □ 4 Disagree
   □ 5 Strongly Disagree
   □ 99 Don’t know

4.8 Coping mechanisms:

<table>
<thead>
<tr>
<th>During the last 1 month, how many times did your household have to employ one of the following strategies to cope with a lack of employment?</th>
<th>Frequency: Number of times during the past 6 months: (use numbers 0-30 to answer number of times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ 1 Borrow money from family / friends / neighbours</td>
<td></td>
</tr>
<tr>
<td>□ 2 Take out loans / incur debt</td>
<td></td>
</tr>
<tr>
<td>□ 3 Rely on savings or remittances</td>
<td></td>
</tr>
<tr>
<td>□ 4 Endure poor working conditions (safety/health concerns,</td>
<td></td>
</tr>
</tbody>
</table>
5. Waste disposal / Environmental hazards:
5.1 What is the main way that your household disposes of garbage from your HH? (CHECK ONE)
  □ 1 Drop it in public bins
  □ 2 Drop it anywhere outside
  □ 3 Drop in informal dumping areas where many people drop their garbage
  □ 4 Pay someone to collect it
  □ 5 Burn it
  □ 6 Bury it
  □ 98 Other, please specify:__________

5.2 How far is the nearest garbage bin from your house?_________minutes

5.3 In your opinion, how often is the municipality collecting the garbage in your community? (CHECK ONE)
  □ 1 Every day
  □ 2 Once every two days
  □ 3 Once a week
  □ 4 Once every two weeks
  □ 5 Once a month
  □ 6 More than once a month
  □ 7 Never
  □ 99 Don’t know

5.4 In your opinion, is the garbage collection frequent enough?
  □ 1 Yes
  □ 2 No
  □ 99 Don’t know

5.5 In your opinion, the cleanliness (e.g. lack of garbage) of the area/street around your accommodation is, using the following scale: (CHECK ONE)
  □ 5 Excellent
  □ 4 Good
  □ 3 Fair
  □ 2 Poor
  □ 1 Very poor
  □ 99 Don’t know

5.6 There has been an increase in pests (insects, rodents, stray dogs) within the community.
  □ 1 Strongly Agree
  □ 2 Agree
  □ 3 Neutral
  □ 4 Disagree
  □ 5 Strongly Disagree
  □ 99 Don’t know

5.7 In your opinion, the way the municipality is dealing with pest control around your accommodation is, using the following scale: (CHECK ONE)
  □ 5 = Excellent
  □ 4 = Good
  □ 3 = Fair
  □ 2 = Poor
  □ 1 Very poor
  □ 99 = Don’t know

5.8 Waste accumulation and pests have led to discontent within your community.
  □ 1 Strongly agree
  □ 2 Agree
  □ 3 Neutral
  □ 4 Disagree
  □ 5 Strongly disagree
  □ 99 Don’t know

5.9 Coping mechanisms:
During the last 7 days, how many times did your household have to employ one of the following strategies to cope with a lack of waste disposal in the community?

| Frequency: Number of times out of the last seven days: (use numbers 0-7 to answer number of times) |  |
5. Are you satisfied with the waste management services provided by the municipality in your community?
- 5 Very Satisfied
- 4 Satisfied
- 3 Moderately Satisfied
- 2 Unsatisfied
- 1 Very Unsatisfied
- 99 Don't know

5.11 If unsatisfied OR very unsatisfied, why?
- 1 Garbage collection frequent not enough
- 2 Not a priority service for the municipality
- 3 No waste management services provided
- 4 There are no public waste bins
- 5 The distance to public bins is far
- 6 Increase in pests (insects, rodents, stray dogs) due to the accumulation of waste
- 7 Not enough waste management workers
- 8 Waste management services is poorly run
- 98 Other, please specify:

6. Sanitation
6.1 Do you have access to the sewer system? (if yes, skip sanitation questions)
- 1 = yes
- 2 = no
- 99 = don't know

