

# Vulnerability Assessment Framework

## Population Study 2019

By Harry Brown, Nicola Giordano, Charles Maughan and Alix Wadeson



**UNHCR**  
The UN Refugee Agency



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This report was produced for:  
The UN Refugee Agency (UNHCR)

by:  
Action Against Hunger UK's Monitoring, Evaluation and Learning Services.

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With contributions by International Labour Organisation

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## Acknowledgements

This report and the background analysis were produced by Action Against Hunger UK and the Vulnerability Assessment Framework Coordinator at UNHCR Jordan: Nicola Giordano (Action Against Hunger UK), Charles Maughan (Action Against Hunger UK), and Harry Brown (UNHCR). Alix Wadeson also supported the report writing. Additional analysis conducted by the International Labour Organization.

Particular thanks are due to the following people and organizations who have provided additional support to the research: Elizabeth Barnhart, Dan Vulcanovic, Hala Nawayseh, Ali Khalil, Meshal Elfayez, Osama Abedlhay, Yara Maasri, MindSet, UN Women, WFP and multiple UNHCR colleagues for their reviews of various drafts.

This report has been approved by the VAF Advisory Board, which consists of members from ACTED, Action Against Hunger Jordan, Care, DRC, NRC, UN Women, UNHCR, UNICEF and WFP.

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## Access to VAF data and information

UNHCR can provide detailed data tables showing the aggregated responses to thematic questions within the survey. For more information and to make a request please contact [JORAMDAT@UNHCR.ORG](mailto:JORAMDAT@UNHCR.ORG). VAF indicator tables are included in Annex 6.4 of this report.

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# List of Acronyms

<b>CARI</b>	Consolidated Approach to Reporting Indicators of Food Security
<b>CBI</b>	Cash-Based Interventions
<b>CFSME</b>	Comprehensive Food Security Monitoring Exercise
<b>CSI</b>	Coping Strategy Index
<b>FCS</b>	Food Consumption Score
<b>GBV</b>	Gender-Based Violence
<b>GoJ</b>	Government of Jordan
<b>HAUS</b>	Health Access and Utilization Survey
<b>ILO</b>	International Labour Organization
<b>JOD</b>	Jordanian Dinar
<b>JRP</b>	Jordan Response Plan
<b>LCSI</b>	Livelihoods Coping Strategy Index
<b>MEB</b>	Minimum Expenditure Basket
<b>MOI</b>	Ministry of Interior
<b>NFI</b>	Non-Food Items
<b>PA</b>	Principle Applicant
<b>RCSI</b>	Reduced Coping Strategy Index
<b>SMEB</b>	Survival Minimum Expenditure Basket
<b>UN</b>	United Nations
<b>UNHCR</b>	United Nations High Commissioner for Refugees
<b>VAF</b>	Vulnerability Assessment Framework
<b>WASH</b>	Water, Sanitation and Hygiene
<b>WFP</b>	World Food Programme
<b>WG</b>	Washington Group

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# Executive Summary

The 2019 Vulnerability Assessment Framework (VAF) population study explores different types of vulnerability dimensions across multiple sectors from a representative sample of registered Syrian refugees in Jordan. This study provides information about vulnerabilities within the targeted population and contributes to reflection within UNHCR on how to interpret their multi-sectorial Home Visit assessments. By exploring relationships between vulnerability indicators and other data collected, the report outlines key trends and relationships. The report details predefined VAF indicators and then provides an in-depth descriptive analysis for each sector. The concluding section suggests links these results to make a series of recommendations on how to improve the identification of vulnerability within the Syrian refugee population in Jordan.

## Universal Indicators

### Welfare

On average in the sample, expenditure exceeds income. Indebtedness is necessary to meet this gap. 55 per cent of debts in sample have been accumulated to pay for basic needs such as rent, health care and food. The difference between the mean expenditure per capita (135 JOD) and the median (85 JOD) indicate that although most respondents fall below the poverty line of 68 JOD per capita, there is a small proportion of respondents with high expenditure which raises the overall average.

Household structure and gender are determinants of welfare ratings and spending levels. For every additional person in a case, monthly expenditure per capita declines by 7.50 JOD. There is a strong relationship between the proportion of females in a case and the expenditure level. As the ratio of women and girls increases, spending per person falls.

A reduction of eight per cent in the percentage of the population identified as highly or severely welfare vulnerable was recorded, from 86 per cent in 2017 to 78 per cent in 2018.

### Coping strategies

The most frequently adopted negative coping strategies are buying food on credit, accepting socially degrading, exploitative, high risk or illegal temporary jobs and reducing essential non-food expenditures. There is a strong correlation between children being withdrawn from school, early marriage and child labour. The relationship between emergency coping strategies and expenditure per capita is weak. Child begging is associated with the total number of negative coping strategies and the proportion of non-autonomous adults within a household.

A 'Weighted Livelihoods Coping Strategy Index (Weighted LCSi)' was created for this study that included more coping strategies than the standard LCSi<sup>1</sup>. On average, respondents use two and half out of a possible 14 coping strategies over the last 30 days.

An increase of three per cent of the population were recorded as being highly or severely vulnerable, from 73 per cent in 2017 to 76 per cent in 2018. Within those found to be vulnerable, a higher proportion were identified more severely vulnerable than in 2017.

### Dependency ratio

There is a high proportion of economically inactive to economically active people within the sample. Nearly half of the individuals surveyed have a severe dependency ratio rating: 49 per cent of respondents have more than 1.8 dependents per non-dependents in their case.

1 The coping strategies included in the 'Weighted LCSi' are: spent savings, bought food on credit or borrowed money to purchase food from non-relatives or friends, bought household goods on credit, took a loan to purchase for essentials, sell household assets or goods, changed accommodation location or type in order to reduce rental expenditure, reduced essential non-food expenditure such as education or health, sell productive assets or means of transport, sent children to work in order to provide resources, withdrew children from school, adult members of the household accepted socially degrading, exploitative, high risk or illegal temporary jobs, sent adult family members to beg, sent children (under 18) family members to beg and having a family member aged younger than 15 who is married.

The dependency ratio also varies according to region. Mafraq cases have a high proportion of economically inactive people. On average, the region also has the greatest number of disabilities per household. Amman is the region with the lowest dependency ratio and the largest proportion of cases with a single individual. Larger case sizes tend to have high dependency ratios and live in households with more reported disabilities.

The VAF dependency ratio vulnerability indicator has been relatively consistent since it was first recorded in 2015 with around 66 per cent of the population identified as being vulnerable.

## Sector Indicators

### Basic needs

Most individuals surveyed are unable to independently maintain the financial and non-financial standards necessary for a dignified life. 40 per cent of individuals who participated in the research have debts of more than 100 JOD per capita. 76 per cent of respondents have a level of expenditure per capita that is below the level necessary to maintain the Minimum Expenditure Basket (MEB).

The VAF basic needs vulnerability indicator has been relatively consistent since it was recorded in 2015. This year 40 per cent of the population identified as being highly vulnerable in basic needs. A further 55 per cent of the sample are classified as severely vulnerable according to the 2018 basic needs rating.

### Education

The cost of attending school is determined by case size, overall expenditure per capita and regional location. Education materials, as opposed to transport, private school fees or other expenses, are the largest component of education costs. Reported education costs are largely unrelated to the distance from the household to school.

Larger case sizes face high education related costs, frequently relying on negative coping strategies. Cultural and social norms such as ideas about the value of education, family obligations and interest in culture are the key reasons why some children do not participate in education. There is evidence that the gender

composition of households determines whether education is prioritised, as cases with a lower proportion of females are more likely to have out-of-school children. Cases with a higher ratio of women and girls are also more likely to constantly maintain expenditure on education even with low levels of income.

Since 2017, there was a minor two per cent reduction in those identified as being highly or severely vulnerable according to VAF education ratings.

### Food security

According to the Consolidated Approach to Reporting Indicators of Food Security (CARI), there is no severe food insecurity in the sample. 13 per cent of respondents are moderately food insecure. Most individuals (67 per cent) are marginally food secure. A further 19 per cent of survey participants are food secure.

Approximately nine out of ten respondents have an acceptable level of food consumption according to the Food Consumption Score (FCS). Female-headed households spend less on food than male-headed households but also tend to achieve higher FCS. Households led by women and girls maintain the same level of food consumption with fewer financial resources. There is a relationship between food security and expenditure on food: monthly food bills are 31 per cent lower in the most food secure region (Irbid) compared to the least food secure region (Zarqa).

According to the 2018 VAF food security rating, one out of three individuals is severely vulnerable and a further 15 per cent of individuals are highly vulnerable. These proportions have remained approximately constant for the last two years.

### Health

21 per cent of the population report having at least one disability according to the Washington Group (WG) Questions. There is a financial penalty related to having a disability or medical condition. Households with more disabilities and health issues face higher doctor and pharmacy fees per capita. There is a positive relationship between medical expenditure per capita and the proportion of females in a case. As the ratio of women and girls increases, medical related spending also increases. This could indicate

that households with a higher ratio of female members are more likely to access health services. Higher levels of income are associated with lower levels of medical expenditure.

Increasingly, health care costs are a substantial source of financial pressure. Approximately half (47 per cent) of the sample indicated that they had noticed a rise in health care costs over the last six months. Those that had noticed an increase reported high levels of unsustainable debt. It is likely that these findings relate to recent health care policy changes in Jordan.

49 per cent of the population are identified as highly or severely vulnerable in regards to health, which is a six per cent reduction since 2017.

### Shelter

Most respondents (95 per cent) sampled in the research live in finished buildings. Only three per cent of those who participated in the survey live in informal buildings.

The quality of shelter varies geographically. Mafraq is the region that has both the highest proportion of substandard shelter and informal settlements. Irbid and the South tend to have superior shelter conditions. Rent expenditure also differs drastically across the regions. Average rent per capita Mafraq (21.67 JOD) is less than half of that in Amman (43.31 JOD).

Having a written rental contract is strongly associated with higher quality shelter, underlining the importance of tenancy rights to secure more dignified living conditions. As the ratio of women and girls in the household increases, spending on rent tends to decline and on average the quality of shelter improves.

VAF shelter vulnerability levels identified are relatively constant since 2017 with 47 per cent identified as moderately vulnerable and five per cent identified as highly or severely vulnerable. Security of tenure and shelter conditions are the greatest sources of this vulnerability. Therefore, addressing poor tenancy rights among the refugee population could reduce shelter vulnerability.

### WASH

Four out of ten respondents report that they

cannot afford to buy some basic hygiene items. Three and half per cent of individuals who participated in the research cannot afford to buy any hygiene items. Expenditure on water and hygiene items is related to case size. Single cases spend nearly twice as much per person on WASH than cases with six or more people.

Expenditure on WASH is a determinant of overall expenditure. There is also a relationship between WASH spending and gender: holding other relevant factors constant, as the proportion of females in a household increases, expenditure on water and hygiene items declines. WASH spending is unaffected by the gender of the household head.

VAF WASH vulnerability levels identified are constant since 2017 with 72 per cent identified as moderately vulnerable, and 11 per cent identified as highly or severely vulnerable. Accessibility to safe drinking water, solid waste management and WASH expenditures are the greatest sources of vulnerabilities.

### New in the 2019 study

This study includes an expanded section on livelihoods in order to assess the impact of any recent changes to work opportunities for refugees. In addition, this year, for the first time, the research team collaborated with the ILO to provide insights into the prevalence of child labour.

### Livelihoods, debt, income and expenditure

For all sectors of the economy, median income from employment is below the level required to maintain the MEB. For some employment sectors, such as agriculture, services and mining, median earnings fall below the Survival Minimum Expenditure Basket (SMEB). Sectors such as construction, the food and beverage industry and manufacturing, have average employment incomes, which are located between the MEB and SMEB thresholds.

Having a work permit is associated with higher expenditure and income per capita as well as debt that is more manageable. Less than five per cent of cases in the sample have a work permit.

Expenditure exceeds income and this difference is financed by debt for most households. In fact, approximately two out of three (64 per cent) of respondents are indebted. A moderate and

positive relationship exists between debt and income per capita, which may suggest that borrowing money raises earnings. The most common reason for borrowing money is to pay the rent. Nearly three out of ten (27 per cent) of the sample report have debts for this reason. There is also a strong correlation between rent and the amount of debt: as rent increases so does the debt level.

Livelihoods, debt and income are shaped by gender and case size. Cases in female-headed households have a lower median income, but also lower median debt than cases in male-headed households. This may indicate that household lead by females efficiently manage financial resources. Small cases residing in male-headed households tend to have above average levels of debt per person. The mean debt of a single case in a male-headed household is 284 JOD. The equivalent figure for a single case in a female-lead household is only 176 JOD, which is approximately equal to the sample mean of 178 JOD of debt per capita.

### Working children and child labour

Partnering with the ILO, this study includes a section describing the conditions of child labour. The metrics used are aligned with the ILO standards established in Jordan. It emerges that approximately five per cent of children aged five to 17 are classified as working children. Nearly 95 per cent of children who work are engaged in child labour. 77 per cent of working children are exposed to hazardous labour. These findings indicate that the prevalence of working children within the refugee population is higher than in the host community. A 2016 national survey of child labour estimated that approximately two (1.8) per cent of children in Jordan are working.

Children who work are most likely to do so in the services sector (31 per cent) and the construction sector (17 per cent). Boys are more exposed than girls to child labour. However, data from the VAF 2019 study, as well as secondary case management information, suggests that female child labour is underestimated by failing to measure the domestic work conducted by girls.

### Additional key findings

### The proportion of genders in a house is strongly correlated with several dimensions of vulnerability

This report assesses the roles and effects of gender from several angles. In addition to standard disaggregation by sex of head of case, two other variables were used; gender of head of household and the proportion of males and females within a case. In many instances, an analysis of both of these variables was insightful. For example, female-headed households are able to achieve the same food consumption score as male-headed households but with lower food expenditures and houses with a higher proportion of females were less likely to withdraw children from school.

From an economic welfare perspective, the proportion of females at the case-level is a better predictor of expenditure patterns than the gender of the household head. As the ratio of women and girls in a case increases and holding other relevant factors constant, spending per head declines. This finding has programmatic and policy implications because women and girls are well represented in the population of Syrian refugees in Jordan (and constitute 63 per cent of case population in the 2019 sample). It was found that male-headed households spend more than female-headed ones, yet, when including this factor in a welfare model alongside other determinants of spending levels, the gender of the household head is a poor predictor of expenditure per capita.

The ratio of women and girls in a case is also strongly associated with food security and coping strategies. These findings may indicate that households with a substantial female proportion may efficiently use resources to address urgent needs.

### Some geographic variation exists but it is a weak indicator of vulnerability

Household structure analysis highlights strong associations between family size and vulnerability. For instance, the number of people within a case is negatively associated with expenditure; as case size increases, expenditure per capita decreases across most of the analysis. Although regional variations exist for some dimensions of vulnerability, geography provides less explanatory and predictive values to expenditure compared to other factors related to household structure.





# 1. Introduction

## 1.1. The Vulnerability Assessment Framework

From its inception, a primary goal of the Vulnerability Assessment Framework, is to provide a unified definition and measurement of vulnerability. By late 2013, considerable amounts of data on Syrian refugees were recorded and used by many humanitarian partners; however, the tools used to analyse and collect this data varied significantly. The use of different vulnerability criteria meant that data lacked comparability and failed to provide a comprehensive view. The VAF created a harmonized definition and measurement tool for vulnerability.

The VAF is a collaborative initiative developed with the engagement of donors, UN agencies and INGOs operating in Jordan<sup>2</sup>. The development of a standardized data collection tool, criteria for vulnerability and the different thresholds allows humanitarian actors to discuss relative vulnerabilities in equivalent terms, track and map those vulnerabilities across the refugee population and respond to the identified vulnerabilities.

By using the VAF questionnaire as the standard tool within broader assessments, data collected by different agencies for different purposes has an improved degree of comparability and contributes towards shared knowledge and analysis of the vulnerabilities of the Syrian refugee population. Through sustainably pooling household assessments by different organizations, the VAF can reduce the requirement for duplicate assessments on the same households thereby reducing assessment fatigue and burden for beneficiaries and a cost saving for organizations. Coordinated data collection and vulnerability assessments can create more cohesion between humanitarian actors by:

1. **Informing strategic decision making** for humanitarian partner organizations through coordinated assessments, gap analysis and prioritization.
2. **Planning and developing strategies**, including sectoral plans, standard

enforcement and funding requirements.

3. **Advocating for responses** to identified concerns on behalf of sectors and affected population.

Using the VAF Home Visit data collection tool, the UNHCR office in Jordan continues to collect comprehensive data on Syrian refugees living outside of formal camp settings that allow for UNHCR and partners alike to better identify the needs and vulnerabilities of the population of concern and prioritize cases in need of urgent assistance. The VAF establishes an observation and reporting system that supports the humanitarian community:

- **To have** a shared and consistent profile of vulnerability for Syrian refugee households, which enables monitoring of changes in vulnerability over time.
- **In order to** target assistance in a more efficient and equitable manner based on the application of common vulnerability criteria.
- **So that** we can strengthen coordination and decision-making of the delivery of humanitarian assistance.

### BOX 1: The relationship between vulnerability, welfare and expenditure:

In early 2014, a World Bank team conducted a detailed analysis of indicators used by UNHCR Jordan for Cash Assistance decisions, using ProGRES and Home Visit data. Based on their analysis, the World Bank produced an econometric model that predicts the economic welfare of Syrian non-camp refugees. A modelling methodology developed by the World Bank, which uses predicted expenditure as a proxy for refugee welfare, was presented to the VAF Steering Committee. It was decided to apply the same methodology on the VAF dataset to be able to predict refugee expenditure as an indicator of refugee household 'economic' vulnerability. This resulted in the 'VAF welfare model', which created the VAF welfare indicator.

2 VAF Governance Framework (<https://data2.unhcr.org/en/documents/details/53637>)



## 1.2 Update to the Syrian refugee context in Jordan

As the Syria crisis enters its ninth year in 2019, Jordan is hosting 671,551 refugees registered with the UNHCR<sup>3</sup>, of which 48 per cent are children and four per cent are elderly<sup>4</sup>. The vast majority, approximately 83 per cent, are living in urban and rural areas outside of the refugee camps. The influx of refugees fleeing is a protracted crisis that places significant strain on the economic and social stability of Jordan. The impact on the most vulnerable refugees is significant. As found in this assessment, refugee households are adopting negative coping strategies, including buying food on credit, reducing essential non-food expenditures, consuming less preferred food and taking on informal, exploitative or dangerous employment.

Humanitarian assistance continues to be a crucial element in improving the welfare of many refugee households in Jordan. A significant component of this assistance is humanitarian cash-based programming. In 2015, the UNHCR distributed US\$53 million in cash-based interventions (CBI) to Syrian refugees living in Jordan. By 2018, Jordan represented UNHCR's second largest cash operation worldwide, providing US\$98 million in cash assistance to over 435,000 refugees<sup>5</sup>. The Government of Jordan's (GoJ) leadership on the Jordan Response Plan (JRP), first initiated in 2015, also represents an important step in strengthening both Jordanian and refugee communities' capacities to cope with the crisis. It represented a paradigm shift by bridging the needs of short-term refugee and longer-term developmental response within a resilience-based comprehensive framework. The JRP 2017–19 is a three-year plan addressing Syrian refugees and Jordanian people, communities and institutions affected by the crisis. It incorporates refugee and resilience responses into one comprehensive plan for each sector and fully integrates policy decisions on livelihood and education issues<sup>6</sup>.

Despite the substantial response by government and humanitarian partners, there is still a large

gap between refugee households' income and expenditure. With limited access to sustainable livelihood options, many refugees enter a cycle of asset and savings depletion, resulting in higher levels of debt<sup>7</sup>. In response, the GoJ has taken steps to increase formal employment opportunities for Syrians and issued approximately 45,000 work permits to Syrian refugees in 2018<sup>8</sup>. In order to analyse this changing context, the 2019 VAF includes a new section on livelihoods, debt, income and expenditure.

The VAF represents a joint effort by the humanitarian community to ensure that assistance is efficient, effective and targeted for the most vulnerable households and regions. UNHCR and partners have been collecting VAF data annually since 2014 to monitor the evolving needs and circumstances and target the population accordingly. In order to reflect the changing trends and driving factors influencing refugee welfare and vulnerability, humanitarian actors decided to update the VAF in 2016. This report provides findings from the most recent VAF population study, conducted in October and November 2018. In doing so, it also acts as a comprehensive account of current context of vulnerability for the Syrian refugee population in Jordan.

### BOX 2: The difference between the VAF Population studys and the VAF Home Visits

The Population studys and VAF Home Visits use similar data collection tools; however, the purpose and sampling technique of the two methods differ.

**VAF Population studys** are conducted on a random, representative sample of registered Syrian refugee population in order to provide periodic insight into the state of Syrian refugees in Jordan. The data collection tool uses core VAF survey questions with additional depth to provide allow greater analysis.

3 UNHCR, [Syria Regional Refugee Response](#), 13 January 2019

4 ReliefWeb, [UNHCR Jordan Factsheet - January - December 2018](#), 20 December 2018

5 UNHCR Financial Tracking System

6 ReliefWeb, [Jordan Response Plan Syria Crisis 2016-2019](#), 9 August 2017

7 Ibid.

8 ReliefWeb, [UNHCR Jordan Factsheet - January - December 2018](#), 20 December 2018

**VAF Home Visits** are an on-going method for data collection used by the UNHCR Jordan Cash Based Interventions unit to determine vulnerability in six operational sectors. The data is gathered from refugees through periodic home visits and refugees requesting UNHCR multi-purpose cash assistance. Thus, the use of VAF Home Visit data could introduce bias for statistical analysis. The VAF Home Visit tool uses VAF core questions with only a few added data points to inform targeting decisions. The vulnerability ratings are used to determine eligibility for various types of assistance, including cash assistance.

### 1.3 Scope and objectives

UNHCR Jordan commissioned the 2019 VAF Population study to monitor the defined vulnerability indicators for a randomly selected representative sample of the registered Syrian refugee population. The core objectives of the study are to:

1. Update the aggregated vulnerability tables for the VAF indicators and identify any trends.
2. Explore the data to determine the most important correlations between sectoral indicators other elements within the data collected.
3. Identify programming and policy recommendations related to the Syrian refugee crisis in Jordan.

Action Against Hunger UK led the VAF 2019 study team in order to meet these objectives. The population study was conducted throughout October and November 2018 using an updated version of the VAF population study data collection tool. The sample consisted of 2,248 Syrian refugee households, which comprised 3,712 cases and over 10,400 individuals. The survey deliberately restricted the sample to include only Syrian refugee households. To ensure geographic representation and explore potential geographical differences in vulnerability respondents were selected from across the twelve governorates of Jordan.

This report presents the key descriptive and evidenced-based findings from the population study. First, a general overview presents the

profile of the sample population. Then, descriptive statistics explore universal indicators of welfare, livelihood coping strategies and dependency ratio. Documentation status is not reviewed in this report due to an inherent sampling bias that would skew results. Then the report reviews the operational sectors of basic needs, education, food security, health, shelter and WASH. The penultimate chapter reviews livelihoods, debt, income and expenditure. Finally, in a chapter co-authored by the International Labour Organization (ILO) child labour is investigated. The analysis across these chapters provides an insight into the relationships that drive welfare and vulnerability in the current Jordan refugee context.

The report ends with a set of recommendations to guide future VAF Population study data collection, welfare modelling, policy development and programming adaptation. The study aims to capture the current context to adjust and improve assistance targeting and multi-sector strategies for humanitarian aid. The goal is to provide rich and nuanced information to the humanitarian community to guide on-going support for Syrian refugees.

#### **BOX 3: Different levels of VAF indicators**

VAF indicators have been developed through consultative processes with humanitarian partners operating in different sectors, utilizing their expertise to identify the critical data points within the VAF questionnaire, and develop customized indicators. Along with ten top-line indicators, the VAF produces 55 additional sub-level indicators that provide a rich source of information for each sector.

