ACCESS TO WATER AND TENSIONS IN JORDANIAN COMMUNITIES HOSTING SYRIAN REFUGEES

THEMATIC ASSESSMENT REPORT

JUNE 2014
SUMMARY

With the protracted Syrian crisis extending into its fourth year, the conflict continues to force millions of Syrians to seek refuge in the neighbouring countries of Jordan, Iraq, Lebanon and Turkey. These host countries are bearing the brunt of the crisis, which represents the largest refugee exodus in recent history with a total of 2,863,595 registered refugees now living outside of Syria.\(^1\) Since 2011, approximately 600,000 Syrians have crossed the border into Jordan, putting immense strain on already scarce resources, and intensifying competition for basic services. The vast majority of these refugees do not reside in camps, but are hosted in Jordan communities,\(^2\) where limited opportunities, a lack of resources and inadequate living space present a challenge to social cohesion and community resilience.

In Jordan, few comprehensive studies have been conducted to provide an in-depth understanding of the key drivers of host community tensions. To address this information gap, this multi-sectoral REACH assessment aimed at identifying where tensions have emerged across northern Jordan as a result of the Syrian refugee crisis, and how they could be mitigated through social cohesion and resilience programming. In the shift from humanitarian relief to long-term development, the assessment aims to promote and inform the mainstreaming of a ‘Do No Harm’ approach in the response provided to conflict-affected populations residing in Jordanian host communities. Sectors assessed included: education, external support, healthcare, livelihoods, municipal services, shelter and water.

With support from the British Embassy in Amman, REACH carried out the assessment between August 2013 and March 2014 across the six northern Jordanian governorates of Ajloun, Balqa, Irbid, Jarash, Al Mafraq and Zarqa. The main coordination mechanism for the assessment was a steering committee comprised of government officials and representatives from the Ministry of Planning and International Cooperation (MoPIC), the Ministry of Interior (MoI), and the Ministry of Municipal Affairs (MoMA). In addition to these government ministries, key stakeholders included the British Foreign and Commonwealth Office (FCO), UN agencies, and other humanitarian and development actors from the international community.

REACH found water to be a major source of tension in host communities that were estimated to be at relatively high risk of tension at the time of assessment. Key findings include:

- 66% of Jordanian respondents were dissatisfied with water management services in their community compared to 55% of Syrian respondents.

- More Syrians (55%) than Jordanians (43%) considered that there was adequate access to reliable and clean water in their community.

- 71% of Jordanians and 61% of Syrians stated that access to water caused tension in their community.

- 30% of respondents cited water shortages as a driver of tension in accessing water in the community. Further reasons for tension were identified, including: poor water management (21%), uneven access to water between Jordanians and Syrians (20%), unreliable water provision (19%), undrinkable water (6%), and water being too expensive (3%).

- Female respondents most commonly cited water shortages as causing tension in their community (32%), while the cause for tension most commonly cited by male respondents was uneven access to water between Jordanians and Syrians (31%).

Inadequate water supply has been linked to rising tensions in Jordanian host communities, forcing many to resort to coping mechanisms such as purchasing water from private tankers, digging wells and relying on rainwater collection. A long history of water scarcity has exacerbated negative perceptions of water usage by Syrian refugees. In addition to water shortages, uneven access to water between Jordanians and Syrians and poor management of water services have been compounded by the rapid population increase in northern Jordan. Given that Jordan is an arid country, where water is in short supply it is not surprising that tensions surrounding this vital natural resource have surfaced in Jordanian host communities subsequent to the Syrian crisis.

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\(^1\) UNHCR, <www.data.unhcr.org>, [last checked 10 July 2014].