6.2 If your toilet discharges into a pit in the ground, how do you empty it?
- 1 = Public desludging trucks
- 2 = Private desludging trucks
- 3 = Informal service (i.e. not orange trucks)
- 4 = Don't empty it, just dig another pit
- 99 = Don't know

6.3 How many times did your pit latrine overflow in the past six months?
- ____ # of times
- 99 = Don't know

6.4 How many times did you desludge your pit latrine in the past six months?
- ____ # times
- 99 = Don't know

6.5 How much did you spend in the past six months to empty it?
- ____ JOD
- = 99 Did not pay anything

6.6 Coping strategies:
- During the last 6 months, how many times did your household have to employ one of the following strategies to cope with a lack of desludging?
- Frequency: Number of times over the past 6 months: (use numbers 0-30 to answer number of times)

- 1 Dig another pit
- 2 Rely on private desludging trucks
- 3 Rely on public desludging trucks
- 4 Dispose of solid waste into a river/valley
- 5 Connect to the sewer system

Other, please specify:

6.7 Sanitation issues have led to discontent within your community.
- 1 Strongly agree
- 2 Agree
- 3 Neutral
- 4 Disagree
- 5 Strongly disagree
- 99 Don't know / Prefer not to answer
6.8 Are you satisfied with the desludging services provided by the municipality in your community?
- 5 Very Satisfied
- 4 Satisfied
- 3 Moderately Satisfied
- 2 Unsatisfied
- 1 Very Unsatisfied
- 99 Don’t know

6.9 If unsatisfied OR very unsatisfied, why?
- 1 No desludging services provide by the municipality
- 2 No sewer system
- 3 High cost of desludging
- 98, Other please specify:

7. Community centers/libraries/parks
7.1 How often do you go to the community center?
- 1 Daily
- 2 Twice a week
- 3 Once a week
- 4 Every two weeks
- 5 Once a month
- 6 Once every two months
- 7 Never
- 8 No community center

7.2 How far is the nearest community center in minutes?
- 99 Don’t know

7.3 How often do you go to the sports center?
- 1 Daily
- 2 Twice a week
- 3 Once a week
- 4 Every two weeks
- 5 Once a month
- 6 Once every two months
- 7 Never
- 8 No sport center

7.4 How is the nearest sports center in minutes?
- 99 Don’t know

7.5 How often do you go to the library in your community?
- 1 Daily
- 2 Twice a week
- 3 Once a week
- 4 Every two weeks
- 5 Once a month
- 6 Once every two months
- 7 Never
- 8 No library

7.6 How far is the nearest library in minutes?
- 99 Don’t know

7.7 How often do you go to the park in your community?
- 1 Daily
- 2 Twice a week
- 3 Once a week
- 4 Every two weeks
- 5 Once a month
- 6 Once every two months
- 7 Never
- 8 No park

7.8 How far is the nearest park from you in minutes?
- 99 Don’t know

7.9 Lack of public leisure centers have led to discontent within your community.
- 1 Strongly agree
- 2 Agree
- 3 Neutral
- 4 Disagree
- 5 Strongly disagree
- 99 Don’t know

7.10 Coping strategies:

<table>
<thead>
<tr>
<th>During the last one month, how many times did your household have to employ one of the following strategies to cope with a lack of public <strong>leisure spaces</strong>?</th>
<th>Frequency: Number of times during the past one month: (use numbers 0-30 to answer number of times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1 The family socialises at home</td>
<td></td>
</tr>
<tr>
<td>- 2 Women socialise inside of the home</td>
<td></td>
</tr>
<tr>
<td>- 3 Youth roam around the streets</td>
<td></td>
</tr>
<tr>
<td>- 4 Youth/children use inappropriate/unsafe public spaces as playgrounds</td>
<td></td>
</tr>
<tr>
<td>- 5 Travel to other areas to visit leisure</td>
<td></td>
</tr>
</tbody>
</table>
7.11 Are you satisfied with the availability and quality of public leisure spaces provided by the municipality in your community?
- □ 5 Very Satisfied
- □ 4 Satisfied
- □ 3 Moderately Satisfied
- □ 2 Unsatisfied
- □ 1 Very Unsatisfied
- □ 99 Don’t know