**Atomic indicators** are indicators that represent a distinct aspect of vulnerability within a sector with minimal data transformation. There are 37 atomic indicators.

**Composite indicators** group together related atomic indicators into sub-themes within a sector. There are 18 composite indicators across the sectors.

**Top-line indicators** are the final composite indicators that are made up of sectoral-related themes to provide an overall aggregated index of vulnerability for

a sector. The component parts were chosen and weighted by experts and field practitioners. Each top-line VAF rating is described through a vulnerability model, which is illustrated by a 'tree-diagram' for clarity and describes the relationship between the different tiers of indicators, commonly referred to as 'sector-trees'. There are six sector indicators and four universal indicators.

All the atomic, composite and top-level indicators are graded into one of four vulnerability thresholds:

- 1 – Low vulnerability,
- 2 – Moderate vulnerability,
- 3 – High vulnerability, and,
- 4 – Severe vulnerability.

## 1.4 Research design and methodology

### 1.4.1. Sampling strategy and research design

The use of dynamic indicators to measure and collect data on an on-going basis has facilitated timely understanding to changes in vulnerability and enabled trend analysis across time, geographic area and key sectors. Accordingly, this continuous process has enabled sector-specific vulnerability models to be developed and updated as the context and needs of over 670,000 registered Syrian refugees<sup>9</sup> continue to evolve. Both Syrian refugee and host populations face complex challenges as they adapt to the long-term realities of a protracted crisis environment. Applying the VAF approach informs decision-making and prioritization to ensure that the most vulnerable continue to receive assistance while also promoting capacity development and resilience as refugee and host communities share space, resources and livelihood opportunities.

This exercise has been repeated several times over the past five years, thus the ratings can be

used for longitudinal analysis to identify shifts within the entire population or specific groups. Updates to the VAF data collection tool were made incorporating the current context, multi-sector trend analysis and the data generated by the VAF since the 2015 baseline. The updated research design still allows for comparison with previous data based on the existing universal and sector-level VAF indicators. However, it also included additional indicators and questions in order to test new relationships between variables, thereby increasing the value of exploratory analysis and overall understanding of determinants of vulnerability, beyond the existing evidence base.

The welfare model is based on an econometric methodology that uses predicted expenditure as one possible proxy for refugee household vulnerability. The model predicts the approximate expenditure levels for a case based on a certain set of characteristics. The model identifies cases that fall within the economic vulnerability thresholds. Those thresholds are based on Jordan's poverty line, which is currently set at 68 JOD per capita per month<sup>10</sup>.

The sampling strategy is designed to generate the most precise statistics possible, to achieve a margin of error below five per cent and at the lowest possible cost. The sampling design was informed by two stratification variables. The first is case size (categorized by one, two and three, and more than three people per case). The second was household location. For the analysis purposes, six geographic units were considered:

- The four governorates of Amman, Irbid, Mafraq and Zarqa (comprising 84 per cent of all registered refugees in Jordan),
- The Central region (consisting of Ajloun, Madaba, Balqa and Jerash governorates), and,
- The South region (made up of the governorates of Aqaba, Karak, Maan, and Tafileh).

The sample was randomly drawn from active cases registered in the ProGres database administered by UNHCR Jordan. The sample includes Syrian refugees residing in urban,

9 UNHCR, Syria Regional Refugee Response, 13 January 2019 (<https://data2.unhcr.org/en/situations/syria/location/36>). This does not account for unregistered refugees.

10 UNHCR Jordan, VAF Baseline Survey Report, 2015

peri-urban and rural settings, but excludes those living in refugee camps. This reflects the current context where most Syrian refugees reside in formal and informal residences in host communities across the country.

As with the 2015 baseline, the sampling strategy applied the Neyman allocation method to

distribute the sample across 99 strata comprised of 3,712 cases. This method incorporates both the variation of expenditure per capita (estimated from the 2017 VAF Population study data) and population proportion to allocate the sample to the strata. Table 1 provide details of the final sample by case size and region of the strata.

Table 1: Overview of sample by case size and region

Strata: Case size	Cases	Proportion of the sample (%)
<b>1</b>	1,487	40
<b>2 and 3</b>	635	17
<b>More than 3</b>	1,590	43
<b>Total</b>	<b>3,712</b>	<b>100</b>

Strata: Governorate and region	Cases	Proportion of the sample (%)
<b>Amman</b>	1,645	44
<b>Irbid</b>	809	22
<b>Zarqa</b>	316	9
<b>Mafraq</b>	374	10
<b>Central</b>	355	10
Ajloun	24	1
Balqa	259	7
Jerash	45	1
Madaba	27	1
<b>South</b>	213	6
Aqaba	59	2
Karak	99	3
Maan	50	1
Tafileh	5	0
<b>Total</b>	<b>3,712</b>	<b>100</b>

Throughout this report, the terms refugee ‘individuals’, ‘cases’ and ‘households’ are used. An individual is one man, woman, boy or girl. A case is the unit of registration used by UNHCR in the ProGres database. A case can be one person or multiple people. Household refers to the group of individuals living in the same residence. A household may consist of one case or multiple cases. Although the UNHCR and the VAF primarily focuses on the analysis of cases, and the tool collects data on that level, the design of the data collection tool also allowed households to be introduced as a variable in the research.

Factors associated with multi-case households

were believed to provide useful insight into additional dimensions of vulnerability that could be missing if cases are only as separate entities. There is a range of implications for vulnerability when considering cases living together since they often share resources as a household unit. Merging cases into a household could have positive or negative effects on the quality of the analysis. Equally, adopting a household as opposed to case-level perspective could have no effect on the findings. As a precaution, both household and case-level differences were considered by the research team. Important gendered vulnerability differences are uncovered by assessing the data at the

multi-case household-level. To introduce a more sensitive measure of these potential differences, the variable 'gender of head of household' was created in addition to the existing gender of the Principal Applicant (PA) of a case variable.

## 1.4.2. Data cleaning, testing and analysis

Throughout October and November 2018, trained enumerators conducted home visits to collect data. The data set was analysed using R. To avoid extreme outliers, only the distribution of all values from zero to 99 per cent was considered in the analysis. The last one per cent of each distribution was replaced with the equivalent values at the 99 per cent cut off point. In addition, cases with extreme negative values in differences between reported income and reported expenditure were excluded from the analysis.

The study tested and analysed dimensions of household size, gender, dependency ratio, food security, health, WASH, shelter, livelihoods, coping strategies, savings, debt and income patterns. Different combinations of relationships between variables applying different controls were tested in order to identify how expenditure is driven by a wide variety of interconnected legal, social and economic conditions. The process determines the most relevant sector-specific findings and associated determinants of vulnerability, and secondly to update the welfare model to improve the accuracy of its expenditure per capita predictions.

Some variables were transformed during the analysis to allow for statistical analysis. Two variables of note are:

- Redistributing expenditures based on household composition: Over 500 cases (approximately 13.5 per cent of the sample) reported a zero value in expenditure per capita. Most of these missing values are valid due to cases sharing expenditures within a house. To replace zero values of expenditure for cases were living as part of a multi-case household the total expenditure of the household was calculated by summing all case expenditures. The total was then divided by the number of individuals in the house, the case totals were then calculated by taking the per capita value and

multiplying it by the number of individuals in each case. This corrected expenditures for all multi-case households, not just those with zero values.

- Gender split: In addition to the sex of the PA of the case and the sex of the head of household, an addition gender metric was created that calculated proportion of males and females in the case.

## 1.4.3. Key limitations

There were no significant challenges encountered in the study process; the research plan was well executed and aligned with ethical standards per the research design and sampling strategy. However, there were some limitations associated with the VAF approach. Although the study provides comprehensive and accurate findings, these limitations have implications for how the results can be interpreted and applied.

- **Representation of vulnerability:** The VAF has historically used expenditure per capita as a proxy measure for vulnerability (See **Box 1** above). Adopting this approach has advantages and disadvantages. In general, lower levels of expenditure per capita are associated with higher levels of vulnerability: if you spend less, you are more vulnerable and if you spend more you are more likely to be able to absorb shocks. However, this may not always be the case. The interpretation of expenditure per capita can depend on income source. Vulnerable individuals may qualify for higher levels of cash assistance. In such cases, increased vulnerability may lead to higher spending. To explore this complex issue, both gross expenditure per capita and expenditure net of assistance per capita are analyzed in the welfare model.
- **Sampling:** The sample was drawn from the ProGres database. Consequently, it is only comprised of cases that have maintained their status as refugees through annual re-registration. As a result, the results of the study may tend to underestimate the vulnerabilities of the population, since refugees with lapsed registrations are not included in the sample. As a result, there is no documentation status indicator in this report (although it remains a component of the VAF for on-going VAF Home Visit



assessments). Syrians living in Jordan without refugee status, non-Syrians refugees and Jordanian nationals are also excluded from the sample.

- **Bias:** The methodology relies on self-reported levels of expenditure, income and debt. As with any form of self-reporting there is potential for inaccuracies and bias. For individual cases, the actual amount of cash received sometimes differs from the perceived level of monetary assistance. For the sample as a whole, however, the actual amount of cash received is approximately equal to the perceived amount of cash. This suggests that these discrepancies, on average, tend to cancel each other out. There is also a risk of bias associated with the power differences between interviewer and interviewee. Many cases included in the study currently receive cash assistance from UNHCR. Others may have requested cash assistance in the past. Some may hope to receive cash assistance from UNHCR in the future. Interviewees may have responded to survey questions with the aim of demonstrating their eligibility to receive assistance.
- **Protection related information:** The vulnerabilities of female-headed households globally tend to be linked to harder to identify protection risks. Some protection issues, including gender-based violence, have been intentionally omitted from VAF data collection. The VAF survey is an inappropriate tool to collect such sensitive data. Other data sources may be better placed to provide evidence on these protection issues. Aggregate comparisons between female and male-headed households therefore need to be carefully considered, especially in relation to coping

mechanisms and the specific needs of men, women, girls and boys. Enumerators receive training to recognize protection issues, including Gender-Based Violence (GBV) and if protection issues arise cases are referred to UNHCR's protection unit for follow up and case management, with consent from the respondent.

## 1.5. Chapter structure

Within the chapter on VAF indicators, the information is presented in the following way.

- An overview of the formulation of the top-line VAF indicator, including any information relating the changes made in 2016.
- A visualization of the formulation of the indicator, where necessary, in the form of a decision tree.
- Observations about the percentage of the population identified with different levels of vulnerability for each indicator, including segmentation by case size and geography and additional observations relating to how the distribution of vulnerability has changed of time.
- In-depth descriptive analysis where relevant findings have been made, sometimes including custom transformed variables to assist examining relationships with other variables in the dataset.
- **Annex 6.1** and **6.2** contain correlation tables for health and welfare respectively. **Annex 6.3** provides an explanation of some of the statistical techniques used in the report
- In **Annex 6.4**, the comprehensive table for all VAF indicators 2019 is provided.

# 2. Profile of the 2019 VAF sample

The sample is representative of the population of Syrian refugees in terms of gender, age and household composition across the six geographical regions created for analysis. Socio-demographic factors, especially for household or case size and gender ratios, are correlated with different aspects of welfare and vulnerability that shape levels of income, debt and expenditure rates. This chapter provides the means and ratios of the demographics of the population studied.

### Households and cases

54 per cent of households in the sample were composed of a single case. The mean number of cases living together as a household is 1.6.



2,248 Households



3,712 Cases



10,400 Individuals

### Gender of head of household and case



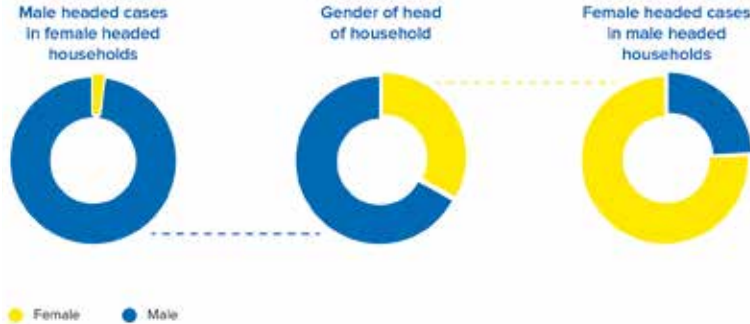
28 per cent of households are female-headed  
72 per cent of households are male-headed



33 per cent of cases are female-headed  
67 per cent of cases are male-headed

Female-headed cases are more likely to live in a male-headed household. 24 per cent of female-headed cases live in male-headed households, whereas only four per cent of male-headed cases live in female-headed households.

Figure 1: Gender of head of household and head of case





## Gender ratio of cases and households



Within a household - Female 46: 54 Male

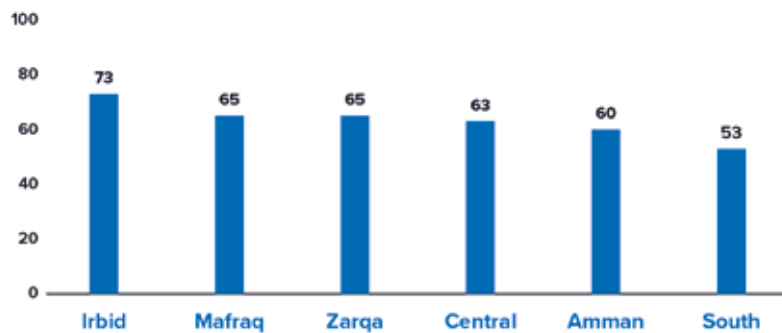


Within a case - Female 63: 37 Male

The sample consists of a higher proportion of women compared men at the case-level, while the ratios of men to women are approximately equal at the household-level.

The highest proportion of females per case is in Irbid (73 per cent) while the lowest is in the South Region (53 per cent).

Figure 2: Proportion of sample that is female at a case-level across regions



## Case and household size



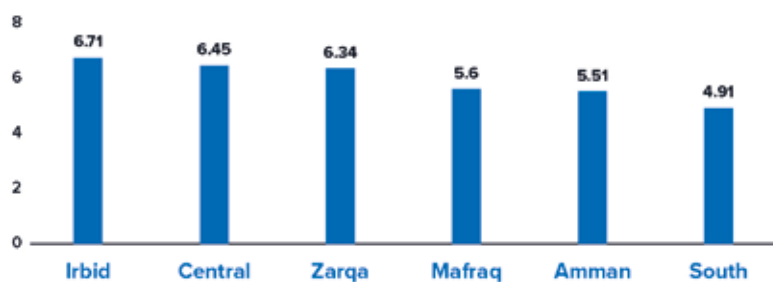
Mean household size = 5.91.



Mean case size = 3.

Average household size ranges from 4.9 (in the South Region) to 6.7 (in Irbid).

Figure 3: Mean household size by region

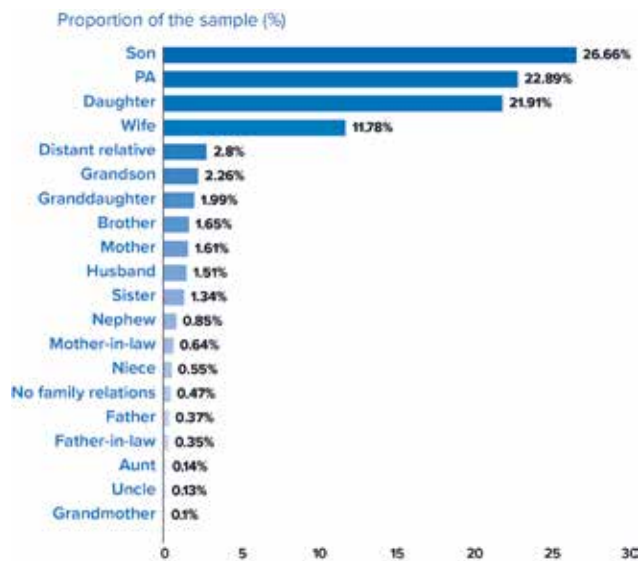


## Relationships



Households are mostly comprised of immediate nuclear family members: mothers, fathers, sons and daughters. Most individuals in the sample are classified as sons, daughters or Principal Applicants. Only 2.5 per cent of multi-case households consist of unrelated cases.

Figure 4: Relationship to Principal Applicant (PA), proportion of the sample (%)



## Age



Children (0-17) = 42 per cent



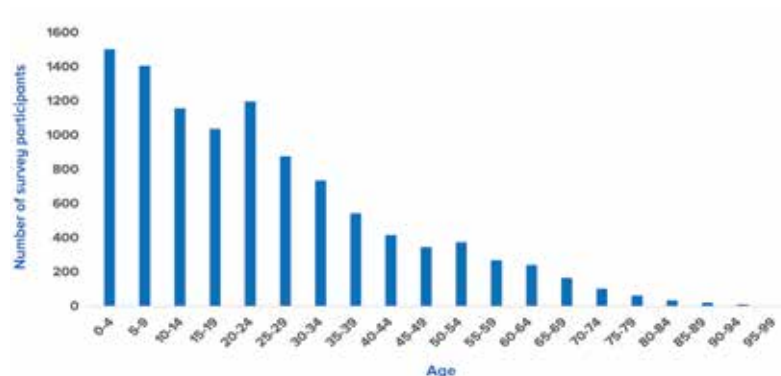
Adults (18 – 59) = 52 per cent



Elderly (60 and older) = Six per cent

The sample is, on average, young with relatively few older people. The mean age of an individual in the sample is 24.28. The median age is 21.

Figure 5: Distribution of age across the sample



## Children



A child is defined as anyone under the age of 18.

- Age 0 – 4 = 12 per cent
- Age 5 – 15 = 30 per cent
- Age 16 – 17 = Five per cent (legal working age)

On average there are approximately three (2.6) children per household. 85 per cent of children in the sample are the sons or daughters of the head of household.

### 3. VAF indicators

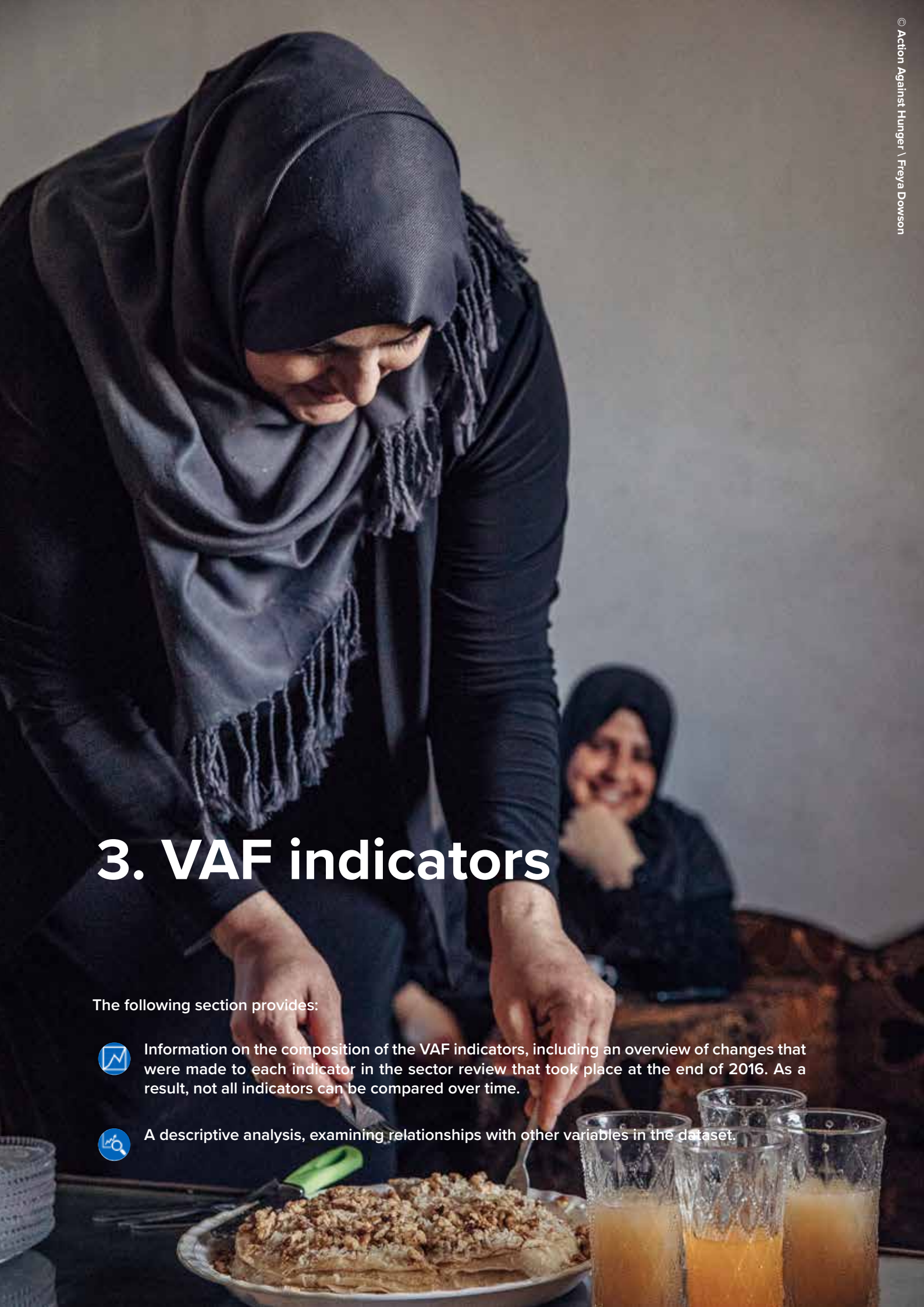
The following section provides:



Information on the composition of the VAF indicators, including an overview of changes that were made to each indicator in the sector review that took place at the end of 2016. As a result, not all indicators can be compared over time.



A descriptive analysis, examining relationships with other variables in the dataset.



## 3.1. Welfare

### Overview

#### Description

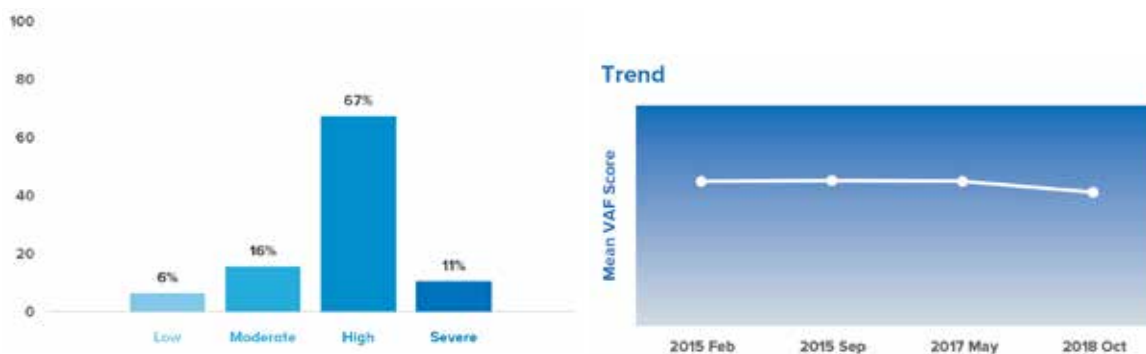
Originally developed in 2015 in partnership with the World Bank, the welfare rating is based on an econometric model which predicts expenditure per capita as a proxy for refugee welfare. The assumption that higher expenditures signify lower vulnerability because expenditure patterns reflect individual choices and higher spending levels indicate more capacity to absorb shocks. A predicted value of expenditure is used to correct for the inaccuracies associated with under, over and miss-reporting expenditures. Economic vulnerability is a core driver for cross-sectoral vulnerabilities, therefore identifying poverty is a cornerstone of the VAF. The poverty thresholds are currently based on the Jordanian poverty line of 68 JOD drawn in 2010<sup>11</sup>.

• <b>Low</b>	Expenditure per capita is greater than 100 JOD per capita
• <b>Moderate</b>	Expenditure per capita is greater than poverty line
• <b>High</b>	Expenditure per capita is less than the absolute poverty line
• <b>Severe</b>	Expenditure per capita is less than the abject poverty line

#### Overall distribution of vulnerability

78 per cent of the population are highly or severely vulnerable, living below the Jordanian poverty line. There is a small increase in the measured expenditures of the survey population compared to 2017, leading to a corresponding reduction of highly vulnerable cases into the moderately vulnerable cases.