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About REACH
REACH is a joint initiative of two international non-governmental organizations - ACTED and IMPACT Initiatives - and the UN Operational Satellite Applications Programme (UNOSAT). REACH works to strengthen evidence-based decision making by aid actors through efficient data collection, management and analysis before, during and after an emergency. By doing so, REACH contributes to ensuring that communities affected by emergencies receive the support they need. All REACH activities are conducted in support to and within the framework of inter-agency aid coordination mechanisms. For more information about REACH and to access our information products, please visit: www.reach-initiative.org. You can also write to us at: jordan@reach-initiative.org and follow us @REACH_info.
ABBREVIATIONS AND ACRONYMS

CBOs  Community-Based Organisations
FCO  British Foreign and Commonwealth Office
FGD  Focus Group Discussion
GoJ  Government of Jordan
HCSP  Host Community Support Platform
MoI  Ministry of Interior
MoMA  Ministry of Municipal Affairs
MoPIC  Ministry of Planning and International Cooperation
NGO  Non-governmental Organisation
NRW  Non-Revenue Water
ODK  Open Data Kit
UN  United Nations
WASH  Water, Sanitation and Hygiene

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 unprecedented influx of Syrian refugees into Jordan has put significant strain on already limited local resources and stretched public services. The effects of these additional pressures are felt acutely in the northern governorates, which are home to some of the most vulnerable Jordanian communities and hosting 67% of the Syrian refugee population in the country. The Government of Jordan (GoJ) along with United Nations (UN) agencies, non-governmental organisations (NGOs) and the international community have made considerable efforts to accommodate the population increase in these areas and address the additional demand placed on public services and utilities. However, challenges to access and service delivery remain for vulnerable refugees and host community members alike as they struggle to compete for limited resources.

Jordan is the fourth most water scarce country in the world. Even before the Syrian refugee crisis, demand for water provision surpassed supply; for instance in 2007, demand for water in Jordan exceeded available water sources by 638 million cubic metres. Since the influx of Syrian refugees, limited water resources have come under additional pressure. Jordan’s water supply network operates through a centralised system and most homes have access to piped water. However, water supply is intermittent, as ageing infrastructure and limited municipal capacity directly impact water availability and access. A staggering 81% of rural Jordanian households run out of water once or twice a month, and many households rely on private water trucking to supplement the insufficient amount of water available through public services. Other major challenges for water service provision include leakages to water mains, borehole contamination and aquifer depletion. There are approximately 400 unlicensed wells throughout Jordan, and in Amman alone an estimated 350,000 cubic meters of water is lost each day through informal tapping of public water. Furthermore, World Bank climate change projections for Jordan predict that between 2020 and 2030 temperatures will increase and precipitation will decline by up to 20%, making droughts more severe.

In many of Jordan’s host communities, the inflow of refugees and consequent pressure on limited local resources is a major cause of rising tension between Syrians and Jordanians. In the northern governorates, disputes have emerged between Syrian refugees and host communities over water and other services. There are also fraught relations between government and civil society with regards to water usage. In 2013, hundreds of Jordanians joined protests outside government buildings in the cities of Mafraq and Karak demanding change. In an earlier report released last year on host community and refugee tensions in Mafraq and Ramtha, Mercy Corps highlighted improving water access as an urgent priority to be addressed in order to mitigate further tensions. The Host Community Support Platform (HCSP) has also identified the two-fold nature of host community tensions in Jordan, highlighting tension between Syrians and Jordanians on one hand, and Jordanians and local governance institutions on the other.

This study, which is one in a series of thematic reports, follows two previous papers released based on assessment findings where sector-specific needs of self-settled Syrian refugees living in northern Jordan were mapped and identified. The overall assessment, conducted from August 2013 to March 2014, concentrated on

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5 REACH, Syrian Refugees in Host Communities – Key Informant Interviews/District Profiling, (January 2014).
8 Ibid.
10 Ibid.
15 Ibid.
16 Ibid.
the dynamics of refugee-host community relations and explored the factors influencing tension and destabilization.

**METHODOLOGY**

REACH, with support from the British Embassy in Amman, undertook a large assessment in Jordanian host communities focusing on prioritization of needs, vulnerabilities and tensions that have emerged as a result of the Syrian refugee crisis. The assessment was undertaken over a six month time period between August 2013 and March 2014 and included a series of data collection and analysis exercises. First, a desk review was conducted to outline the broad challenges, needs and priorities in Jordan as a result of the Syrian refugee crisis. The findings from this desk review informed the methodology for a key informant assessment in 446 communities in the six northern governorates of Ajloun, Balqa, Irbid, Jarash, Al Mafraq and Zarqa.18

Findings from the key informant assessment were then used to select the 160 host communities most at risk of high tension and insecurity, which were identified based on having the lowest level of resilience.19 REACH then undertook a community-level assessment of Jordanians and Syrians living in these 160 communities from December 2013 until early March 2014. Administration of questionnaires and eight focus group discussions (FGDs) with on average 6 participants per group were undertaken in each of these communities. During the targeted assessment phase 7,158 individual questionnaires were completed and 1,280 FGDs with Jordanians and Syrians. [See Annex I for geographical representation of the specific time frame during which each community was assessed.]