7.12 If unsatisfied OR very unsatisfied, why?
- □ 1 There are no public leisure spaces
- □ 2 This is not a priority for the municipality
- □ 3 Overcrowded leisure spaces
- □ 4 Not enough leisure equipped spaces
- □ 5 Public leisure spaces are far
- □ 6 Poor maintained / leisure space facilities
- □ 98 Other, please specify:
- □ 99 Don’t know

7.13 How far is the nearest graveyard from your household in minutes?

_________________________ minutes

7.14 This graveyard has adequate capacity for the local community?
- □ 5 Strongly Agree
- □ 4 Agree
- □ 3 Neutral
- □ 2 Disagree
- □ 1 Strongly Disagree

7.15 How far is the nearest market from your household in minutes?

_________________________ minutes
- □ 99 Don’t know

7.16 This market caters to your household needs
- □ 5 Strongly Agree
- □ 4 Agree
- □ 3 Neutral
- □ 2 Disagree
- □ 1 Strongly Disagree

7.17 How far is the nearest slaughterhouse from your household in minutes?

_________________________ minutes
- □ 99 Don’t know

7.18 How satisfied are you with the state of your local slaughterhouse?
- □ 5 Very satisfied
- □ 4 Satisfied
- □ 3 Neutral
- □ 2 Unsatisfied
- □ 1 Very unsatisfied
- □ 99 Don’t know

8. Roads/sidewalks and public illumination
8.1 Are you satisfied with the quality of roads and sidewalks in your community?
- □ 5 Very Satisfied
- □ 4 Satisfied
- □ 3 Moderately Satisfied
- □ 2 Unsatisfied
- □ 1 Very Unsatisfied
- □ 99 Don’t know

8.2 If unsatisfied OR very unsatisfied, why?
- □ 1 No sidewalks
- □ 2 Poor maintained roads
- □ 3 incurred additional costs to fix the car
- □ 4 Narrow roads
- □ 5 Dangerous roads
- □ 98 Other, please specify:

8.3 Are you satisfied with the way the municipality is maintaining the roads and sidewalks in your community?
- □ 5 Very Satisfied
- □ 4 Satisfied
- □ 3 Moderately Satisfied
- □ 2 Unsatisfied
- □ 1 Very Unsatisfied
- □ 99 Don’t know

8.4 If unsatisfied OR very unsatisfied, why?
- □ 1 No maintenance
- □ 2 Irregular maintenance
- □ 3 Poorly maintained
- □ 98 Other, please specify:

8.5 Are you satisfied with the availability of public lighting in your community?
- □ 5 Very Satisfied
- □ 4 Satisfied
8.6 If unsatisfied OR very unsatisfied, why?
- □ No public lighting available near roadside
- □ Poor public lighting
- □ All public lighting needs maintenance
- □ Irregular maintenance
- □ Other, please specify

8.7 Do you feel unsafe in your community at night?
- □ Always
- □ Most of the time
- □ Sometimes
- □ Rarely
- □ Never

8.8 If always/most of the time/sometimes, why? Rank first three most important.
- □ Poor street lighting
- □ Fear of criminal activity
- □ Gang presence
- □ Fear of harassment
- □ Substance abuse in the streets
- □ Culturally inappropriate to be in the streets after dark
- □ Other, please specify

8.9 The quality of roads/public illumination have led to discontent within your community.
- □ Strongly agree
- □ Agree
- □ Neutral
- □ Disagree
- □ Strongly disagree

8.10 Coping strategies: During the last one month, how many times did your household have to employ one of the following strategies to cope with a lack of public illumination and/poor quality of roads?