Figure 6: VAF welfare rating, proportion of individuals in each vulnerability category and trend over time



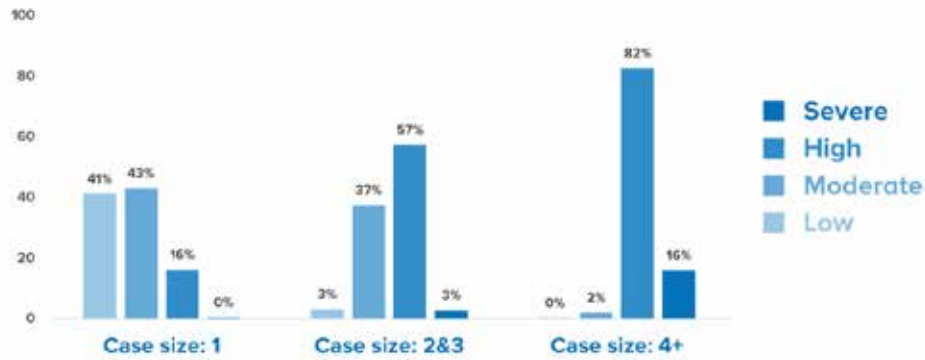
#### Overall distribution of vulnerability segmented by case size

Small cases tend to have higher expenditures than larger cases. 84 per cent of single cases have a low or moderate welfare vulnerability. The equivalent figure for cases with two or three people is 40 per cent. However, this result should be interpreted with caution. Rent is a compulsory expenditure item and accounts for a large proportion of household income. There are also economies of scale associated with renting: holding constant other factors, a single person case would spend more on housing on a per capita basis than larger cases. Therefore, the additional required per-capita rent expenditure for single-cases may not represent lower vulnerability. The nuances of the relationship between expenditure vulnerability for smaller cases were not detected in previous VAF surveys due to a lack of information related to housing costs. The small decline over time in welfare vulnerability detailed above is partly a result of collecting more data related to the rent expenditures of single cases.

11 Report on the poverty situation in Jordan, based on expenditures and income for the family in 2010 (October 2012).

For larger cases, welfare vulnerability has remained more constant over time.

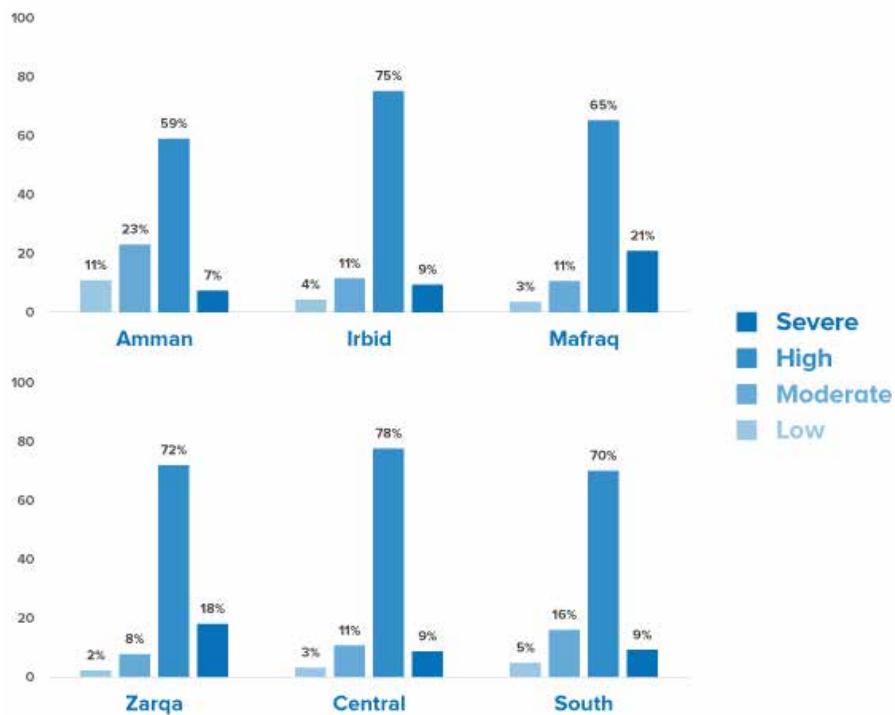
Figure 7: VAF welfare rating, proportion of individuals in each vulnerability category according to case size



### Overall distribution of vulnerability by geographic segmentation

The distribution of welfare vulnerabilities is relatively equal across governorates, except for Amman that has lower rates of highly vulnerable and over double the percentage of low or moderately vulnerable. Compared with other governorates, Amman has the highest proportion of single-cases in the sample, which could explain this observation.

Figure 8: VAF welfare rating, proportion of individuals in each vulnerability category according to region





## Descriptive analysis

### Effects of redistributing expenditure based on household composition

A large portion of case size one and two might under-report their expenditure per capita if they are living with other cases in a joint household. Equally, some cases may legitimately have zero expenditures, for example, an elderly family member may be registered as a separate case to the rest of the family, and the rest of the family may cover the costs of the elderly member. This issue was addressed by reweighting expenditures for multi-case households based on how many individuals were in each household (see section on Data cleaning, testing and analysis). After this adjustment, 58 per cent of all cases retain the original welfare rating, 17 per cent of all cases receive a higher welfare rating and 25 per cent of cases receive a lower welfare rating. The net impact of cases living together is that it lowers their vulnerability through the pooling of financial resources.

### Expenditure, income and debt relationships with poverty

Although VAF vulnerability ratings are not normally expressed as decimals, the mean welfare rating for the 2018 sample is approximately two and a half (2.4). This suggests that the average case falls between moderate and high levels of vulnerability. The mean monthly expenditure per capita is approximately 135.3 JOD. Meanwhile, the sample has a median welfare rating is three which reflects the median expenditure per capita of 85.5 JOD. This difference between the median and mean welfare values demonstrates that most cases have low expenditures but there is a small number of high expenditure cases, which raises the overall average.

Most debt (55 per cent) is incurred to cover rent (27 per cent), health expenditures (17 per cent) and food purchases (11 per cent), indicating that debt is usually accumulated to meet basic needs. Expenditure per capita exceeds income per capita (with a median difference of 18.5 JOD per person per month). Both averages for income are inclusive of payment from regular employment, irregular employment and cash assistance. Table 2 provides a summary of the mean and median welfare ratings, expenditure per capita, debt per capita and income per capita. More details on the relationships between these variables are provided in **Appendix 6.2**.

Table 2: Overall welfare rating and related economic variables per capita

Rating	Mean	Median
<b>Welfare as expressed by vulnerability rating (1-4)</b>	2.4	3
<b>Expenditure per capita (JOD)</b>	135.3	85.5
<b>Debt per capita (JOD)</b>	244.4	71.4
<b>Income per capita (JOD)</b>	91.9	67.0

### Household structure

Expenditure per capita is negatively associated with case size. In other words, mean expenditure per capita consistently decreases as case size increases. For every additional person in a case, spending per head declines by 7.5 JOD.

### Gender

There is a significant difference between the average expenditure per capita of male and female-headed households. It is estimated that male-headed households spend eight JOD more per person each month compared to female-headed households.

Despite differences in the average expenditures between male and female-headed households, it is limited in its usefulness as a variable to explain the pattern of expenditure across the sample. Instead, the proportion of women or girls in a household performs as a superior predictor of expenditure per

capita. The proportion of females in a house is also more strongly correlated with other dimensions of vulnerability such as coping strategies, food insecurity and education dropouts than gender of head of household.

The relationship between expenditure per capita and gender varies across regions. Amman, for example, follows the pattern outlined above: spending is less in female-headed households and declines as the proportion of women and girls increases (see figures 9 and 10). It is also the most populous governorate of Jordan and therefore extensively sampled in this research. In Mafrqa, on the other hand, the opposite is true. In this region, households headed by women or girls spend more on average than their male counterparts. Moreover, there is a positive relationship between expenditure per capita and the ratio of females in cases based in Mafrqa.

Figure 9: Expenditure across regions disaggregated by gender of head of household

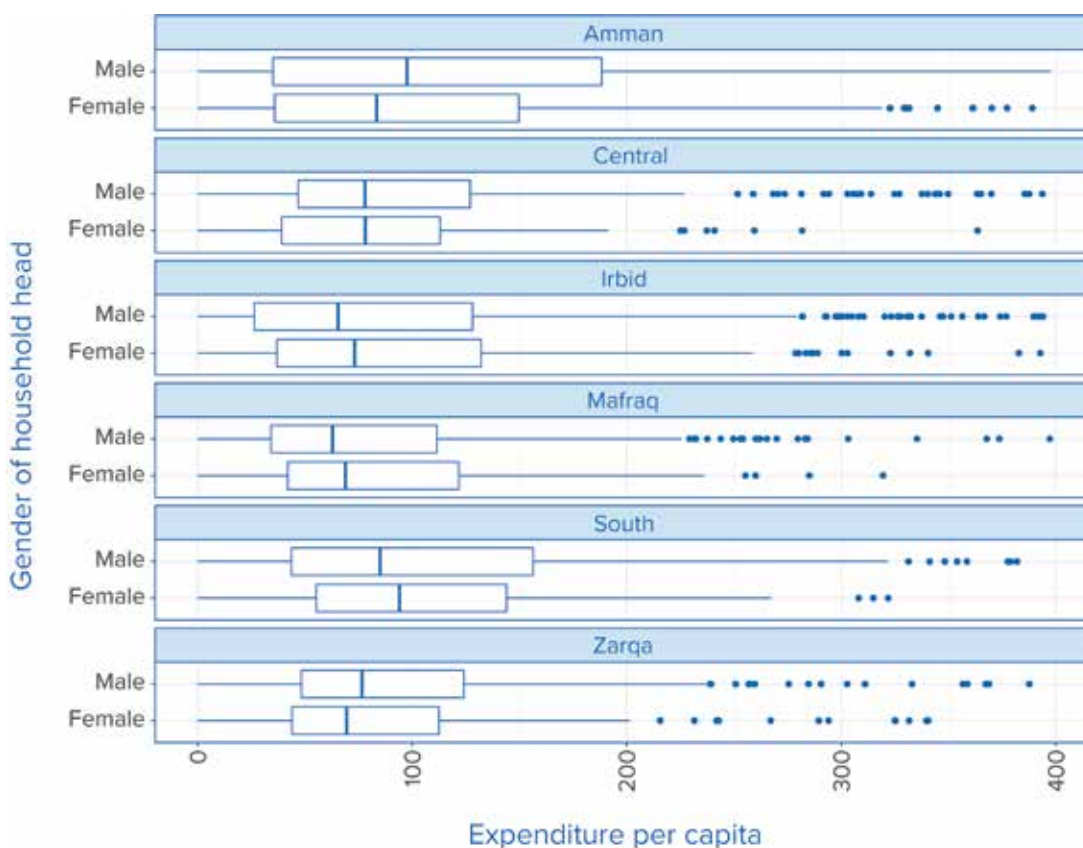
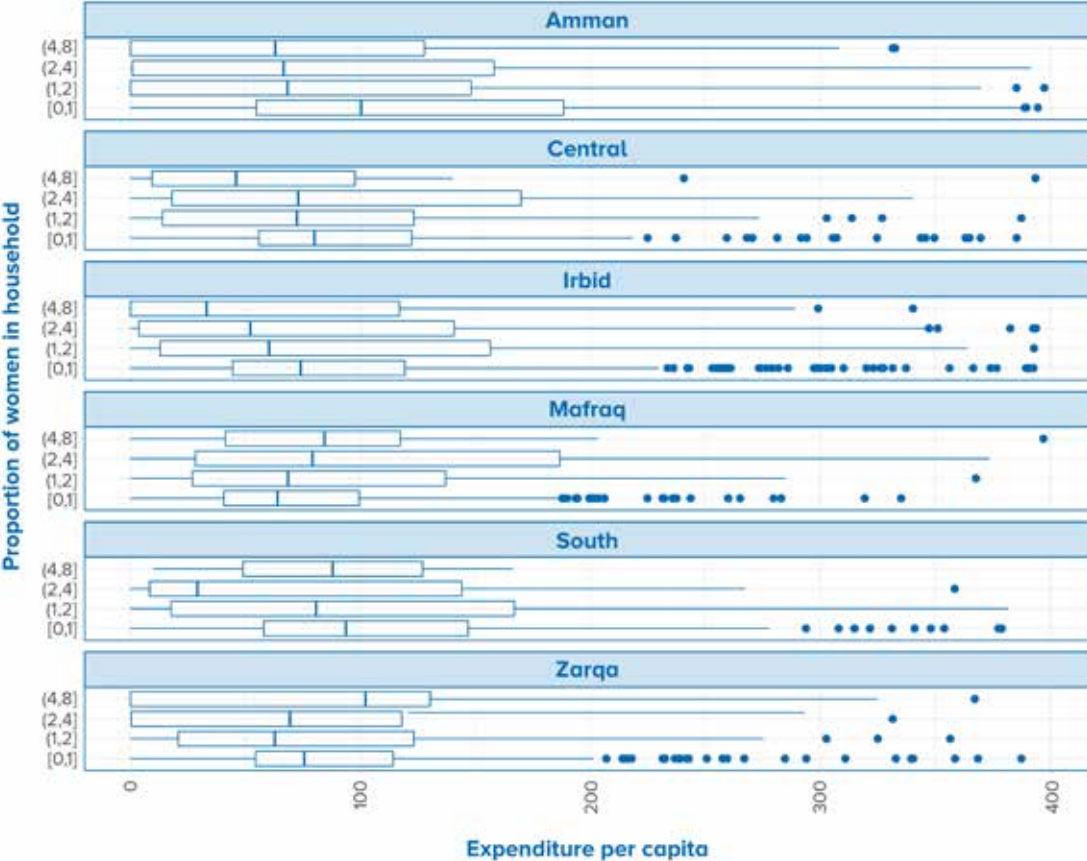




Figure 10: Expenditure across regions disaggregated by the gender ratio of the case



## 3.2. Coping strategies

### Overview

#### Description

The Livelihoods Coping Strategy Index (LCSI) is used to measure food insecurity by assessing reliance on negative coping strategies in order to meet food needs. The 2016 WFP CFSME definition of the LCSI was used, including eight coping strategies (see table 3) that are split into different levels of severity, covering behaviours such as asset depletion, debt and accepting exploitative work, each within a 30-day recall period. The output of the rating for each case is equal to the highest level of severity of the strategies used. The WFP definitions for livelihood coping strategies, No livelihood strategies adopted, Stress coping strategies, Crisis coping strategies and Emergency coping strategies are synonymous with the VAF terms Low, Moderate, High and Severe.

• <b>Low</b>	Not adopting coping strategies
• <b>Moderate</b>	Adopting stress coping strategies
• <b>High</b>	Adopting crisis coping strategies
• <b>Severe</b>	Adopting emergency coping strategies

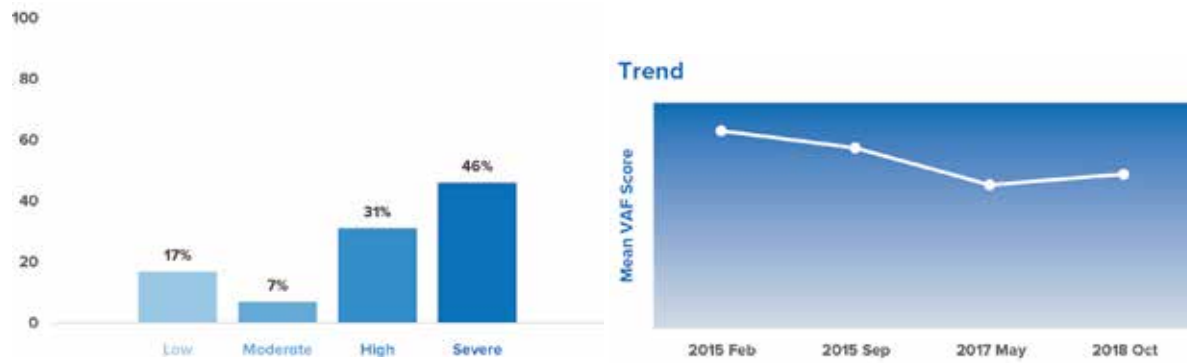
Table 3: Livelihood Coping Strategy Index

Level	Indicator
<b>Stress</b>	Spent savings
	Bought food on credit or borrowed money to purchase food from non-relatives/friends
	Sell household assets/goods (jewellery, phone, furniture, electronics, domestics, etc.)
<b>Crisis</b>	Reduced essential non-food expenditure such as education/health
	Sell productive assets or means of transport (sewing machine, car, wheelbarrow, bicycle, motorbike, etc.)
<b>Emergency</b>	Adult members of the household accepted socially degrading, exploitative, high risk or illegal temporary jobs
	Sent adult family members to beg
	Sent children (under 18) family members to beg

#### Overall distribution of vulnerability

Comparing against 2017 results, the percentage of the population identified as vulnerable (either highly or severely) remained constant at about 75 per cent. However, within the two categorizations, the number of severely vulnerable people increased by 12 per cent while the number of highly vulnerable decreased by 9 per cent. Although the trend of the average vulnerability appears to decrease over time, the proportion of people identified as vulnerable remains high and there are substantial fluctuations over time.

Figure 11: VAF coping strategies rating, proportion of individuals in each vulnerability category and trend over time



### Overall distribution of vulnerability segmented by case size

Larger cases are more likely to resort to negative coping strategies. A possible explanation for this could be the burden of higher dependency ratios.

Figure 12: VAF coping strategies rating, proportion of individuals in each vulnerability category according to case size



### Overall distribution of vulnerability by geographic segmentation

The use of coping strategies varies across different geographic areas. In Zarqa, for example, 52 per cent of cases report resorting to emergency level coping strategies. The equivalent proportion for Irbid was only 35 per cent.

Figure 16: Regression results for the use of children begging as a coping strategy

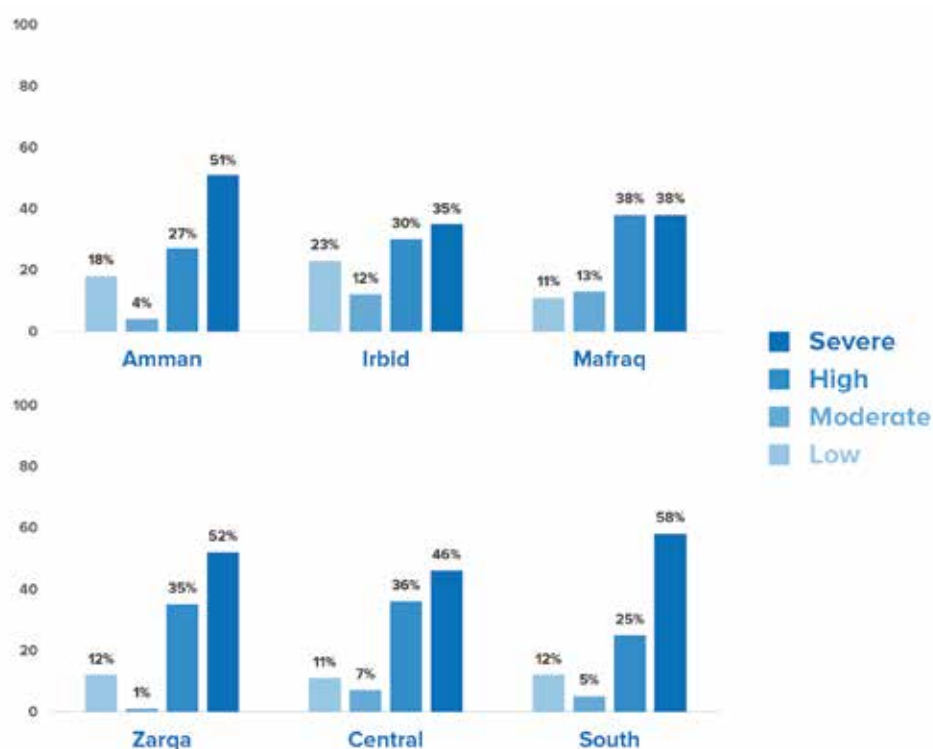
	Dependent Variable:		
	No Children Begging (1)	No Because I Have Exhausted (2)	Children Begging (3)
Case size	-0.089 (0.110)	-0.500*** (0.145)	-0.214 (0.166)
Medical expenditure per capita	-0.0003 (0.002)	-0.001 (0.003)	0.001 (0.003)
Food consumption score	-0.005 (0.015)	-0.009 (0.017)	-0.014 (0.020)
Gender ratio in household	-0.260 (0.591)	-0.133 (0.677)	-0.283 (0.815)
Number of disabilities	0.013 (0.082)	0.110 (0.091)	0.086 (0.103)
Global CSI	0.192** (0.093)	0.214** (0.095)	0.364*** (0.099)
Proportion of dependents	0.068 (0.256)	0.157 (0.288)	0.523* (0.296)
Constant	5.956*** (1.563)	2.559 (1.730)	-3.143 (2.247)
Akaike Inf. Crit.	644.675	644.675	644.675

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

The number starts next to the coefficient indicate the level of significance for each estimate. Case size, for example, determines 'No, because I have exhausted this strategy' at a one per cent significance.

Figure 13: VAF coping strategies rating, proportion of individuals in each vulnerability category according to region



## Descriptive analysis

### Weighted LCSl

For a more in-depth investigation into coping strategies a modified version of the standard LCSl was created, referred to in this report as the Weighted LCSl. In addition to the eight WFP LCSl indicators listed above, six additional coping strategies were included in the 2019 study. Together these 14 coping strategies form the Weighted LCSl. The full list of the indicators is provided in table 4. Emergency coping strategies were assigned a double weight.

Table 4: Weighted Livelihoods Coping Strategy Index

Level	Indicator
<b>Stress</b>	Spent savings
	Bought food on credit or borrowed money to purchase food from non-relatives/ friends
	Bought household goods on credit
	Took a loan to purchase for essentials
	Sell household assets/goods (jewellery, phone, furniture, electro domestics, etc.)
	Changed accommodation location or type in order to reduce rental expenditure
<b>Crisis</b>	Reduced essential non-food expenditure such as education/health
	Sell productive assets or means of transport (sewing machine, car, wheelbarrow, bicycle, motorbike, etc.)
	Sent children (under the age of 18) to work in order to provide resources
	Withdrew children from school
<b>Emergency</b>	Adult members of the household accepted socially degrading, exploitative, high risk or illegal temporary jobs
	Sent adult family members to beg
	Sent children (under 18) family members to beg
	Has anyone in your family aged younger than 15 married?

Female and male-headed households have a similar rating according to the Weighted LCS. Households headed by men tend to use more emergency coping strategies. Factors associated with an increase in the frequency of coping strategies are a higher female-to-male household ratio and a larger household size. Households with more recurrent negative coping strategies are also more likely have a higher incidence of reported disabilities and ratio of non-autonomous adults.