In addition, REACH hosted six participatory workshops with local government representatives from the six sampled governorates during January and February 2014. The aim of these workshops was to gain a better understanding of perceptions, challenges and needs of local government institutions in providing support to host communities and incoming refugees. In particular, these workshops sought to identify the priority sectors in each governorate to inform programming around social cohesion and resilience. They thereby complemented the community-level data collection to illustrate a comprehensive and nuanced perspective of vulnerabilities and challenges to resilience in Jordanian host communities.

**FOCUS GROUP DISCUSSION METHODOLOGY**

In each of the 160 communities a FGD was held with each of the following demographic groups: Jordanian women, Jordanian men, young Jordanian women, young Jordanian men, Syrian women, Syrian men, young Syrian women, and young Syrian men. The upper-age threshold determining whether individuals were placed in the younger FGD was 30 years of age. The groups were divided in this manner to allow for different types of discussions to surface in the FGD setting. Previous assessments had already indicated the importance of separating Jordanian and Syrian FGDs20 but it was also deemed necessary to separate according to sex and age groups to allow for a more nuanced discussion.

Prior to each FGD, participants were asked to fill out a survey questionnaire using Open Data Kit (ODK) which was uploaded onto smart phones. The questionnaires were filled out individually with the enumerators’ guidance, and served the purpose of gauging the individual challenges, priorities, and perceptions held by participants in the FGDs. The ODK survey was completed before the FGDs so as not to have the group dynamics of the FGD influence the responses.

**CHALLENGES AND LIMITATIONS**

A purposive sampling approach was adopted for the community-level assessment to clarify the specific challenges to social cohesion and resilience within different demographic groups in Jordanian host communities. Furthermore, the selection of respondents and participants in these communities was also purposive, and the sampling approach therefore is not intended to generate statistically significant findings, generalisable to the

assessed communities or to northern Jordan. Instead, it allows for a more nuanced thematic understanding of the challenges to social cohesion and resilience facing people living in tension-prone Jordanian host communities.

In some communities, there were occasions when both Jordanians and Syrians were reluctant to participate in the assessment. On the whole, this was not a major challenge, but it complicated operational planning as certain FGDs had to be rescheduled and moved around in order to achieve an acceptable level of participation in the assessment. Furthermore, in some communities it highlighted growing assessment fatigue; some Jordanians and Syrians felt that too many assessments are being conducted without being followed by action.

**FINDINGS**

This section of the report presents the main findings related to water access that were generated through the assessment. It outlines perceptions of access to water and drivers of tension through access; satisfaction with water management services; and the perceived impact of population increase on the water supply in Jordanian host communities.

**PERCEPTIONS OF ACCESS TO WATER**

Managing perceptions is central to mitigating tensions. In particular it is vital that allocation of resources is perceived as serving the long-term interests of the host communities as well as the needs of Syrian refugees.21 Perceptions of community access to water services were near evenly divided; 48% of respondents reported having adequate access to reliable (regular supply) and clean water compared to 45% reporting inadequate access. The remaining 7% were either neutral or did not know. However, when disaggregating responses by sex of the respondents, there was a notable difference between male and female respondents, as 57% of women reported having adequate access to water as opposed to only 40% of men (see Figure 1 below). This discrepancy could be explained by the traditional gender roles within the household, as women often oversee domestic chores and may be more aware of the household’s water needs and consumption.

Figure 1: There is adequate access to reliable and clean water in this community (by sex)

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When disaggregated by nationality, overall more Syrians (55%) than Jordanians (43%) considered that there was adequate access to reliable and clean water in their community (see Figure 2). Some 49% of Syrians cited the response ‘Agree’ compared to 38% of Jordanians, and 6% of Syrians indicated ‘Strongly Agree’ compared to 5% of Jordanians. Contrastingly, 49% of Jordanian respondents disagreed or strongly disagreed that there was adequate access to water, compared to 41% of Syrians. The rest were neutral or did not know. This may imply that Syrian respondents enjoy better access to reliable and clean water than their Jordanian counterparts, or that Jordanian respondents have higher expectations for water access and quality in their community.