<table>
<thead>
<tr>
<th>Frequency: Number of times during the past one month: (use numbers 0-30 to answer number of times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Did not go out at night due to poor lighting</td>
</tr>
<tr>
<td>□ Did not go out at night / drive at night because of road safety issues (examples: hidden corner, non-functioning traffic lights/signs, narrow two-way streets, no sidewalks)</td>
</tr>
<tr>
<td>□ Used alternative transportation (walking, animals, etc) due to poor quality of roads</td>
</tr>
<tr>
<td>□ Incurred additional costs to fix my car</td>
</tr>
<tr>
<td>□ Avoided public areas</td>
</tr>
<tr>
<td>□ Installed additional lighting around your accommodation</td>
</tr>
<tr>
<td>□ Other, please specify:</td>
</tr>
</tbody>
</table>

9. Community outreach

9.1 How satisfied are you with the way the municipality is dealing with the main issues in your community?
- □ Very Satisfied
- □ Moderately Satisfied
- □ Satisfied
- □ Unsatisfied
- □ Do not know
9.2 Are you aware of where/how to make a complaint about municipal services?
☐ 1 Yes  ☐ 2 No

9.3 Have you ever made a complaint to the municipality?
☐ 1 Yes  ☐ 2 No

9.4 If yes, what was it about? (multiple choice)
☐ 1 waste accumulation / no public waste collection
☐ 2 presence of pests and wild dogs
☐ 3 lack of public illumination at night/feeling unsafe at night
☐ 4 lack of public leisure spaces
☐ 5 poor quality of roads and sidewalks
☐ 6 water-related issues
☐ 98 other, please specify:_________________

9.5 (Skip logic) If 9.3 yes, how satisfied were you with the outcome of the complaint?
☐ 5 Very Satisfied
☐ 4 Satisfied
☐ 3 Moderately Satisfied
☐ 2 Unsatisfied
☐ 1 Very Unsatisfied

9.6 If unsatisfied OR very unsatisfied, why?
☐ 1 There is no response from the authorities
☐ 2 The authorities took a long time to respond
☐ 3 Did not receive a trustworthy response
☐ 4 The response was not helpful
☐ 98 Other, please specify

9.7 Have you ever participated in a community consultation?
☐ 1 Yes  ☐ 2 No

9.8 (Skip logic) If 9.7 yes, how satisfied were you with the outcome of the consultation?
☐ 5 Very Satisfied
☐ 4 Satisfied
☐ 3 Moderately Satisfied
☐ 2 Unsatisfied
☐ 1 Very Unsatisfied

9.9 If unsatisfied OR very unsatisfied, why?
☐ 1 There is no response from the authorities
☐ 2 The authorities took a long time to respond
☐ 3 Did not receive a trustworthy response
☐ 4 The response was not helpful
☐ 98 Other, please specify:

9.10 Coping mechanisms:

<table>
<thead>
<tr>
<th>Frequency: Number of times during the past six months: (use numbers 0-30 to answer number of times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 1 Complained to the community leader</td>
</tr>
<tr>
<td>☐ 2 Complained to the religious leader</td>
</tr>
<tr>
<td>☐ 3 Complained to local organizations/NGOs</td>
</tr>
<tr>
<td>☐ 4 Complained to the media</td>
</tr>
<tr>
<td>☐ 98 Other, please specify:</td>
</tr>
</tbody>
</table>

9.11 What are the most prioritized sectors for you to have in your community? Rank the most important three priorities (1 most important)
☐ 1 Housing/Accommodation
☐ 2 Water
☐ 3 Livelihoods / Employment
☐ 4 Waste disposal / Environmental hazards
☐ 5 Sanitation
☐ 6 Community centres / libraries / parks
☐ 7 Roads/sidewalks and public illumination
☐ 8 Community outreach
☐ 98 Other (please specify)