### Frequency analysis

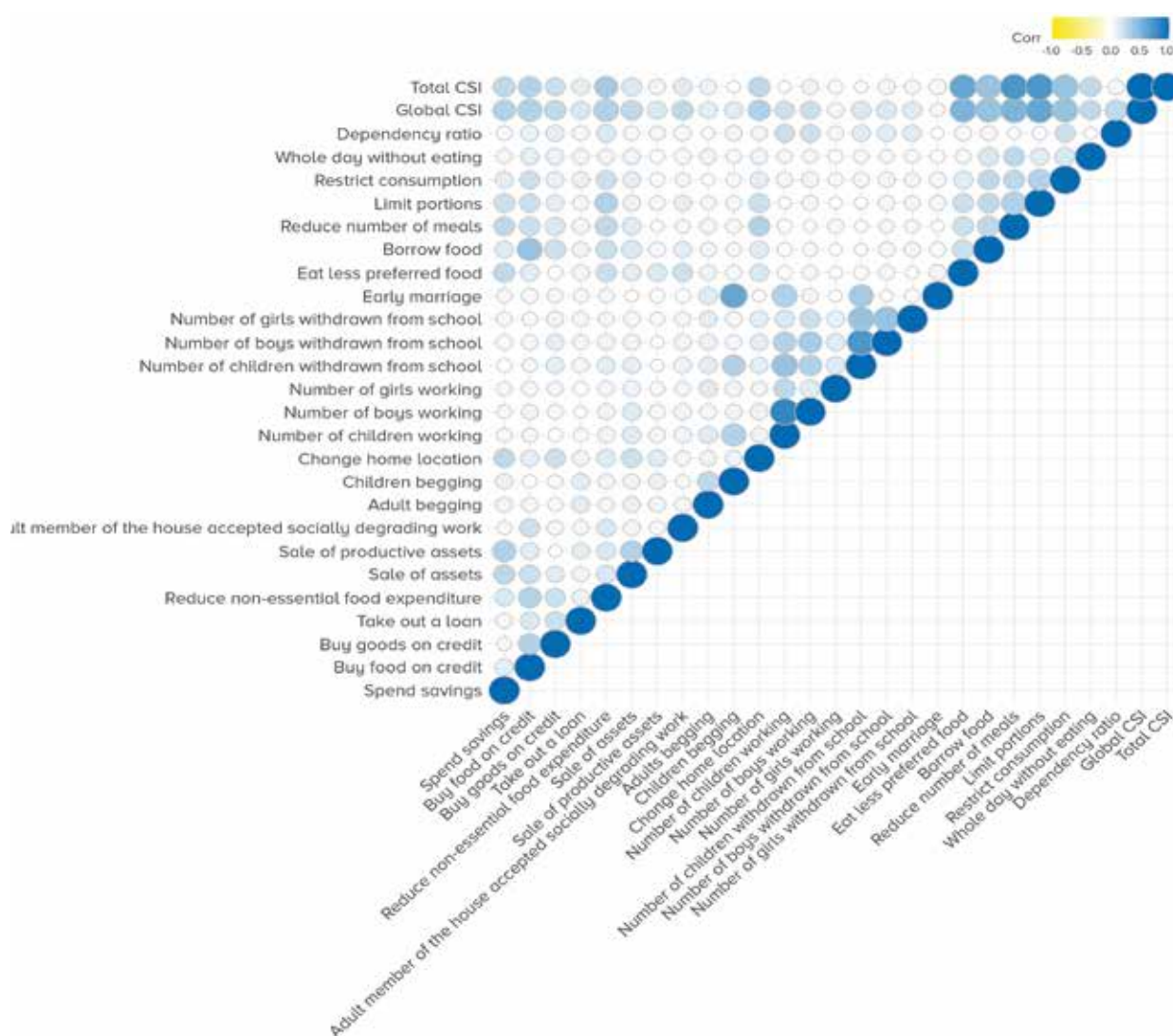
In assessing the frequency and types of livelihood coping strategies reported by the sampled population, the most frequently adopted ones are:

1. **Stress:** Buying food on credit,
2. **Emergency:** Households accepting socially degrading, exploitative, high risk or illegal temporary jobs<sup>12</sup>, and,
3. **Crisis:** Reduction of essential non-food expenditures.

Most respondents in the sample rely on buying food on credit, which could show linkages to responses to the Reduced Coping Strategy Index (described below) that shows that consuming less preferred food is the most commonly used strategy related to food consumption. As figure 14 below demonstrates, there is a strong correlation between coping strategies of children being withdrawn from school, early marriage and child begging or child labour. On average, respondents used two and half coping strategies (2.45) over the last 30 days.

12 Note that the survey does not include a standard definition for socially degrading, exploitative, high risk or illegal temporary jobs, as there is not an agreed definition in the context. It also represents a sensitive and personal issue. Therefore, the question was left for the respondent to interpret independently and respond according to their own perceptions.

Figure 14: Correlation table for livelihood coping strategies



### Reduced Coping Strategy Index

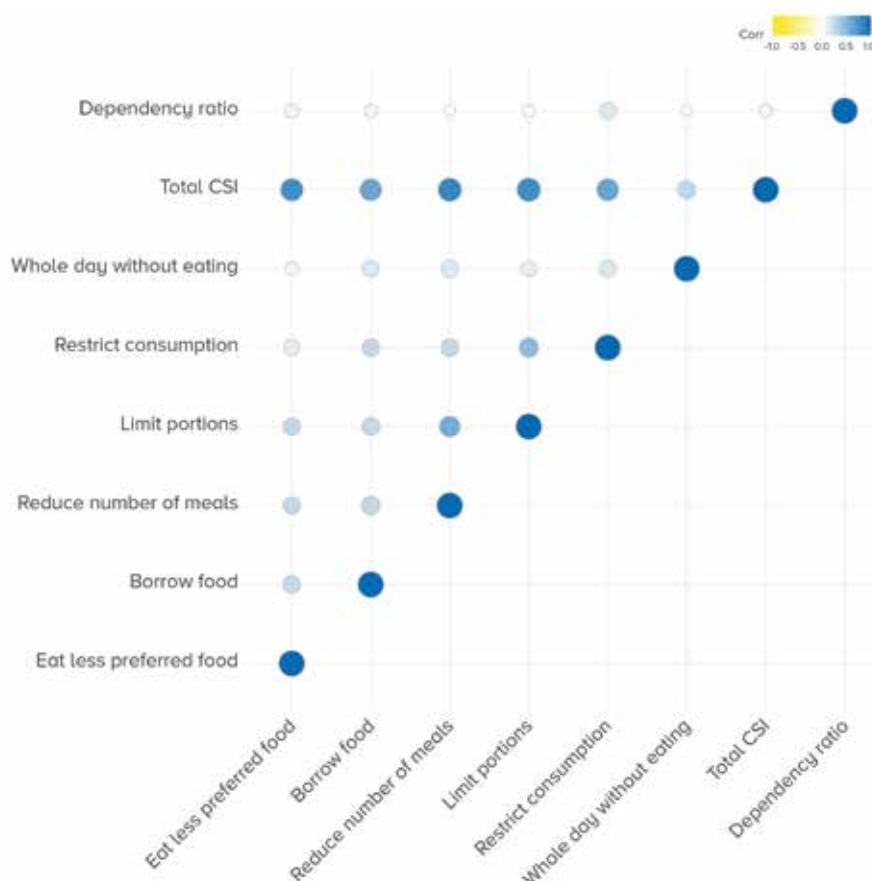
The Reduced Coping Strategy Index (RCSI) is another proxy indicator of household food insecurity, measuring strategies or behaviors that are adopted in normal day-to-day life. It is standard WFP Global indicator calculated with a universal set of behaviours, each of which is assigned a weighting (see table 5). The calculation for the RCSI is the sum of the number of times each behaviour was utilised in a seven-day recall period, multiplied by its severity weighting.

Table 5: Reduced Coping Strategy Index behaviours and weightings

Behaviour	Weighting
<b>Eating less preferred foods</b>	1
<b>Borrowing food / money from friends and relatives</b>	2
<b>Limiting portions at mealtime</b>	1
<b>Limiting adult intake</b>	3
<b>Reducing the number of meals per day</b>	1

Reducing the number of meals per day and limiting portions at mealtime are strategies that are strongly correlated with each other in the sample (see figure 15). The adoption of RCSI strategies is unrelated to the dependency ratio within a case.

Figure 15: Correlation table for food coping strategies



Previous studies have suggested that there should be an association between the RCSI and LCSI<sup>13</sup> and this is confirmed by this study. There is a moderate and positive correlation between LCSI and RCSI (with a coefficient of 0.33). As a result, the RCSI indicator will be added to the VAF data collection tool in 2019 for regular VAF data collection.

This study combined the variables used in the Weighted LCSI and the RCSI to create a count of all coping strategies in the survey tool. According to this combined indicator, on average approximately ten (10.06) coping strategies were used by each household in the data set with a maximum possible score of 19. The South had the lowest average rating (8.87) while Central region had the highest (13.06). The difference between female and male-headed households is largely unrelated to the incidence of coping strategies. The average Weighted CSI score for female led households is under ten (9.77) compared to just over ten (10.18) for equivalent male-led households.

### Correlations between coping strategies and expenditure per capita

There is only a weak relationship between expenditure per capita and emergency coping strategies such as child begging. The use of child begging as a coping strategy also appears unrelated to food consumption. The results detailed below in figure 16 demonstrate that the incidence of child begging is associated with household structure and the total number of coping strategies pursued by the household. In addition, there is a positive relationship between the proportion of non-autonomous adults in a household and the incidence of child begging.

Qualitative methods, as opposed to the survey approach adopted in this report, may be more suitable to analysing the socio-cultural drivers of using child begging as a coping strategy.

13 [https://documents.wfp.org/stellent/groups/public/documents/manual\\_guide\\_proced/wfp211058.pdf](https://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp211058.pdf)



### 3.3. Dependency ratio

#### Overview

#### Description

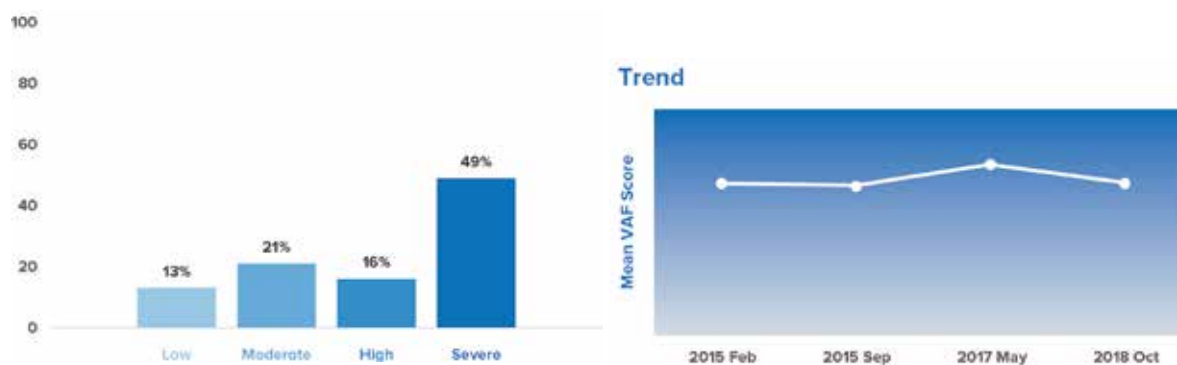
The VAF dependency ratio is identified as a factor that contributes to both the resilience and vulnerability of refugees for most sectors. The dependency ratio is an indicator that describes the economically active and inactive people in a family<sup>14</sup> and is the relationship of dependents (non-autonomous adults, children and the elderly<sup>15</sup>) to non-dependents (able-bodied, working-age members). As such, a dependency ratio greater than 1 means that there are more dependents than working age household members.

• <b>Low</b>	Less than 0.6 dependents per non-dependent
• <b>Moderate</b>	0.6 to 1.2
• <b>High</b>	1.2 to 1.8
• <b>Severe</b>	More than 1.8 dependents per non-dependent

#### Overall distribution of vulnerability

66 per cent of the surveyed population live in cases classified as highly or severely vulnerable, with nearly 50 per cent having more than 1.8 dependents per non-dependents. The levels of vulnerability have remained constant over time, which is unsurprising given that there has been no notable demographic change to the refugee population between 2017 and 2018.

Figure 17: VAF dependency ratio rating, proportion of individuals in each vulnerability category and trend over time



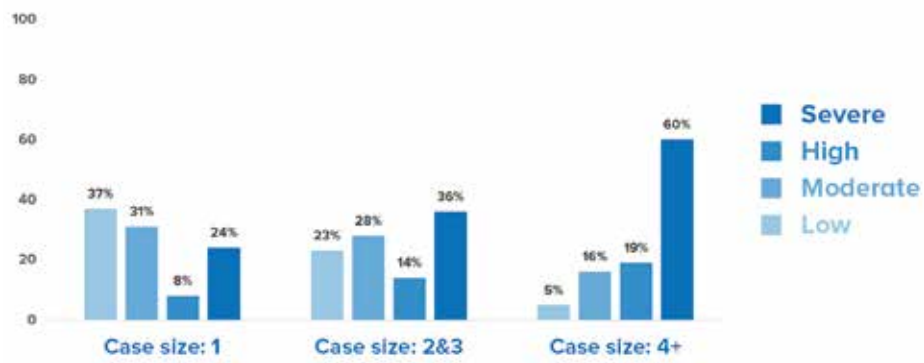
#### Overall distribution of vulnerability segmented by case size

As is expected, larger cases with have a higher dependency ratio rating due to the presence of more dependent children.

14 Family members between the ages of 18 and 60 are considered as economically active, whilst children from the ages of 0 to 17 and people above the age of 60 are considered as the economically inactive cohort. The ratio is disability adjusted (i.e. if a family member of age 18w to 60 is chronically ill or is disabled, the person has a condition which affects their ability to be economically active or manage daily activities. (UNHCR, VAF Baseline Study Report, 2015)

15 Ibid

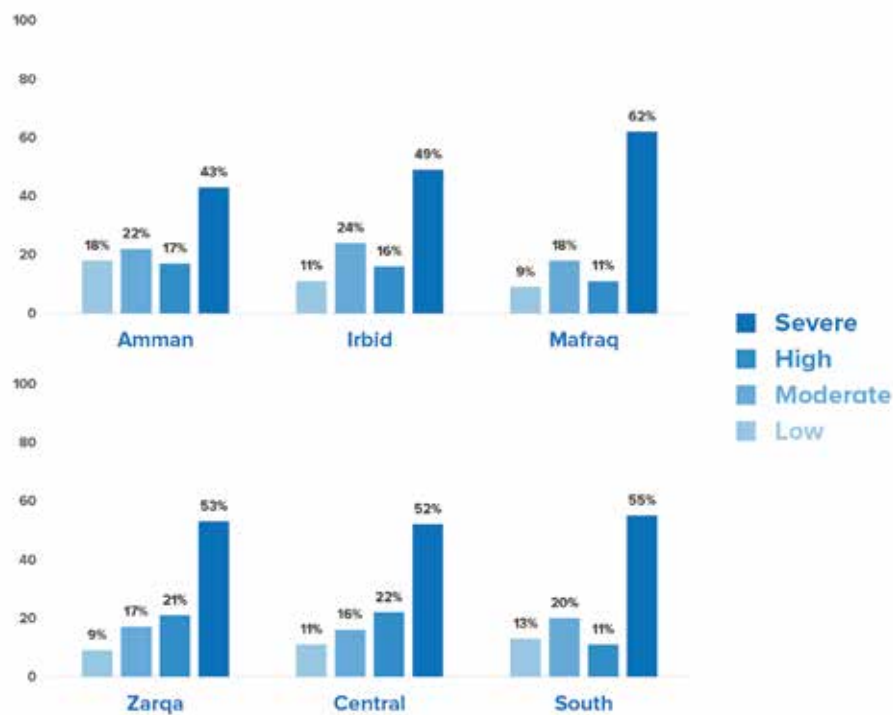
Figure 18: VAF dependency ratio rating, proportion of individuals in each vulnerability category according to case size



### Overall distribution of vulnerability by geographic segmentation

Amman has the highest proportion of less vulnerable population according to dependency ratio. This could be due to Amman having smaller families or families with more working age males. 45 per cent of the cases registered in Amman are case size one, which is over 15 per cent more than all other regions (see figure 19).

Figure 19: VAF dependency ratio rating, proportion of individuals in each vulnerability category according to region



## Descriptive analysis

### Disability

This section focuses on the number of self-reported disabilities via the Washington Group (WG) Questions, which is used along with other factors, such as age, to determine whether individuals are autonomous or not. Disability was identified using the following short set WG Questions<sup>16</sup>:

- Do you have difficulty seeing, even if wearing glasses?
- Do you have difficulty hearing, even if wearing a hearing aid?
- Do you have difficulty walking or climbing steps?
- Do you have difficulty remembering or concentrating?
- Do you have difficulty (with self-care such as) washing all over or dressing?
- Using your normal customary language, do you have difficulty communicating, for example understanding or being understood?

In addition to the six Washington Group Questions above, the following three questions were also asked during the survey:

- Does the identified medical problem / disability affect your ability to perform activity of daily living (eating, bathing, toileting, dressing, transferring)?
- Does the identified medical problem/disability affect your ability to work?
- Are you able to access the specialized services you need?

A response of either 'Yes, a lot of difficulty' or 'Cannot do at all' constitutes one disability. For the purposes of this research, an individual can have a maximum of nine disabilities. The total number of disabilities was then aggregated by household.

The most frequently reported disabilities are hearing, seeing and walking. Mothers and fathers report the highest number of disabilities.

### Geographic variation

In some regions, such as Mafraq, households have both a high number of reported disabilities per household and a higher dependency ratio. In others, namely Amman, households have a below average number of disabilities and low dependency ratio (see table 6).

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<sup>16</sup> The Washington Group on Disability Statistics is a UN city group established under the United Nations Statistical Commission. The main purpose of the WG is the promotion and coordination of international cooperation in the area of health statistics focusing on disability data collection tools suitable for censuses and national surveys. Its major objective is to provide cross-nationally comparable population-based measures of disability.

Table 6: Mean number of disabilities and VAF dependency rating across regions

Governorate	Mean number of total reported disabilities per household	Mean dependency ratio rating	Proportion of the sample (%)
Amman	4.38	1.53	44
Central	6.67	1.88	10
Irbid	4.80	1.86	22
Mafraq	6.58	2.26	10
South	4.75	1.91	6
Zarqa	5.97	2.01	8
<b>Total Means</b>	<b>5.07</b>	<b>1.77</b>	<b>100</b>

### Effects of case size

There is a positive trend between case size and the mean number of reported disabilities, meaning that as the case size increases so does the total number of disabilities. Table 7 shows the number of disabilities reported per household (not the number of individuals with disabilities) in each household; it is therefore possible for a single case to identify multiple disabilities.

Table 7: Mean number of disabilities and VAF dependency rating across case sizes

Case size	Mean number of total reported disabilities per household	Mean dependency ratio rating	Proportion of the sample
1	4.43	1.25	40
2	4.79	1.45	17
3	5.35	1.60	10
4	5.62	1.84	10
5	5.75	2.45	9
6	6.00	2.92	6
7	6.22	3.43	4
8	6.54	4.12	4
9	6.98	4.20	1
<b>Total</b>	<b>5.07</b>	<b>1.77</b>	<b>100</b>

### Disability and medical expenditure

There is some evidence to suggest that larger cases may be more vulnerable to the financial pressures associated with having a disability. This is demonstrated in the table below which shows that spending per head on doctors' fees and the average number of disabilities both increase with case size. However, case size and the mean number of disabilities is an insufficient explanation of expenditure on medication. Furthermore, case size two is an anomalous result that fails to conform to the general pattern between health expenditures and disabilities.

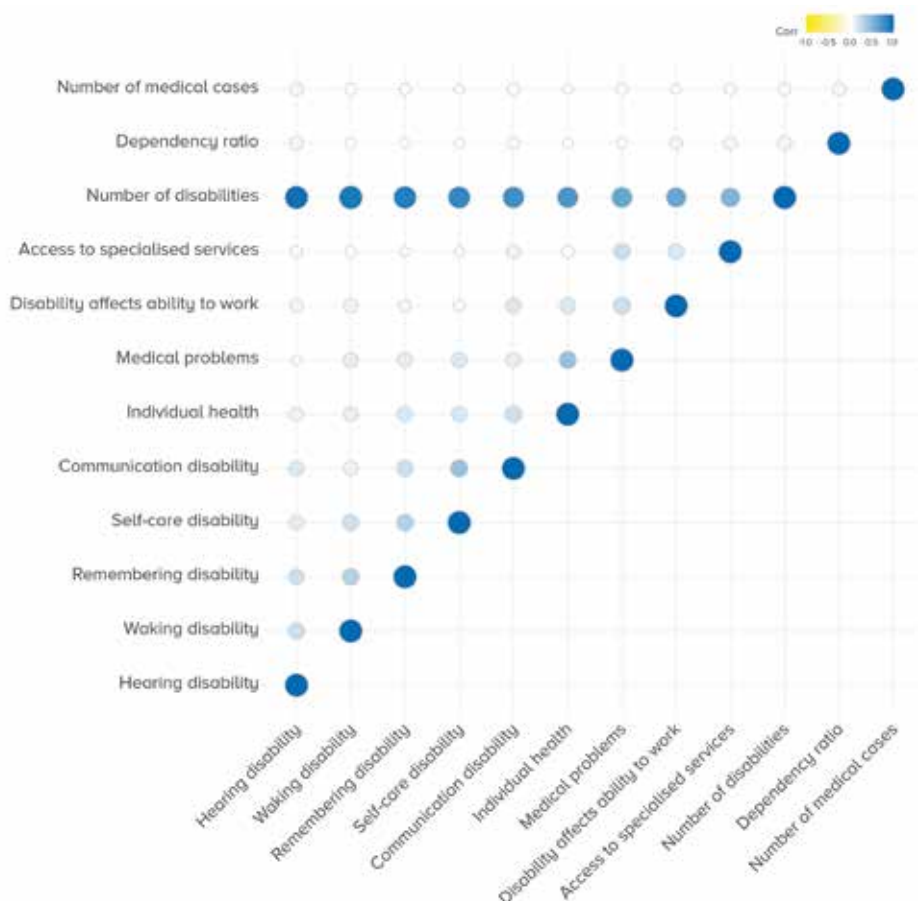
Table 8: Mean number of disabilities and health expenditures

Case Size	Mean number of reported disabilities per household	Medication expenditure per capita (JOD)	Expenditure on doctors' fees per capita (JOD)
1	4.43	39.12	99.57
2	4.79	64.27	143.22
3	5.35	58.94	112.01
4	5.62	59.63	119.81
5	5.75	48.73	108.68
6	6.00	61.08	109.52
7	6.22	69.87	130.56
8	6.54	56.82	129.75
9	6.98	45.51	149.8
<b>Totals</b>	<b>5.07</b>	<b>51.39</b>	<b>114.28</b>

### Correlations with disability, dependency ratios and household size

The proportion of economically inactive to active people within a case and the reported number of disabilities per household has a negative effect on expenditure per capita. As figure 20 shows, medical conditions affect a respondents' ability to work to a greater extent than having a disability. There are only weak correlations between the different forms of disability. There is a stronger correlation between the total number of dependents and the different types of disability.

Figure 20: Correlation table between types of disability, reported medical or health problems, total number of disabilities, effect of disability on ability to work and access to specialised services



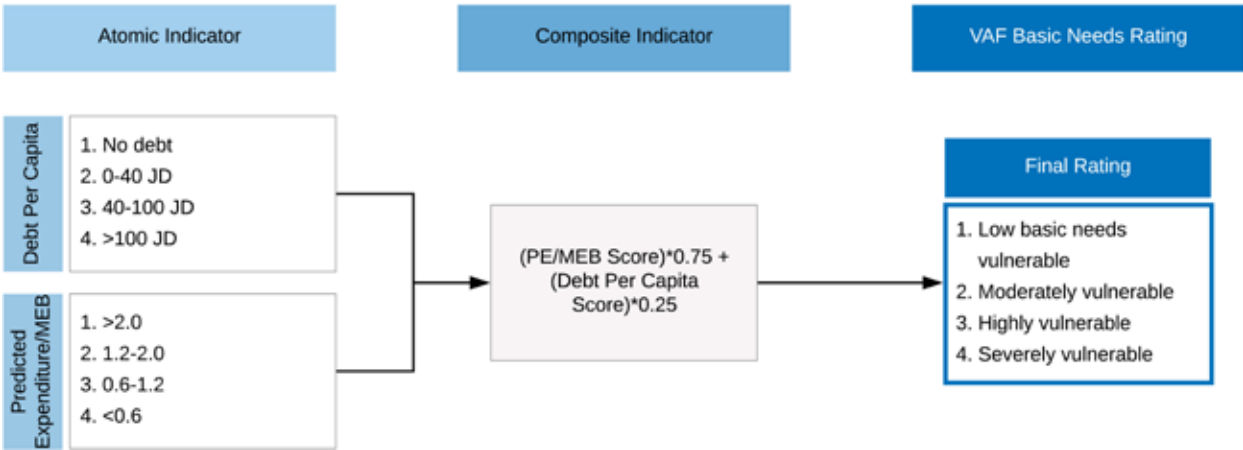
### 3.4. Basic needs

#### Overview

#### Description

Basic needs are the financial and non-financial minimum standards a family needs to be able to maintain their welfare and dignity. Most Syrian refugee families have limited access to sustainable livelihood options and need financial, non-financial and non-food assistance. High levels of debt per capita and low levels of expenditure per capita make families vulnerable in this sector. Many families have depleted all assets and live in unfurnished or semi-furnished apartments. Often cases face considerable hardship during the winter months and lack adequate bedding, heating and floor coverings. Most are without access to regular income or financial support that would allow them to manage their own needs.