Respondents were also asked whether they expected water access to improve in the near future (see Figure 3). When accounting for nationality Syrians had a more positive outlook overall, with 48% of Syrian respondents anticipating improvements in access to water in the near future, compared to 36% of Jordanians. Jordanians most commonly selected the response ‘Disagree’, and a total of 48% of Jordanians did not think that water access would improve in the near future compared to 29% of Syrians. These findings may be attributed to Jordanian respondents’ perceptions of deteriorating water access and services since the onset of the Syrian refugee crisis.
TENSIONS IN ACCESSING WATER

Although perceptions of present and future water access were largely positive across sampled respondents, the majority of all Jordanians and Syrians assessed (67%) reported that access to water caused tension in their community (see Figure 4, Figure 5, and Annex I for a geographical representation of this data). This suggests that factors beyond access to water have contributed to perceptions of water-related tension among sampled respondents. These perceptions of tension coincide with respondents’ rating of the urgency of water-related challenges within their community, which were also high (see Figure 6).

Figure 4: Perceptions of access to adequate water and tension in host communities

When disaggregating by nationality, more Jordanians than Syrians perceived access to water as causing tension in their community (see Figure 5). Some 71% of Jordanians linked water access to tension, compared to 61% of Syrians. The most commonly cited response was ‘Agree’ with 48% of Jordanians and 47% of Syrians expressing this opinion. Overall, only 12% of all respondents strongly disagreed that access to water caused tension in their community. These findings suggest that access to water is a clear point of contention in the assessed host communities.

Figure 5: Access to water causes tension in your community (by nationality)
While water access was adequate for some 50% of respondents, 73% of those assessed reported water challenges within their community as ‘Very Urgent’, or ‘Extremely Urgent’ (see Figure 6). A mere 3% of respondents considered that water challenges in the community were ‘not important at all’. Significantly, there is a strong positive correlation (coefficient=0.48) between water-related tension and the urgency of water-related challenges reported amongst sampled respondents, with higher urgency ratings of water challenges associated with higher levels of water-related tension in the community.

Figure 6: Breakdown of urgency rating of water challenges in the community (all respondents)

Refugee and host community members were asked to identify the major causes of tension related to water provision in their community; Figure 7 shows the breakdown of responses provided. The most cited reasons for access to water causing tension included water shortages, poor water management, unequal access to water for Jordanians and Syrians, and unreliable water supply (refer to Annex II for a geographical distribution of this data). Notably, an equal proportion of Jordanians and Syrians (30%) selected the response ‘There is a shortage of water’, indicating that this was a commonly observed problem for both groups. Severe water scarcity in Jordan prior to the influx of Syrian refugees could also help to explain Jordanian respondents’ pronounced concern with water shortages. More Jordanians than Syrians perceived poor management of water services (26%) and uneven access to water between Syrians and Jordanians (25%) as causing tension in their community. Contrastingly, a larger proportion of Syrians than Jordanians considered that water was unreliable (23%), undrinkable (10%) and too expensive (5%). These findings highlight that tensions surrounding water access are multifaceted, and incorporate issues of water quality, quantity and supply management.

Figure 7: Perceived reasons why access to water causes tension (by nationality)
A breakdown by sex shows that male and female respondents reported different primary causes for water-related tension within their communities (see Figure 8). Approximately 31% of men reported uneven access to water between Syrians and Jordanians, making it the primary cause of water tension listed by male respondents. However, 32% of women reported a shortage of water as the primary cause of water tension. This disparity may be attributable to the varying ways men and women use water on a daily basis. The tendency of female respondents to be more concerned about water shortages may be a reflection of women being more likely to participate in household chores which are dependent upon a reliable water supply (i.e. washing clothing, cleaning the house, etc.). Jordanian community organizations have identified a link between water scarcity and domestic conflicts. This may further suggest that where women are responsible for domestic chores they may be targets for blame when water is in scarce supply. Conversely, findings indicate that male respondents had a more acute perception of inequality between Syrians and Jordanians than their female counterparts.