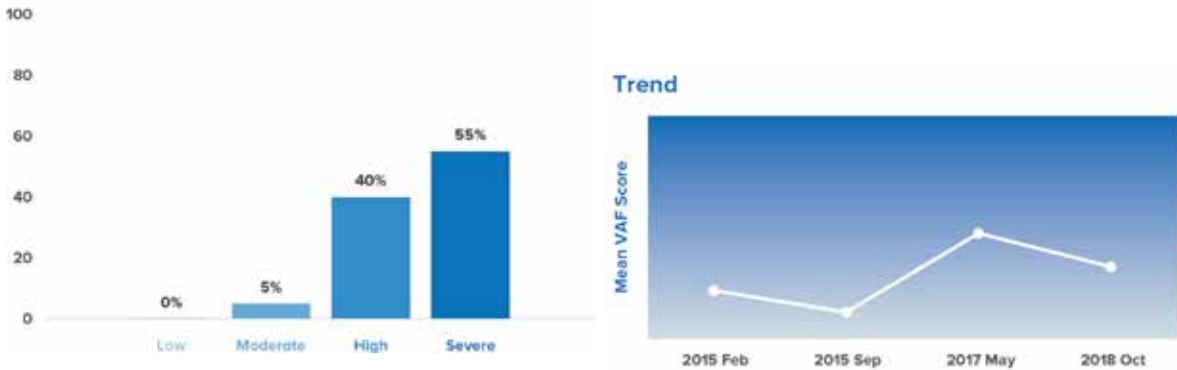
At the end of 2016 the basic needs sector redefined the vulnerability indicators, to simplify it and to reduce duplication with other indicators such as coping strategies. The most significant change was the introduction of the expenditure relationship to MEB indicator. This was designed to determine if the case could meet their basic needs before considering debt. The changes to the indicator was purposefully designed to allow some continuity with previous definitions.



#### Overall distribution of vulnerability

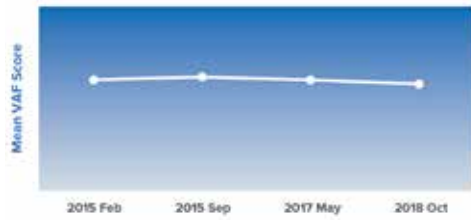
The changes to the basic needs indicator were designed to maintain some degree comparability over time. The trend is one of consistently high levels of basic needs vulnerability. Nearly 55 per cent of the population are identified as severely vulnerable and 40 per cent as highly vulnerable, 95 per cent in total, compared to 78 per cent in total identified by the welfare rating.

Figure 21: VAF basic needs rating, proportion of individuals in each vulnerability category and trend over time





**Trend**



**Debt per capita:** 62 per cent of the population are identified as being vulnerable to debt. Nearly 40 per cent have over 100 JOD of debt per capita, which, when multiplied by the case size for large families, adds up to a significant amount. Debt vulnerability has remained quite consistent over time.



**Trend**



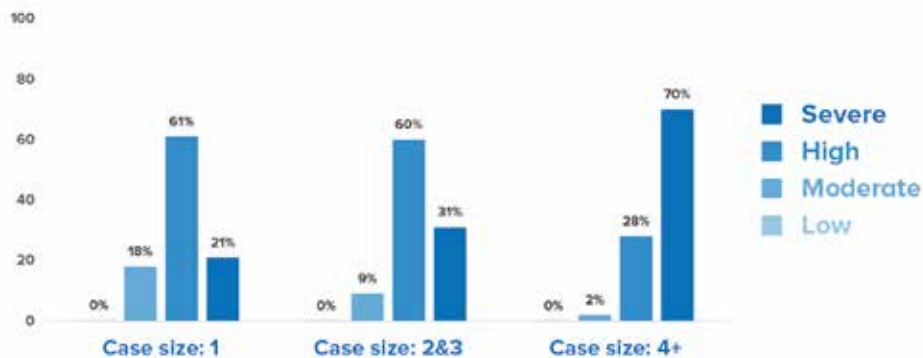
**Expenditure and MEB:** The whole population were identified as have expenditures lower than the MEB, with 76 per cent having spending less than half. Although the whole population is identified as being vulnerable, Amman had the lowest levels of severely vulnerable at 60 per cent.



**Overall distribution of vulnerability segmented by case size**

Larger case sizes are identified as being most severely at risk, which is largely driven by the relationship between rating of expenditure and MEB, where 87 per cent of cases expenditures are less than half of the MEB.

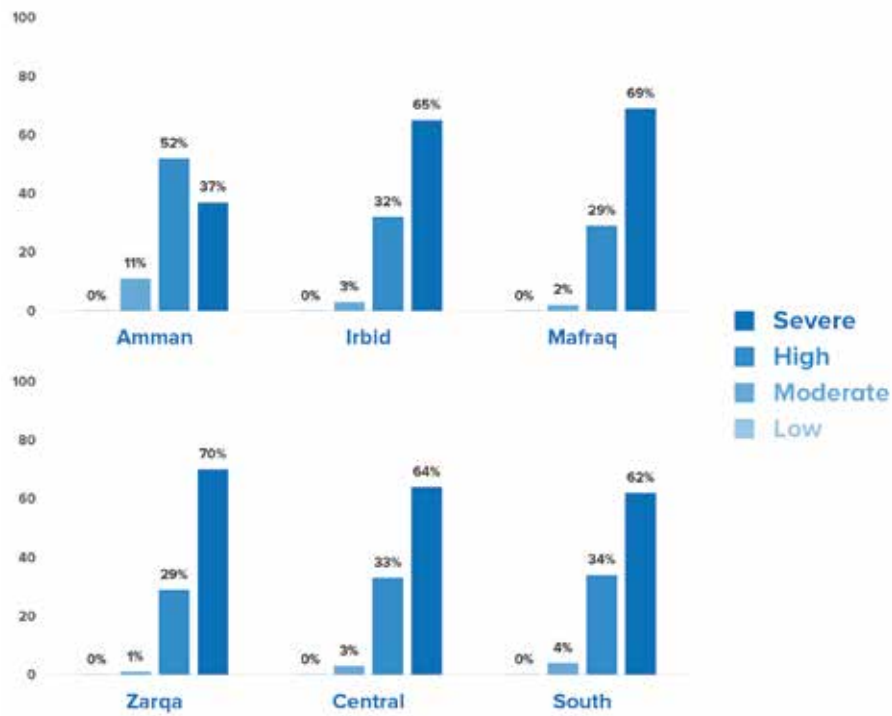
Figure 22: VAF basic needs rating, proportion of individuals in each vulnerability category according to case size



**Overall distribution of vulnerability by geographic segmentation**

Amman governorate is the least vulnerable governorate despite having 89 per cent of its population being vulnerable. Outside of Amman, the vulnerability distribution trends are similar.

Figure 23: VAF basic needs rating, proportion of individuals in each vulnerability category according to region

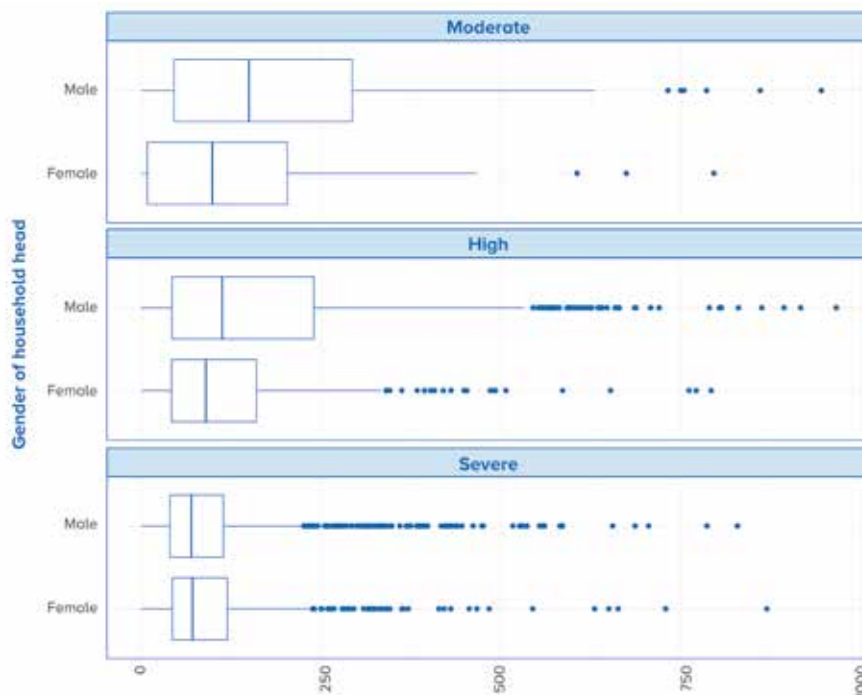


## Descriptive analysis

### Basic needs rating and expenditure

As is demonstrated in figure 24, the variation of expenditure per capita is greater for cases categorised as moderately vulnerable according to the basic needs rating, compared to those that are severely or highly vulnerable. As expected, median expenditure for both male and female households is higher for cases who can meet their basic needs.

Figure 24: Basic needs rating and expenditure per capita across male and female-headed households



Note: there are no cases classified as low vulnerability according to the VAF basic needs indicator.

## 3.5. Education

### Overview

#### Description

Access to education for registered Syrian refugee school aged children is currently free in Jordanian state schools, however, Syrian families face several barriers to ensure that all their children can enrol and remain in education. These include social, protection, legal, economic and educational barriers, for example, the distance to school, availability of places in a school, financial or economic barriers and having a history of interrupted schooling.

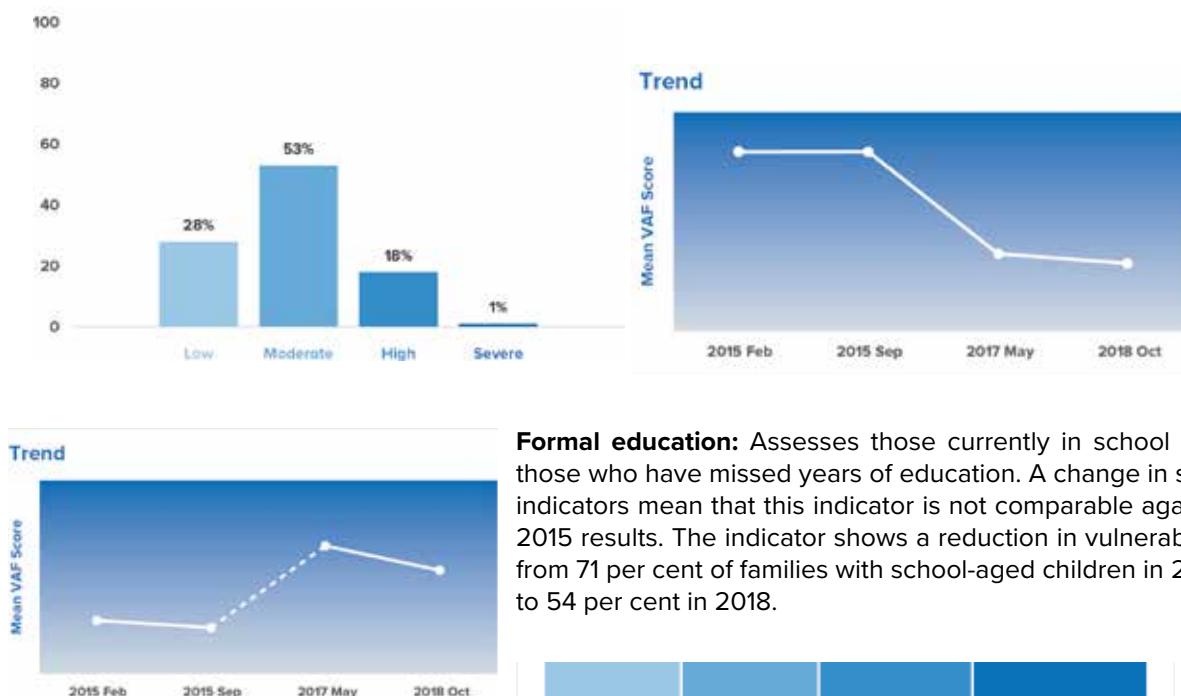
The VAF Education indicator is focused on two key areas. Firstly, children who remain out of school despite the increase in available formal places. Secondly, children who are at risk of not completing education.

#### Overall distribution of vulnerability

A relatively small proportion of the sample with school-aged children (19 per cent) are classified as vulnerable according to the VAF education rating.

There were significant changes to the indicator definition at the end of 2016, which means that it is impossible to compare the results to studies prior to this date. The only atomic indicators unchanged are the school-aged children rating and the education attendance rating, both of which are approximately constant over time. Since the 2017-18 survey, any changes to indicator distributions have been minor.

Figure 25: VAF education rating, proportion of individuals in each vulnerability category and trend over time

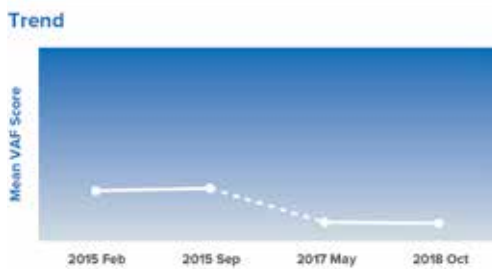




**School-aged children:** A count of how many children are in a case. This indicator has remained the same since 2015. The recent decrease in vulnerability identified here could be related to children becoming 18 years of age. 40 per cent of families with children are identified as being highly or severely vulnerable.



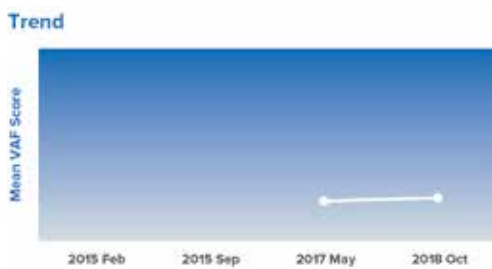
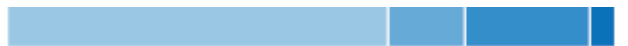
**Formal education attendance:** Shows what percentage of school-aged children are attending school. This indicator has remained the same since 2015. 19 per cent of cases with school-aged children have less than half or no children attending school.



**Years of missed education:** Shows what percentage of school-aged children have missed three or more years of school. This indicator has changed since 2015. 6 per cent of cases with children identified as having more than have or all children missing three years of school.

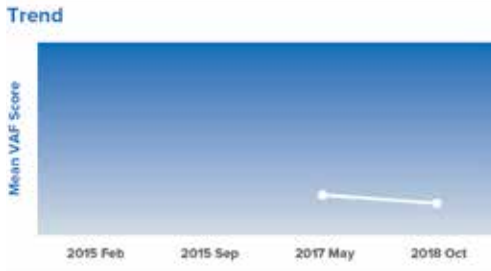


**Risk of non-completion:** Measures factors that could lead to early dropouts. This indicator has changed since 2015.

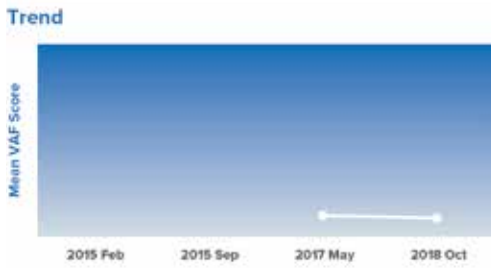


**Difficulties experienced at school:** 25 per cent of cases with school-age children state financial constraints, distance, discrimination and humiliation, verbal abuse, physical abuse, child labour, early marriage or inadequate facilities for disabilities as potential reasons a child may drop out. The indicator has remained relatively constant since it was devised in 2017.





**Access to education:** A new indicator in 2017, capturing reasons that a child is not attending school.



**Reasons for non-attendance:** Introduced in 2017, this indicator measure the proportion of cases stating child labour, financial constraints, safety fears, child marriage, distance and disability, family obligations or were refused entry as reasons for not currently attending school. It has remained relatively constant since 2017.



**Not in any form of education:** This indicator was also created in 2017. 28 per cent of cases with children state that they are not enrolled. The indicator has remained relatively constant since 2017.



### Overall distribution of vulnerability segmented by case size

Vulnerabilities related to not participating in education remain approximately constant across different case sizes.

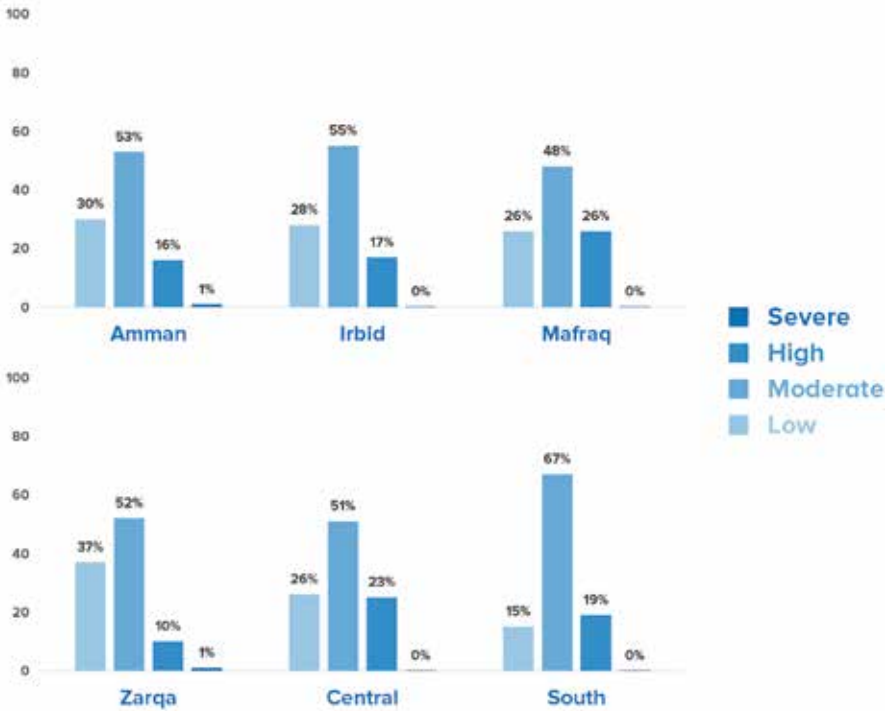
Figure 26: VAF education rating, proportion of individuals in each vulnerability category according to case size



### Overall distribution of vulnerability by geographic segmentation

Children in Mafraq and the Central region are most vulnerable to factors associated with not attending school. Zarqa and Amman have the lowest education vulnerability ratings.

Figure 27: VAF education rating, proportion of individuals in each vulnerability category according to region



**Descriptive analysis**

**Education costs**

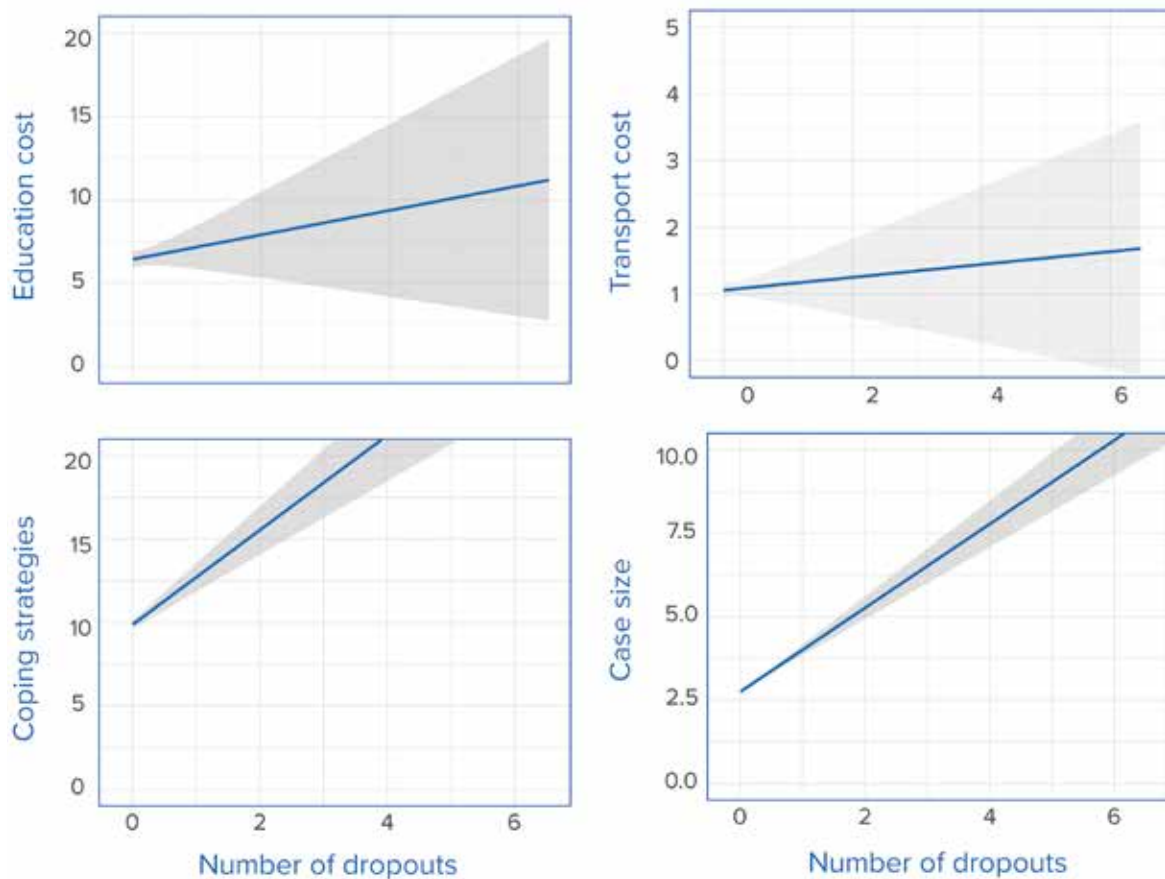
Education materials represent the largest costs of schooling, especially in larger cases. Families spend less on transport, private school fees and other education expenses than they do on materials. Furthermore, education costs are strongly positively correlated with case size; large cases have more children that incur educational expenses. Geographically, refugees in Central region and Zarqa cases experience the highest education-related costs. Cases in these two areas spend approximately 40 per cent more than average on education materials, school related expenses and private school fees. The key determinant of education costs is overall expenditure per capita whereas the distance to school is unrelated to education costs.

**Out-of-school youth**

The incidence of out-of-school youth are positively correlated with total education costs, frequency of coping strategies and case size, while distance to school has a very low correlation, see figure 28. An increase of out-of-school youth is evident for larger cases and for those resorting to a greater number of coping strategies. Smaller cases and those with a larger proportion of females are less likely to have out-of-school youth. Finally, having a disability does not affect the incidence of out-of-school youth.