The breakdown of reasons for water tension in communities shows that 9% of women reported undrinkable water as a primary cause of tension. This is supported by responses from FGDs, in which participants from Irbid, Ajloun, Jarash, and Zarqa cited inadequate access to drinking water and contamination of their primary water sources. This subject requires further investigation and may be indicative of water contamination.

Figure 8: Perceived reasons why access to water causes tension (by sex)

Satisfaction with Water Management Services

Notably, two of the top four reasons cited as causing tension; poor water management and unreliability of water, are closely related to public water management. Recent WASH assessments conducted by REACH in the northern governorates indicated that most households relied on piped water, but some relied on water supplied by public trucks or boreholes. Many households ran out of water within a month and were forced to rely on private water trucks and other services to meet their household needs. Local governance bodies and public water providers are struggling to cope with the increased demand subsequent to the Syrian crisis and lack the capacity to meet community water needs. The amount of non-revenue water (NRW) lost nationwide could satisfy the needs of 2.6 million people — which represents more than a third of Jordan’s current population. Figure 9 below shows the breakdown of respondents’ reporting satisfaction with water management services in their community disaggregated by nationality.

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24 Ibid.
More Jordanians (66%) reported higher levels of dissatisfaction with water management in their community than their Syrian counterparts (55%). However, the majority of both Syrian and Jordanian respondents were dissatisfied with water management services. FGDs in Qala’a, Ajloun, echoed these findings as FGD participants specifically mentioned the mismanagement of water sources, as well as reallocation of limited water resources towards Syrian refugees. In Tunis, Irbid, participants explicitly stated that the major community tensions and hostilities were directed toward water authorities.

**POPULATION GROWTH AND WATER**

Between 1990 and 2008, Jordan’s population rose by 86%, adding an additional 2.7 million water users to the country. Numerous assessments have linked additional pressures on public services with rapid and substantial population growth within communities. Some 59% of all respondents cited a rise in population in their community as the reason that water access would not improve (see Figure 10). This finding indicates that the influx of Syrian refugees into northern Jordan has had a dramatic impact on respondents’ perceptions of access to water.

The next most commonly cited response was that access to water had been deteriorating, with 34% of respondents expressing this opinion. This figure echoes previous findings regarding perceptions of the key challenges to accessing water. Only 6% of those assessed considered lack of investment in their community as a factor preventing water access from improving. A further 1% indicated other impediments to improvement. Therefore, findings suggest that the increase in population size had significantly influenced respondents’ outlook on future water access.

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CONCLUSION

This report has outlined some contentious issues surrounding water access in the most tension-prone host communities across northern Jordan. Assessment findings indicated that, among sampled respondents in these communities, there was a significant amount of tension arising from challenges in accessing water and high levels of dissatisfaction with water management services being provided. Uneven access to water between Jordanians and Syrians and water shortages were also commonly cited as reasons for tension. These findings highlight that issues surrounding access to water threaten social cohesion; both between Jordanians and Syrians assessed, and between community members and service providers.

Heightened perceptions of urgency and serious concerns regarding water shortages in these communities suggest that there may be a need to enhance the capacity and quality of water services and supply in these Jordanian host communities. As the populations of host communities continue to grow and vital resources become increasingly stretched, addressing tensions surrounding access to water and water management services could be crucial in preventing and mitigating friction between Jordanians and Syrians.

The findings in this report suggest that there is a need for government, humanitarian and development actors to address how access to water can contribute to tensions in Jordanian host communities. There is a need to further understand the link between gender and water-related tensions as this could inform more successful humanitarian interventions. Studies and assessments focused on water distribution and delivery systems in northern Jordan should aim to capture the most urgent needs and priorities of both Jordanian and Syrian populations in order to ensure that greater social cohesion and resilience are fostered through programmatic responses.
ANNEX I: MAP OF COMMUNITIES ASSESSED AND ASSESSMENT TIMEFRAME
ANNEX II: WATER AS A CHALLENGE TO SOCIAL COHESION IN JORDANIAN HOST COMMUNITIES
ANNEX III: SATISFACTION WITH WATER MANAGEMENT IN JORDANIAN HOST COMMUNITIES
ANNEX IV: REASONS FOR WATER-RELATED TENSION IN JORDANIAN HOST COMMUNITIES