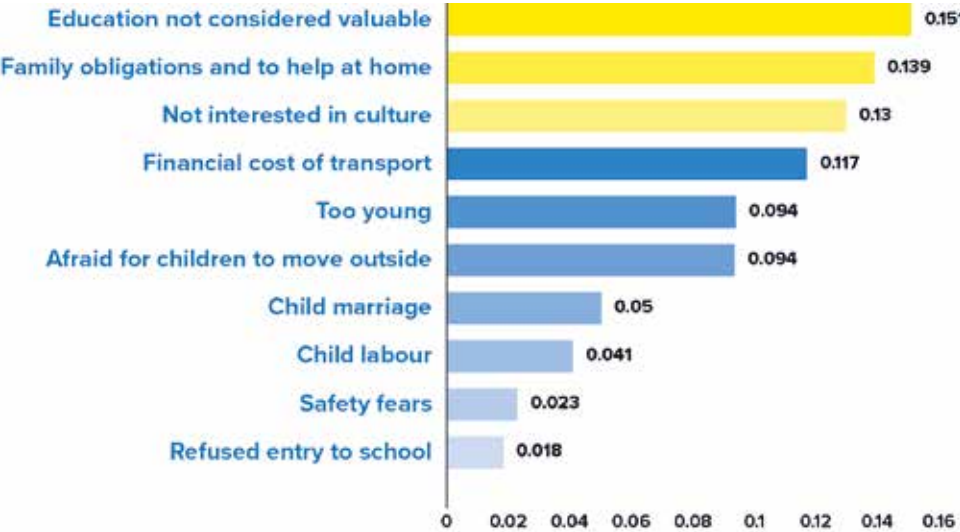
Figure 28: Relationship between dropouts and causal factors



### Reasons for out-of-school youth

It is important to note that a child not attending school can also be explained by cultural and social norms. Perceptions of the value of education and family obligations affect over 30 per cent of reported out of school youth cases, see figure 29. This has implications for the type of assistance and programming required to promote school attendance, as the study indicates that barriers to education are not solely restricted to economic constraints or other variables that are easy to quantify. Qualitative methods might be better placed to probe the causal drivers for dropouts.

Figure 29: Reasons for out of school youth



**Gender and education**

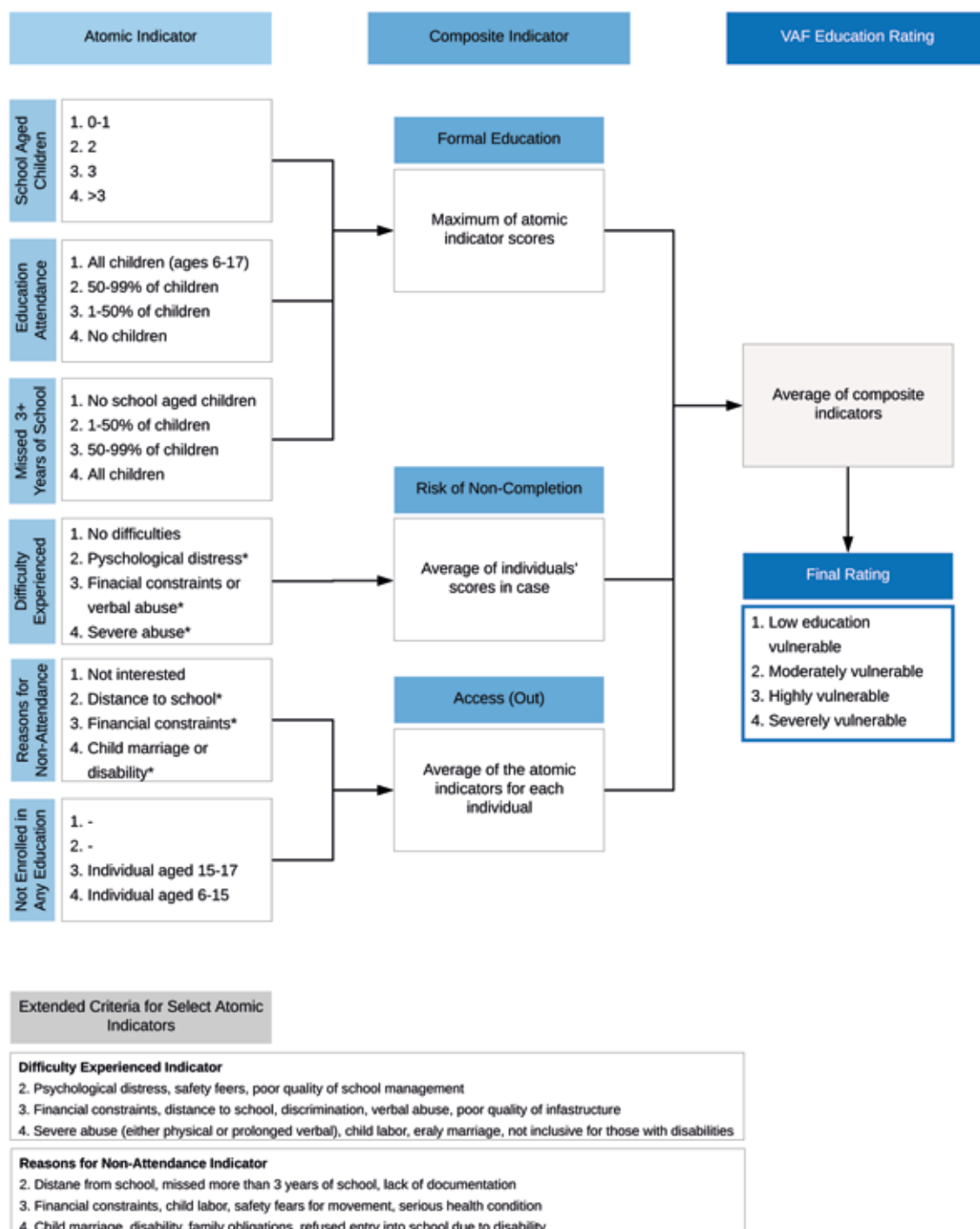
Several findings suggest that having a higher proportion of females in the household has a positive impact on education indicators and that the prioritization of education is influenced by gender. Households with a larger proportion of females maintain a constant education spending per capita even when income per capita decreases and are less likely to use the coping strategy of children begging. In addition, the incidence of out-of-school youth decreases faster in female-headed as opposed to male-headed households. However, it is difficult to detect gendered differences between the years of education completed by adults. Male-headed and female-headed households have similar average levels of adult schooling.

## 3.6. Food security

### Overview

#### Description

The VAF food security indicator is based on globally recognized standards and tools. The CARI (Consolidated Approach for Reporting Indicators of Food Security) is a WFP global methodology for assessing food vulnerability. In addition to the CARI, social vulnerability (measured by dependency ratio and the incidence of single-headed households) is a component of food security vulnerability. The social vulnerability rating is the only food security atomic rating that underwent revision in 2016. As a result, the VAF food security indicator is largely comparable over time.



## Overall distribution of vulnerability

One third of the population are identified as being severely vulnerable and 15 per cent as being highly vulnerable. These proportions have remained approximately constant for the last two years. In 2015, one third were highly vulnerable with just over 15 per cent being severely vulnerable. Despite high a Food Consumption Score (FCS) and acceptable levels of expenditure on food, many cases resort to negative coping mechanisms in order to meet their food needs. Overall food security ratings are further degraded with high dependency ratios and close to 60 per cent of cases being single-headed or with other vulnerable people.

Figure 30: VAF food security rating, proportion of individuals in each vulnerability category and trend over time



**Social vulnerability:** This indicator changed due to amendments the SHH atomic indicator. 41 per cent of the population are identified as high or severely vulnerable, down from 67 per cent identified in 2017.

**Dependency ratio:** This indicator has remained the same since 2015. 66 per cent of the population live in cases classified as highly or severely vulnerable, with nearly 50 per cent having more than 1.8 dependents per non-dependents. The levels of vulnerability have remained relatively constant over time.

**Single-headed household or other vulnerabilities:** This indicator was changed in 2017 to add 'other vulnerabilities' to the definition. 57 per of the population are identified as being single-headed household, or with vulnerable members, or both. This is an increase from 37 per cent identified in 2017.

### Trend



**CARI:** The CARI rating has remained virtually consistent since 2015, with the FCS and expenditure atomic indicators also flat. Although the overall percentages of people identified as either high or severely vulnerable has remained the same, there was an apparent shift in the 2017 survey where fewer people were identified as severely vulnerable reduced, in 2018 this appears to have increased again but not to former levels.



### Trend



**Food Consumption Score:** Using the globally recognized WFP food security indicator, it has kept the same definition since 2015. 10 per cent of the population are identified as having borderline or poor FCS.



### Trend



**Expenditure on food:** Measuring the percentage of overall expenditure that is dedicated to food, this indicator has remained the same since 2015. 14 per cent of the population are identified as spending over 50 per cent of the expenditures on food.



### Trend



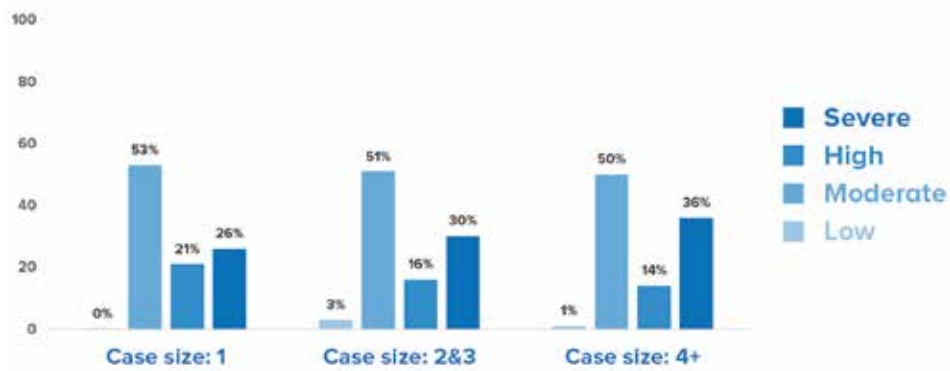
**Livelihoods Coping Strategies:** Using the globally recognized WFP food security indicator, adapted to the Jordan context, it identifies if cases resort to negative coping strategies to meet daily food needs. It has kept the same definition since 2015. 76 per cent of the population are identified as adopting crisis or emergency coping strategies.



## Overall distribution of vulnerability segmented by case size

For case size one to three, 46 per cent of individuals are classified as vulnerable according to the security indicator. The equivalent figure is 50 per cent for case sizes equal to or greater than four. These larger cases are more likely to contain people who are severely vulnerable according to the food security dimension of the VAF.

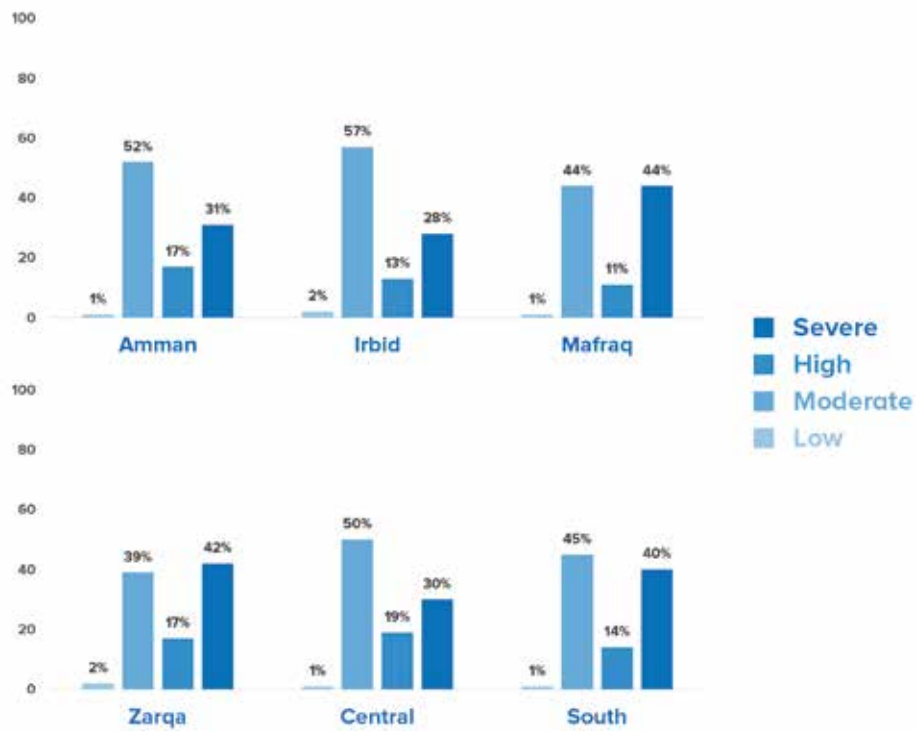
Figure 31: VAF food security rating, proportion of individuals in each vulnerability category according to case size



### Overall distribution of vulnerability by geographic segmentation

The South region and Mafraq are the regions with the highest proportion of people vulnerable to food insecurity. Over half the population of these two areas falls into the high or severe vulnerability categories.

Figure 32: VAF food security rating, proportion of individuals in each vulnerability category according to region





## Descriptive analysis

### Relationships with CARI, food expenditure and Food Consumption Score (FCS)

The study uses the **Consolidated Approach to Reporting Indicators of Food Security (CARI)**<sup>17</sup> to assess food security. The ratings in the sample population show that 13 per cent are moderately food insecure. The largest group of respondents (67 per cent) are marginally food secure. An additional 19 per cent of individuals are food secure. No cases were classified as severely food insecure. 85 per cent of the Syrian refugee population living in communities receive WFP food assistance. It is likely that food security would decrease without this assistance.

Table 9 shows that there are small variations in the VAF CARI rating across different regions. Irbid is the most food secure region and Zarqa is the least food secure region, but there is only a seven per cent difference between the respective ratings of each area. The price of food seems to be strongly associated with food insecurity: Irbid and Zarqa also have the lowest and highest level of expenditure per capita on food respectively. Relocating from the least food secure region to the most food secure reduces monthly food expenditure by 31 per cent.

The mean Food Consumption Score (FCS) for the sample is 74.2. Food consumption is acceptable if the FCS is greater than 35. Approximately nine out of ten respondents have an acceptable level of food consumption according to this indicator. Moreover, as is demonstrated in table 9, there are only small variations in the average FCS across the regions.

Table 9: VAF CARI rating, monthly expenditure per capita on food (JOD) and mean FCS across different regions

Location	VAF CARI rating	Monthly expenditure per capita on food (JOD)	Mean FCS
Amman	1.83	15.37	75.46
Central	1.95	14.11	72.45
Irbid	1.70	11.31	73.94
Mafraq	1.88	12.59	74.67
South	1.88	15.33	76.51
Zarqa	1.98	16.45	75.20

Although VAF vulnerability ratings are normally expressed as integers, when making comparisons decimal places are useful.

According to information presented in table 10, case size drives up food insecurity. Multiple cases living together as a household, however, is associated with more food security and less expenditure on food. The FCS varies across different case sizes, but no clear pattern emerges.

Table 10: VAF CARI rating, monthly expenditure per capita on food (JOD) and mean FCS across case sizes

Case Size	VAF CARI rating	Monthly expenditure per capita on food (JOD)	Mean FCS
1	1.77	9.48	74.30
2	1.83	13.75	75.15
3	1.81	15.3	77.89
4	1.84	16.89	76.09

17 The **Consolidated Approach to Reporting Indicators of Food Security (CARI)** is a WFP method used to analyze and report the level of food insecurity within a population.

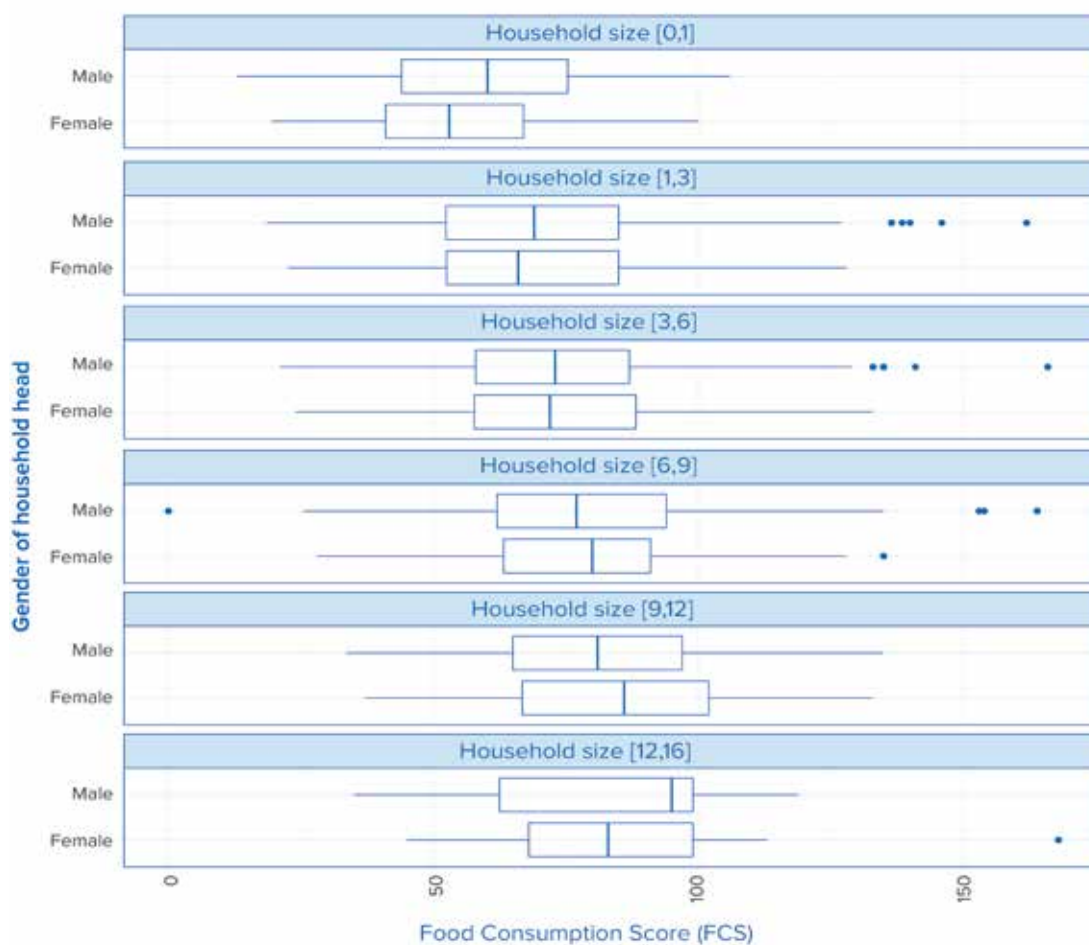
<b>5</b>	1.90	18.64	75.25
<b>6</b>	1.96	20.25	73.00
<b>7</b>	1.94	24.86	70.29
<b>8</b>	1.98	19.83	68.11
<b>9</b>	1.98	32.86	78.26
<b>Mean</b>	<b>1.89</b>	<b>19.09</b>	<b>74.26</b>

Although VAF vulnerability ratings are normally expressed as integers, when making comparisons decimal places are useful. The lower expenditure for case size 8 is due to an anomaly due to the small number of observations of this size.

The diversity of food types consumed is negatively correlated with the incidence of medical conditions, reliance on negative coping strategies and case size. The frequency of food types is always lower for households with medical cases. The number of medical cases in a household also brings down the frequency of food types. If different cases live together as a household diet diversity tends to improve.

Figure 33 below shows that food consumption tends to be marginally higher in larger households. In addition, smaller households (sized between one and six people) lead by males have consistently higher median FCS than their female lead counterparts.

Figure 33: FCS by household size and gender of household head



### Relationships between food security and coping strategies

The FCS demonstrates a negative correlation with both the RCSI (coefficient of -0.21) and the LCS (coefficient of -0.15): as food security increases, reliance on negative coping strategies declines. Food insecurity exerts detrimental pressures on the livelihoods of some households.

### Food expenditure and gender

As shown in figures 34 and 35, in general female-headed households achieve the same food consumption score but with a lower food expenditure than the male-headed households (except for single case households).

Figure 34: Total food expenditures per case across regions and gender of household head

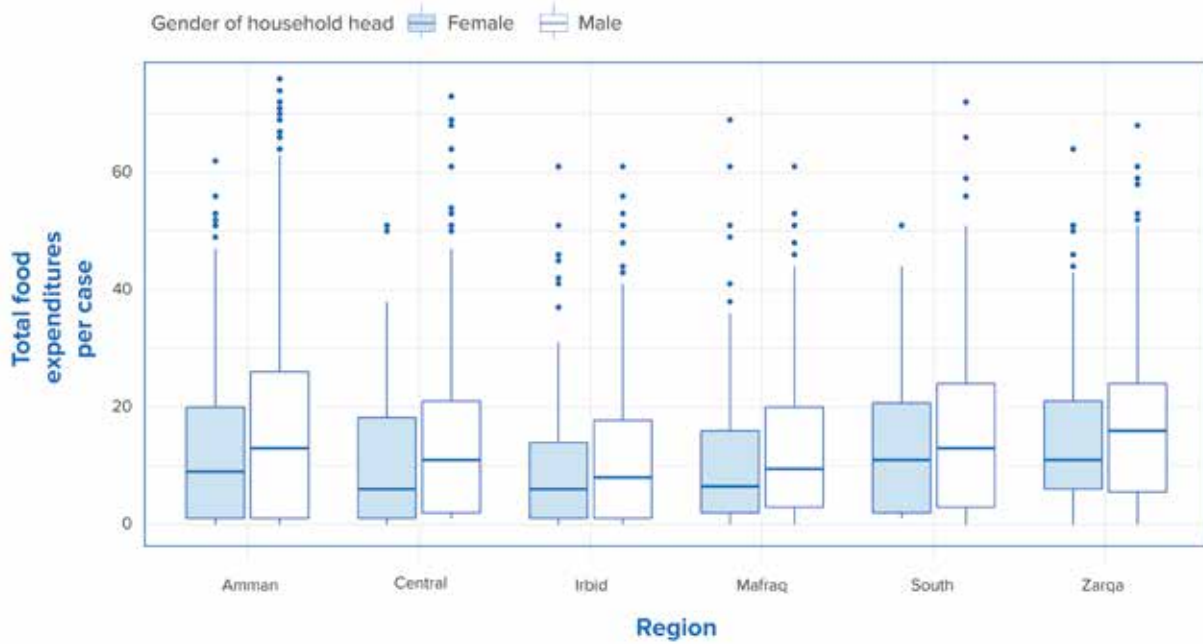
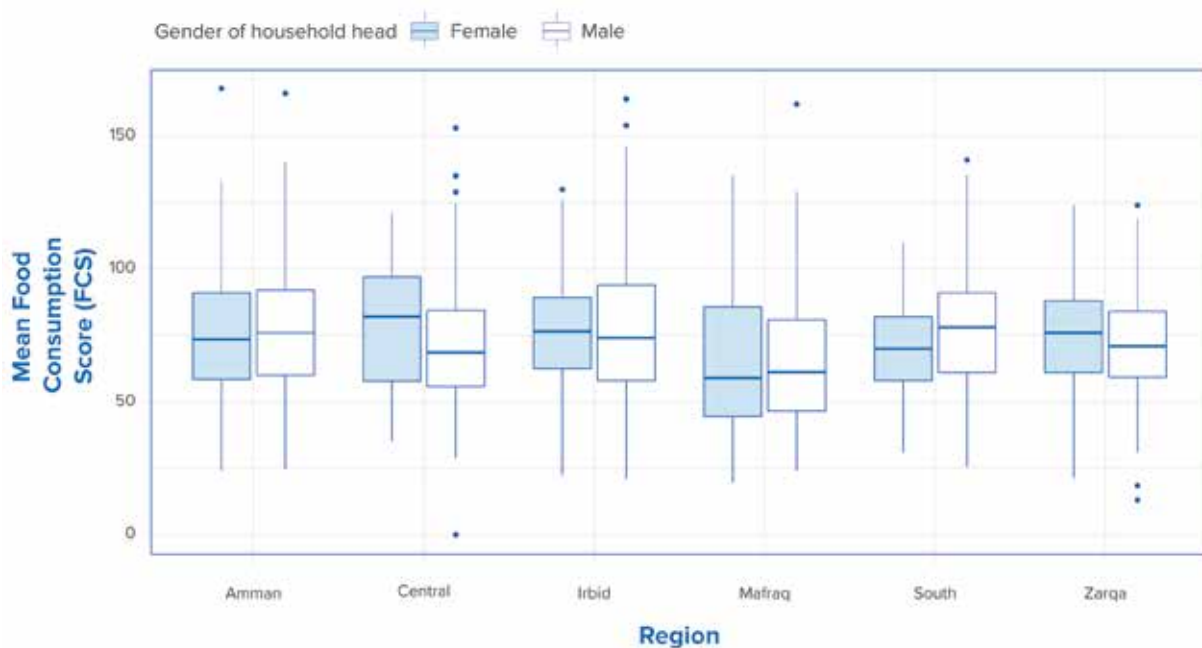


Figure 35: FCS per case across regions and gender of household head



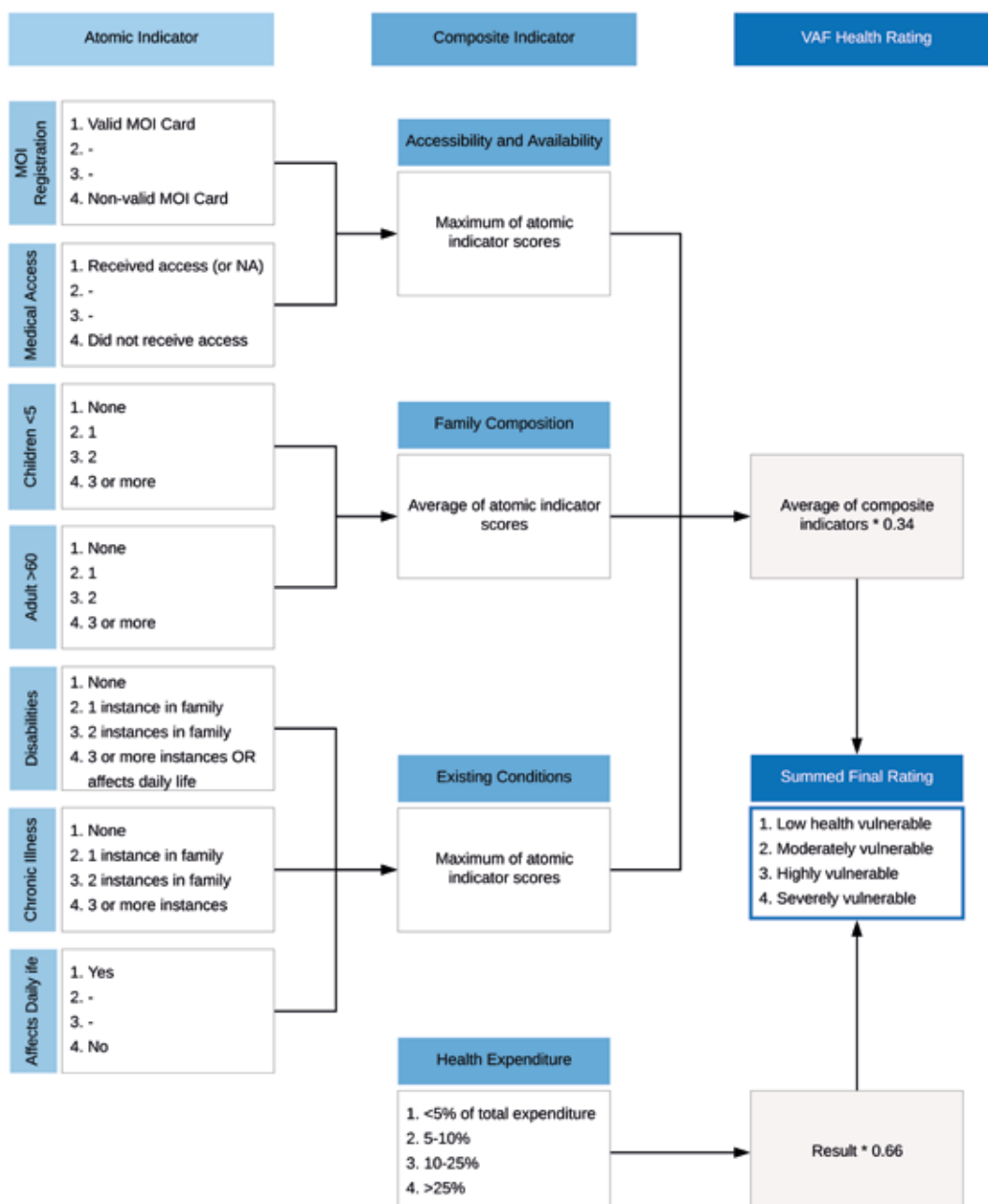
## 3.7. Health

### Overview

#### Description

The health sector vulnerability indicator focuses on factors that influence an individual's ability to mitigate health risks, rather than aiming to assess the extent of medical issues. The health sector identified the following factors: access and availability of health care, family composition, existing health conditions and the proportion of expenditure on health-related items, as influencing health vulnerability.

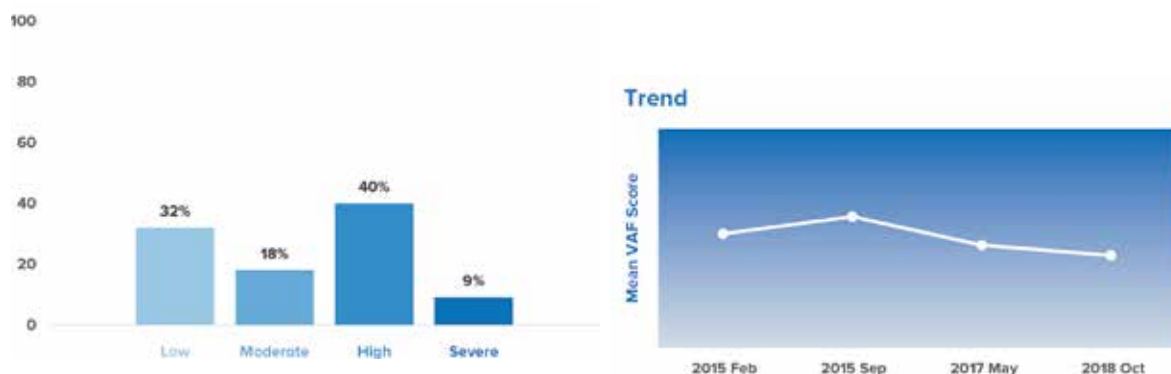
Changes were made to the VAF health indicator in late 2016. When data was compared between the VAF and the Health and Access Utilization Survey (HAUS), although there were few discrepancies between atomic indicators the overall VAF Health indicator appeared to be inflated. Therefore, although most indicators remain the same, the way they are combined was redesigned.



## Overall distribution of vulnerability

Nearly half (49 per cent) of the population in 2018 are classified as vulnerable according to the health sector indicator. This is a reduction from 55 per cent from the VAF 2017 survey.

Figure 36: VAF health rating, proportion of individuals in each vulnerability category and trend over time



**Access and availability of health services:** Although the sub indicators remained the same, this indicator was revised in 2016 in how they were combined. 37 per cent of the population are identified as severely vulnerable, an increase of 17 per cent since 2017.

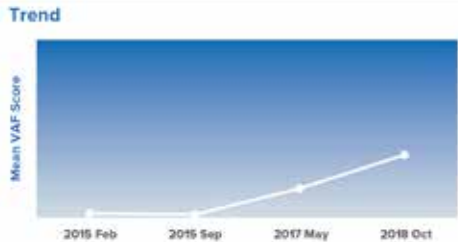


**MOI registration:** This indicator has remained constant since 2015. Three per cent of cases were identified as missing MOI reduction. This could be a biased result as a result of the sampling strategy focusing on registered refugees.



**Medical access:** This variable is constructed by asking if a case was able to access health services over the last six months. It has remained constant since 2015. 35 per cent of cases reported issues related to access, up from 16 per cent in 2017 and up from one or two per cent in 2015. It is probable that the medical access indicator has worsened because of the recent health policy change that led to increases in the health costs of Syrian refugees.





**Family composition:** Combing the number of children below six and adults over 60, this indicator has remained constant since 2015.



**Children below six:** Representing a count of children below six, this indicator has remained constant since 2015. There has been an 8 per cent increase in the number of families with no children below six since 2017.



**Adults above 60:** Representing a count of adults over 60, this indicator has remained constant since 2015. The results have remained constant since 2015 with 85 per cent of the population live in cases with no adults over 60.



**Existing conditions:** This indicator was revised in 2016 because of a change in the way that disabilities were identified in 2017. There has been a very small drop in the number of the population identified as vulnerable compared to 2017.



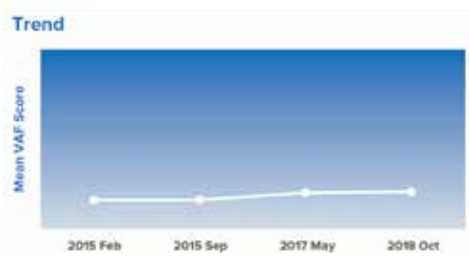
**Presence of disabilities:** The method of identifying disabilities was changed in in 2016 to incorporate the Washington Group Questions. This led to an increase from 11 per cent to 24 per cent of cases from 2015 to 2017. The percentages identified have remained relatively constant since then.



**Presence of chronic illnesses:** Identifying the presence of chronic illnesses in a case, this indicator has remained constant since 2015. 31 per cent of the population are identified as having two or more family members with chronic illnesses.







**Health issues affecting life:** Asking if the disability or illnesses affect daily life, this indicator has remained constant since 2015. 21 per cent of the population are part of cases identified as vulnerable.



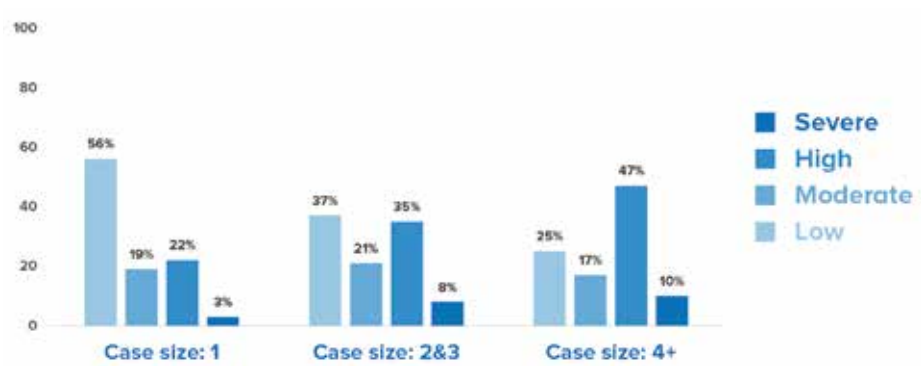
**Health expenditure:** This indicator has remained constant since 2015. In 2017 63 per cent of the population were vulnerable due to spending over 10 per cent of their expenditures on health items, in 2018 this reduced to 53 per cent of the population.



**Overall distribution of vulnerability segmented by case size**

Larger cases are more vulnerable than single and smaller cases from a health perspective. For case size one, only 25 per cent of individuals are rated as vulnerable. The equivalent proportion for the case size four or more is 57 per cent.

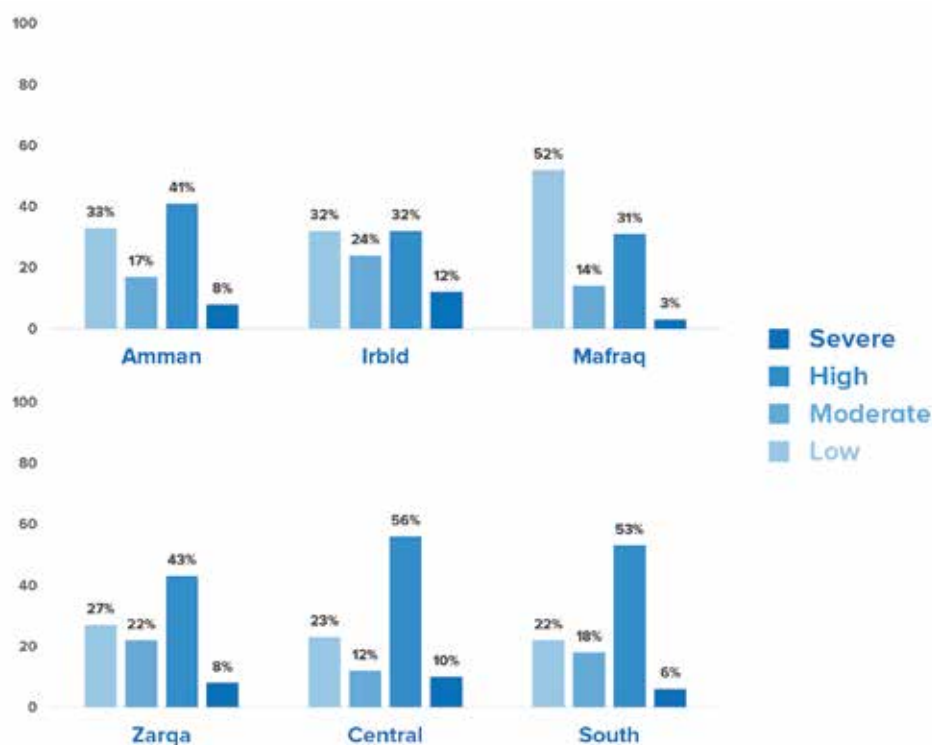
Figure 37: VAF health rating, proportion of individuals in each vulnerability category according to case size



**Overall distribution of vulnerability by geographic segmentation**

Mafraq emerges as the region with the smallest proportion of people with vulnerabilities according to the VAF health sector indicator. Only 34 per cent are vulnerable according to this dimension. The Central region has an above average level of health vulnerability. 66 per cent of respondents in this region are classified as health vulnerable.

Figure 38: VAF health rating, proportion of individuals in each vulnerability category according to region



### Descriptive analysis

The study examines the sample populations’ access to adequate medical services (with a valid MOI card) and expenditure patterns for doctor fees and medications. It also explores the effect of the change in the health subsidy provided to refugees for health expenditures and costs. The incidence of mental health and the relationship between mental health and coping strategies was also examined as well as dimensions of geography, employment, income and case size.

### Identification and incidence of disability

It is important to note that the describing the occurrence of disabilities as a percentage of population, percentage of cases or households with disabled members can change the descriptive statistics significant. Table 11 shows that the overall incidence of disability in the population sample as 21 per cent of individuals in the sample having at least one disability. When described at the case and household-levels this percentage jumps to 37 per cent of cases and nearly half of households have one or more members with at least one disability. Disability is identified using the WG Questions (see **Section 3.3: Dependency ratio**).

Table 11: Reported disability via the Washington Group Questions according to different measurement levels

	Percentage of population (%)
<b>Individuals with a disability</b>	21
<b>Cases with at least one individual who has a disability</b>	37
<b>Households with at least one individual who has a disability</b>	45

## Medical cases and expenditures

Income, debt and medical cases in the household are the key determinants for medical expenditures. Appendix 6.1 provides more details of these relationships. The VAF health rating is strongly correlated with doctor and pharmacy expenditures and vulnerability. As expected, health expenditures of doctor and pharmacy fees are interrelated (with a moderate correlation coefficient of 0.44). Pharmacy expenditure is higher than doctor fee expenditure across all locations for both men and women. The highest mean medical expenditure was in the Central region and the lowest in Mafraq. As is indicated by table 12 below, reported disabilities in a household are associated with higher medical fees and diagnosed medical cases.

Table 12: Number of disabilities in the household, medical and doctor fees and medical cases

Sum of disabilities per household*	Medical cases per household**	Doctor fees per household per month (JOD)	Medical fees per household per month (JOD)	Proportion of the sample (%)
<b>0 - 5</b>	0.66	27.9	76.7	42
<b>5 - 10</b>	0.90	23.9	90.0	25
<b>10 - 15</b>	1.01	24.2	80.8	12
<b>15 - 20</b>	1.16	24.3	94.9	3.1
<b>20 - 30</b>	1.21	25.8	115.3	1
<b>NA</b>	0.23	23.9	50.8	16.8

\*One individual can have multiple disabilities (for example, seeing and hearing)

\*\*One individual with multiple medical issues has only one medical case

As is demonstrated in the regression results in figure 39, medical expenditure can be explained by case size, rent and expenditure per capita as well as case size and ratio of females in the household. This pattern is expected since these variables also determine overall expenditure. Normally, there is a positive relationship between income and expenditure: higher earnings equate to higher expenditure. For medical expenditures, however, the reverse is true: as income increases, spending on doctor and pharmacy services decreases. Predictably, the number of medical cases strongly determines medical expenditures. Having a medical condition leads to more spending on health care.

Analysing medical expenditure from a gender perspective reveals that cases with a high proportion of women and girls tend to spend more on health care. Whether the household is headed by a male or female, on the other hand, is a statistically insignificant determinant of medical expenditure.

Figure 39: Regression results for on medical expenditures (doctor fees and medication) per capita

<b>Dependent Variable:</b>	
<b>Medical Expenditure Capita</b>	
<b>Expenditure per capita</b>	0.476*** (0.029)
<b>Income per capita</b>	-0.134*** (0.037)
<b>Monthly rent per capita</b>	-0.355*** (0.089)
<b>Case size</b>	-11.929*** (1.569)
<b>Head household sex male</b>	0.557 (6.049)
<b>Ratio females case size</b>	12.037*** (2.260)
<b>Number medical cases</b>	8.034** (3.173)
<b>Constant</b>	46.393*** (9.863)
<b>Observations</b>	3,682
<b>R<sup>2</sup></b>	0.161
<b>Adjusted R<sup>2</sup></b>	0.159
<b>Residual Std. Error</b>	164.182 (df = 3674)
<b>F Statistic</b>	100.712*** (df = 7; 3674)

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

### Health policy changes<sup>18</sup>

Prior to 2012, the GoJ had allowed Syrians registered with UNHCR to access health care services free of charge in Ministry of Health primary healthcare centres and hospitals. However, in November 2014, this policy was withdrawn and Syrian refugees were required to pay the non-insured Jordanian rate. In February 2018, the GoJ had lowered the level of access for Syrians to 80 per cent of foreigner rate when they use all types of health services provided by the Ministry of Health. To monitor the impact of these changes additional questions were added to the survey tool, which will enable future triangulation with the Health Access and Utilization Survey (HAUS). At the time of data collection, approximately half of the sample noticed an increase in health costs over the last six months. The long-term effects of the new health care regime may lead to a decline in the VAF health ratings in future years.

For the 47 per cent of respondents that had noticed an increase in health-related costs, 79 per cent said the impact of this change was that they were no longer able to afford medication. A further 72 per cent of this group said that they were prevented from visiting a doctor due to escalating health care expenses.

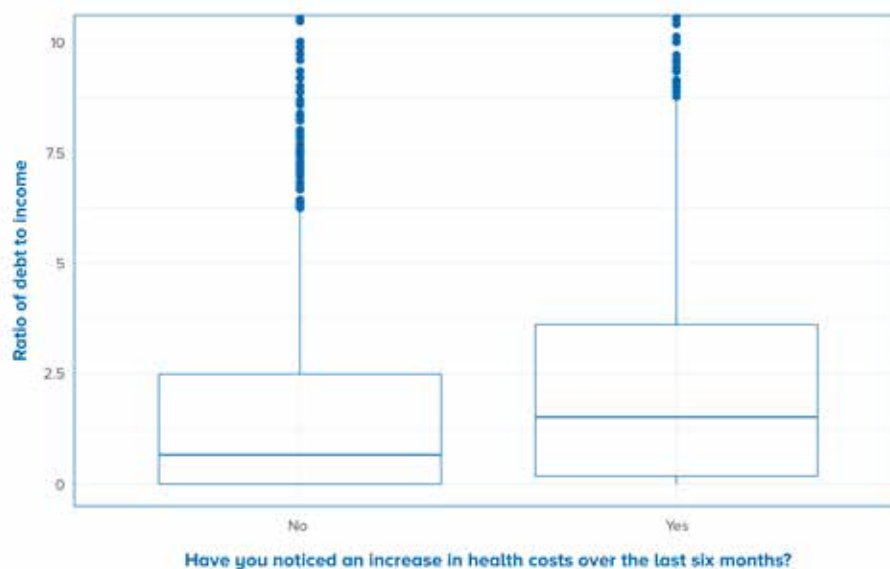
Figure 40: Perception of an increase in health care costs



18 At the time of printing the Government of Jordan, via the Jordan Health Development Partners Forum, announced a roll-back to the uninsured Jordanian rate for Syrian refugees. Precise details have not been announced at this time.

There is also some evidence of a relationship between increasing health costs and financial strain. 34 per cent of those that had noticed a rise in health costs over the last six months said that they had borrowed money or spent savings in order to meet household health care needs. Those that had noticed an increase in health costs have higher average levels of unmanageable debt (see figure 41 below). The ratio of debt to income is a proxy measure for debt manageability.

Figure 41: Debt sustainability and reported increase in health costs



### Key findings on mental health

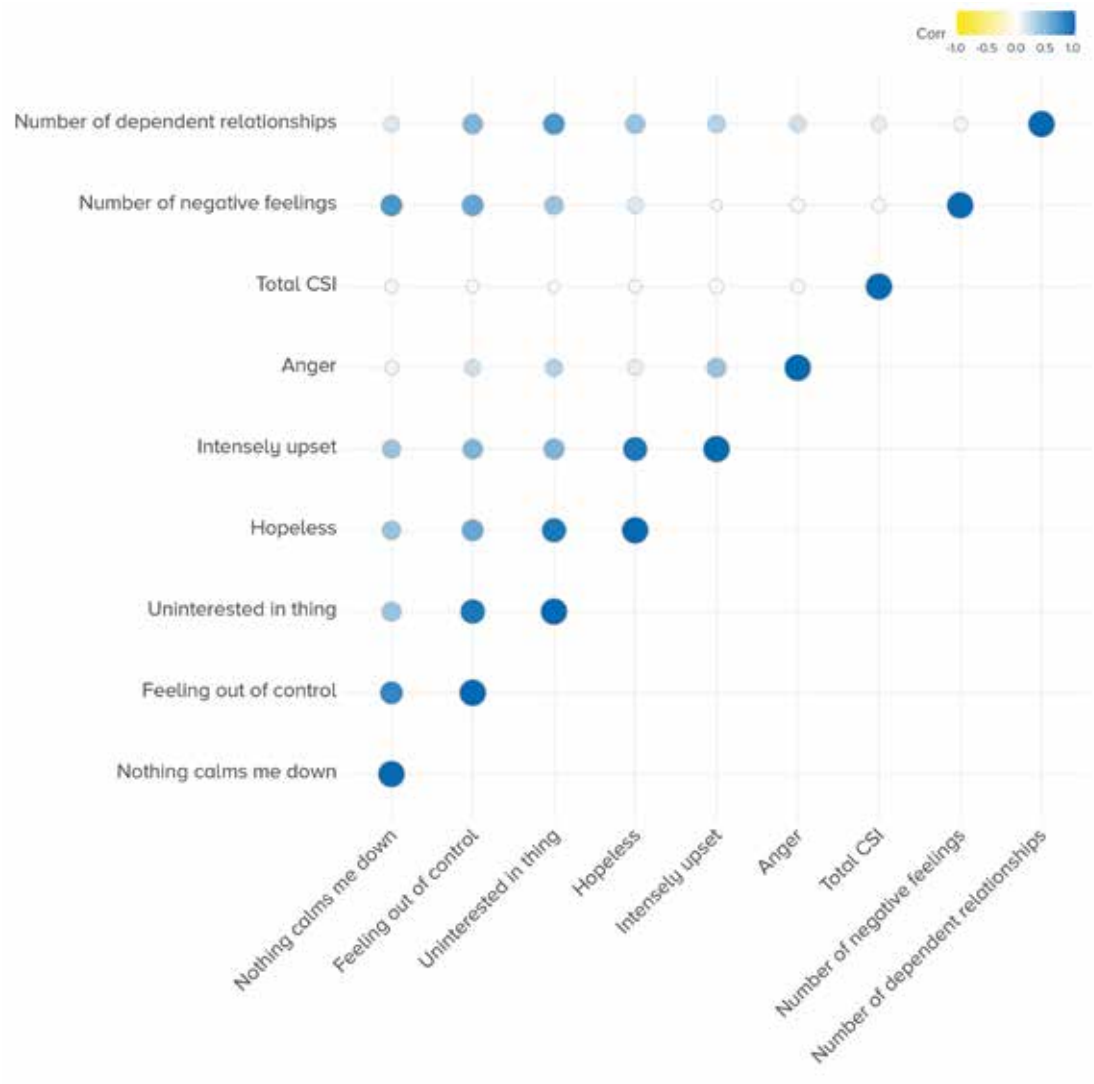
Mental health is a recurrent issue across the sample overall, which again is unsurprising given the challenging context of life as a refugee and exposure to trauma. Table 13 shows the percentage of the population that responded “All of the time” or “Most of the time” to the WHO-UNHCR Assessment Schedule of Serious Symptoms in Humanitarian Settings (WASSS) questions relating to mental health. These questions were only asked to adults (5,839 individuals) with a recall period of two weeks. Over one third of adults in the sample report feeling so upset about the war, that they tried to avoid places, people, conversations or activities that reminded them, and a quarter of adults report feeling so angry that they feel out of control. One fifth of adults report feeling so hopeless that they did not want to carry on living.

Table 13: Reported negative feelings of adults in the sample

Proportion of adults in the sample (%)	Question
35	Feeling so severely upset about the war, that you tried to avoid places, people, conversations or activities that reminded you of such event
24	Feeling so angry that you felt out of control
20	Feeling so hopeless that you did not want to carry on living
18	Feeling so uninterested in things that you used to like, that you did not want to do anything at all
18	Feeling you were unable to carry out essential activities for daily living
16	Feeling so afraid that nothing could calm you down

The frequency of coping strategies is unrelated with reported negative feelings, which is a counterintuitive result. Although there does seem to be association between negative feelings and the number of dependent relationships in the household and between different types of negative feelings (see figure 42). 30.6 per cent of cases that report mental health conditions also report receiving income from the formal labour market. A further 27 per cent of cases with a mental health condition have access to an informal income.

Figure 42: Correlations between mental health, the coping strategy index (CSI) and the total number of dependent relationships in the household





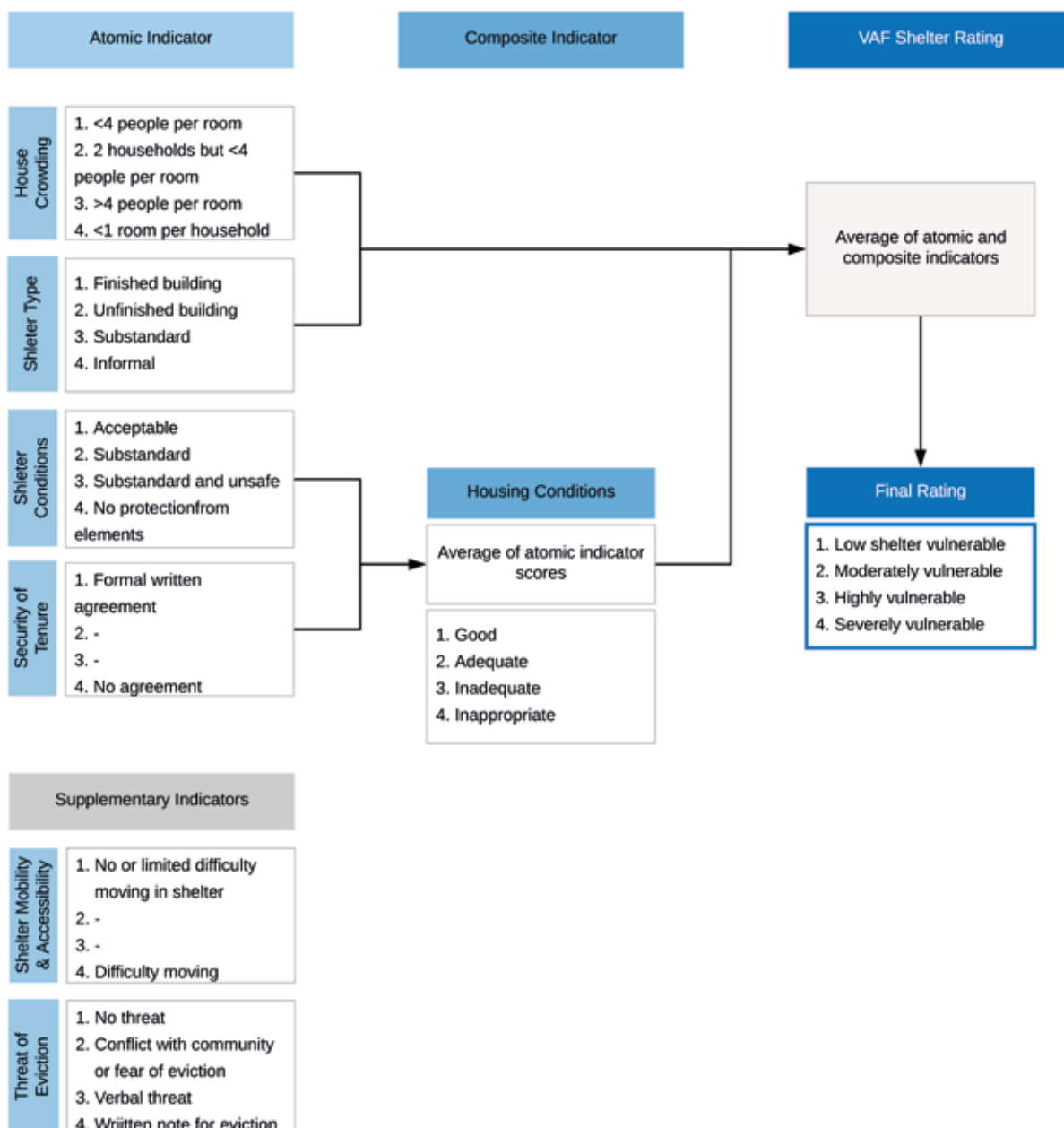
## 3.8. Shelter

### Overview

#### Description

Capturing the physical conditions of shelter is vital to designing the adequate intervention. Supporting households living in substandard shelters with cash for rent assistance will not mitigate any of the serious risks faced by the tenants in terms of health, safety or privacy. The categorization of the shelter conditions in the shelter decision tree will inform actors in designing interventions capable of addressing the living conditions of the refugees and ensuring their security of tenure.

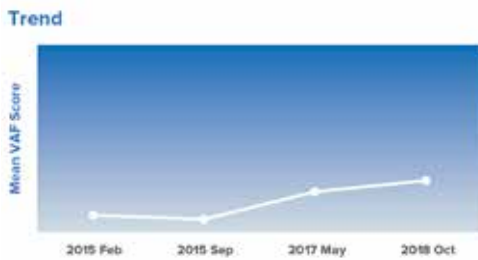
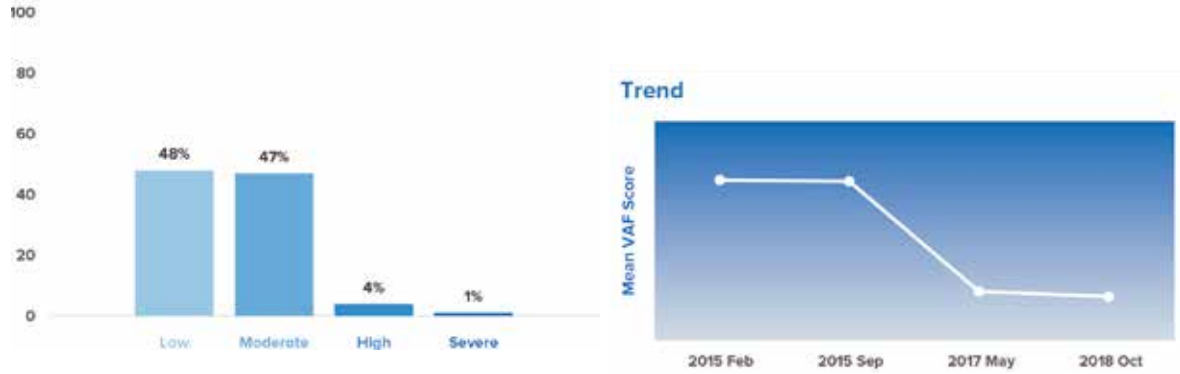
In 2016, the sector working group identified that the existing shelter tree while comprehensive in capturing various indicators as visible above, it was agreed that some indicators are no longer relevant. Other indicators were removed as they were considered duplications of other VAF indicators. Lastly, some indicators were restructured.



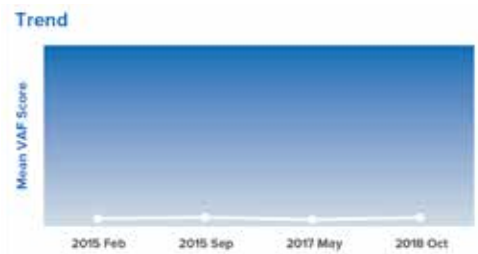
## Overall distribution of vulnerability

78 per cent of the population are identified as being highly or severely vulnerable according to the VAF shelter indicator. Security of tenure and shelter conditions are the primary drivers for vulnerability.

Figure 43: VAF shelter rating, proportion of individuals in each vulnerability category and trend over time



**House crowding:** This indicator was redefined in 2016 and is therefore incomparable to the earlier rating. It was changed from the number of people per m2, to the number of people per room. Six per cent of the population live in accommodation where two or more cases living together in limited space or without partition.



**House type:** This indicator was redefined in 2016. As a result, the extent that it is comparable over time is limited. The indicator now includes a combination of shelter type and enumerator judgement. Six per cent of cases live in sub-standard buildings (any type of building, for example, school, factory, warehouse, garage, shop, that is not designed as accommodation, which require some upgrade and transformation to meet the minimum requirement for accommodation) or informal accommodation (any makeshift shelter built by refugees themselves with or without connection to water and sanitation facilities).



**Housing condition:** This indicator is also incomparable to previous years due to being redesigning in 2016. It is a combination of shelter conditions and the security of tenure.





**Shelter condition:** This indicator was redefined in 2016 and is incomparable to the earlier rating. It assesses the condition of ventilation, lighting, electrical feature and other external openings.

Eight per cent of the population live in households identified as having substandard ventilation and lighting.

Three per cent of the population live in households identified as having unsafe electrical conditions.

28 per cent of the population live in households identified as lacking protection from the elements or as having leaking openings.



**Security of tenure:** As a result of the redesign in 2016, this indicator is also incomparable over time. 43 per cent of cases report not having a formal agreement with their landlord, which is an increase from 25 per cent in 2017.



**Mobility and accessibility:** This indicator is unconnected to the top-level shelter rating. It is instead meant to be complimentary to the shelter rating to reflect the needs of the disabled community. 6 per cent of the population are in cases where not all family members can comfortably access and move around the house. The results remain level with those reported in 2017.



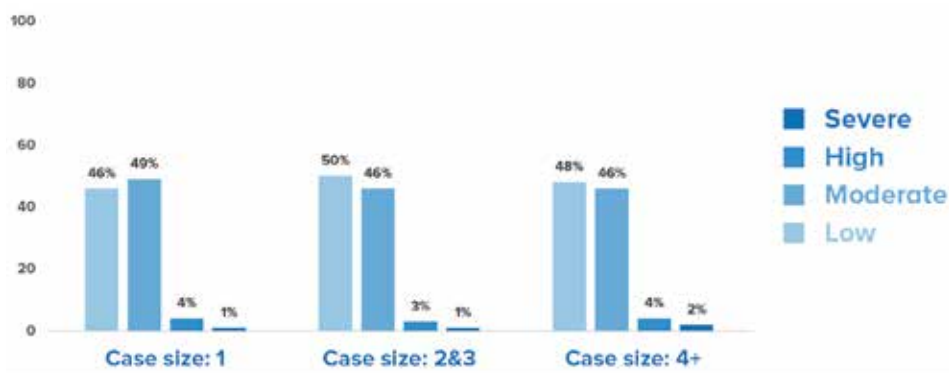
**Threat of eviction:** This indicator is not part of the top-level shelter rating. It has been included to complement the security of tenure rating. It was introduced in 2017. The intention was to provide extra information to facilitate prioritization. 3 per cent of the population report being vulnerable to conflicting with the host community or feeling there is a threat of eviction. 10 per cent report having received a verbal threat of eviction. The results remain level with those reported in 2017.



### Overall distribution of vulnerability segmented by case size

Case size does not have any significant effect on shelter vulnerability.

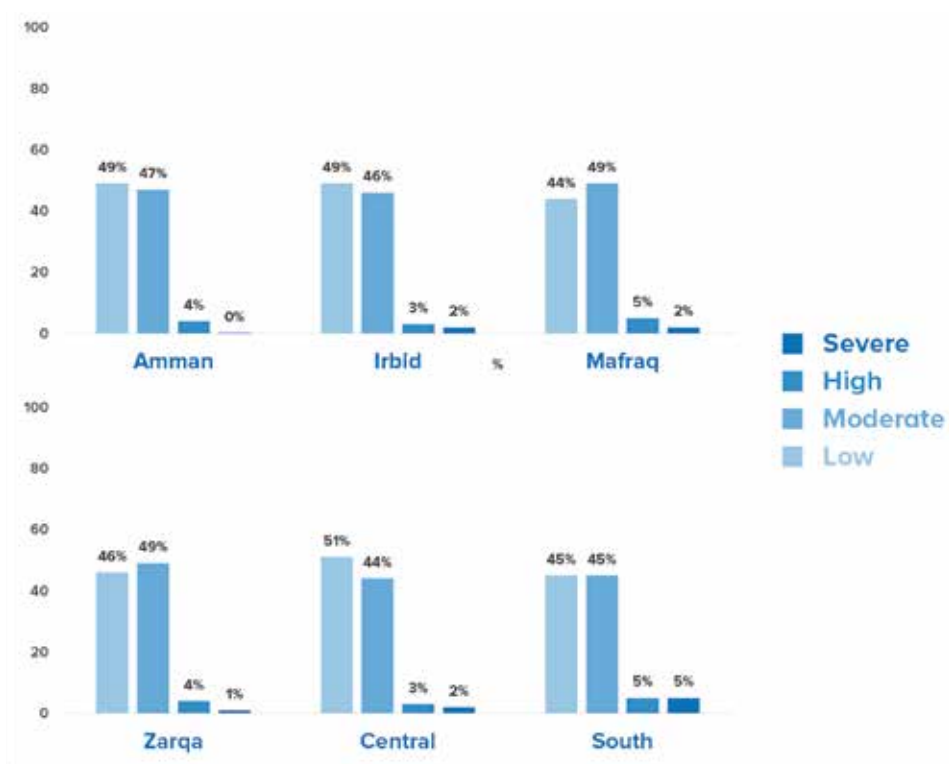
Figure 44: VAF shelter rating, proportion of individuals in each vulnerability category according to case size



### Overall distribution of vulnerability by geographic segmentation

Geographically there are only small variations in the VAF shelter rating.

Figure 45: VAF shelter rating, proportion of individuals in each vulnerability category according to region



## Descriptive analysis

### Shelter quality and location

Much of the sample (95 per cent) live in finished buildings, not substandard buildings or informal settlements, and 80 per cent of these people live above the ground level. Approximately three per cent of the sample lived in informal settlements. Living in a finished building in comparison to living in an informal settlement is associated with an average increase of over five and half (5.6) JOD in monthly expenditure per capita. In addition to the VAF shelter indicators, an additional indicator was created for this analysis. The substandard shelter score was calculated based on whether the roof, doors, electrical features, access to the dwelling, natural ventilation and natural lighting were judged to be acceptable. If any of these

items were substandard, then the household was given one point. The maximum score was six (with higher scores indicating worse shelter conditions).

There are important geographical variations in shelter conditions. Mafraq stands out as a region with a relatively high proportion of households residing in substandard buildings or informal settlements and has the highest overall sub-standard shelter scores. Whereas Zarqa and Amman have the highest proportion of households living in finished buildings with the least living in informal settlements. Regions with the lowest sub-standard shelter score (or the best relative shelter conditions) are Irbid and the South.

External doors and windows close for over 90 per cent of all respondents. However, most respondents experience some shelter-related damage such as cracks and mould, up to 57 per cent in Zarqa and 72 per cent in Central region. Leaks are reported in all other regions, but to a lesser extent.

A higher sub-standard shelter score indicates worse shelter conditions. Case size is again a useful indicator of shelter vulnerability, as family and household size increases, housing conditions tend to worsen; therefore, larger ones are especially prone to living in substandard shelter. Cases of seven or more, for instance, had a substandard shelter score that was close to one (1.04) while single cases had a mean score that was approximately three quarters (0.74). Overall, larger households, cases and families, particularly those with a higher proportion of males, are more vulnerable to substandard shelter and house crowding than other groups in the data set.

### Tenancy agreements

The key determining factor for shelter vulnerability relates to the tenancy agreement type and whether it is written or not. Possession of a written rental contract improves the shelter score whereas the lack of any agreement increases the vulnerability. The difference between having a written agreement as opposed to other more informal arrangements is associated with a one-point decrease in the substandard shelter. The relationship between tenancy conditions remains strong for different levels of rent and income: while holding rent per capita and income per capita constant, the effect of having a written contract still improves housing conditions.

### Shelter and electricity costs

The mean and median total rent per case is 74.06 JOD and 70 JOD respectively. The per capita mean is 34 JOD and the median is 20 JOD. The mean and median electricity expenditure per capita is five and three JOD respectively. Unsurprisingly, per person spending on shelter and electricity declines steadily as case size increases. The rate at which rent per capita decreases as case size increases slows down with each additional person in the case.

Regionally, the mean expenditure per capita for rent is lowest in Mafraq (21.67 JOD) and the highest is over twice as much in Amman (43.31 JOD). The second highest rent per capita is in the South and is in-between these values at 32.63 JOD. The mean expenditures per capita for electricity is also lowest in Mafraq (3.68 JOD) and highest in the South (5.34 JOD), with Amman as second highest (4.83 JOD).

Table 14: Mean rent per capita and mean electricity expenditure per capita across the regions

Region	Mean rent per capita	Mean electricity expenditure per capita
Amman	43.31	4.83
Central	28.86	3.84
Irbid	28.28	4.11
Mafraq	21.67	3.68
South	32.63	5.34
Zarqa	26.96	4.33

### Shelter and gender

Overall, the data indicates that the shelter conditions for male and female-headed households is similar. 95 per cent of both male and female-headed households live in finished buildings. Most male and female-headed households live above ground (84 and 87 per cent respectively) while a smaller proportion live at basement level (eight to nine per cent). However, males are almost twice as likely as females to live at the roof level: over seven per cent (7.1) of men do so compared to approximately four per cent (3.8) of women. The sub-standard shelter score is on par for both male and female-headed households alike and their mean expenditure per capita for both rent and electricity is almost identical.

A much stronger determinant of shelter quality is the proportion of females in a given household. Firstly, there is a statistically significant relationship between the proportion of women and girls and the rent expenditure per capita: as the ratio of women and girls in household or case increases, spending per head on housing costs decreases. Secondly, as the same proportion increases, the acceptability of shelter conditions tends to improve.



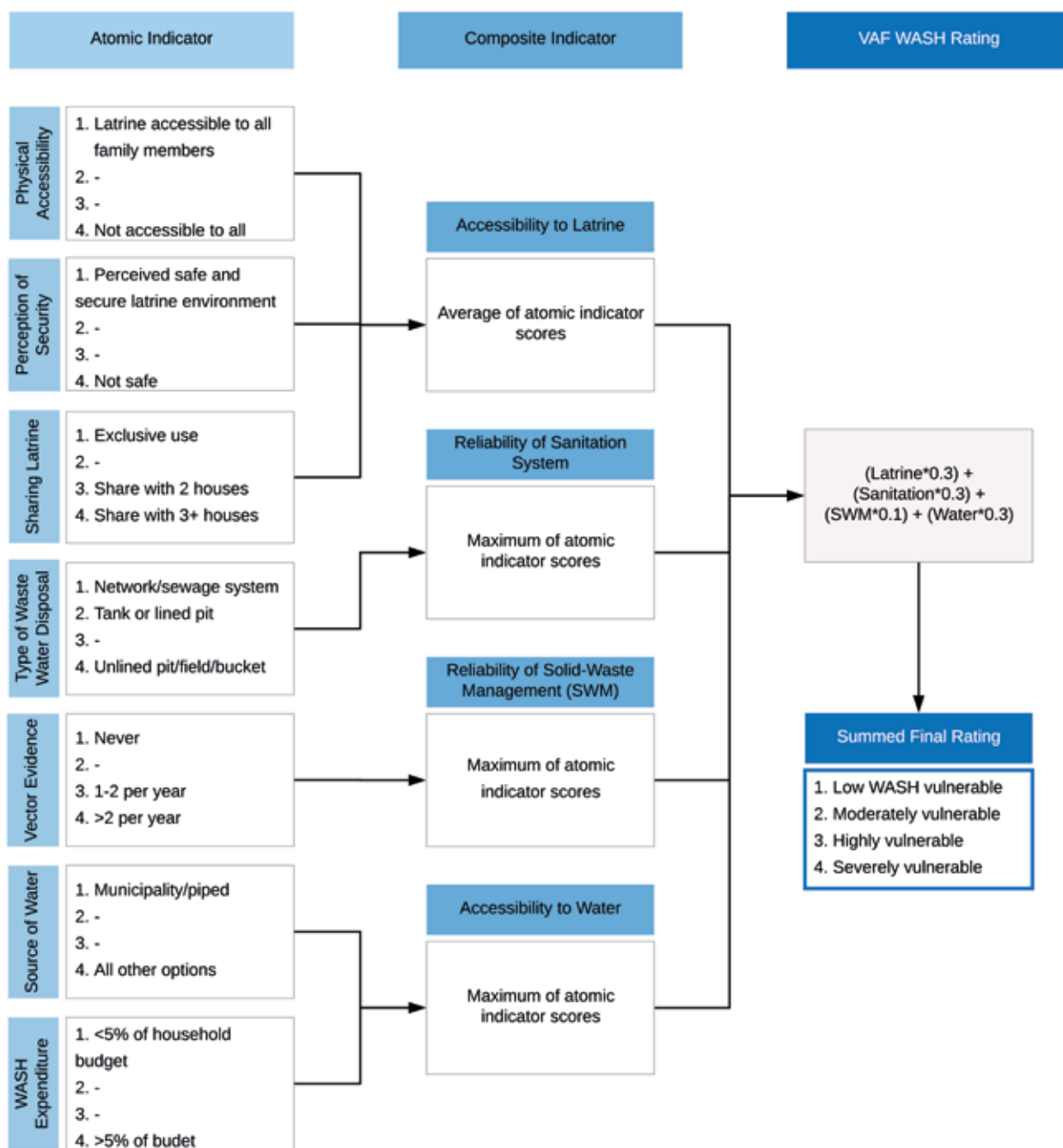
## 3.9. WASH

### Overview

#### Description

Access to WASH services is crucial to many aspects of a refugee's daily life, from hygiene, to drinking water and waste disposal. As such, many discrete, non-related, contributing factors constitute the WASH sector rating. The WASH rating is composed of indicators relating to accessibility to latrines, reliability of sanitation, reliability of solid waste management and accessibility to drinking water. The current VAF WASH indicator is not comparable to the original one created in 2015. After a year in practice, the WASH working group determined that the sector tree could be more closely aligned to what the Jordanian context. The WASH sector requested the following changes to be made:

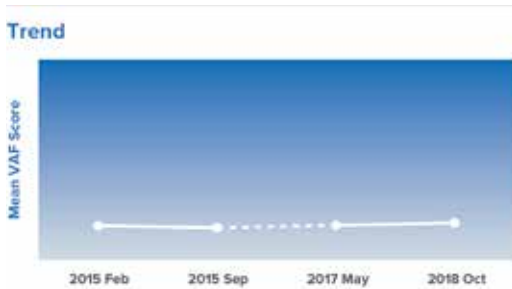
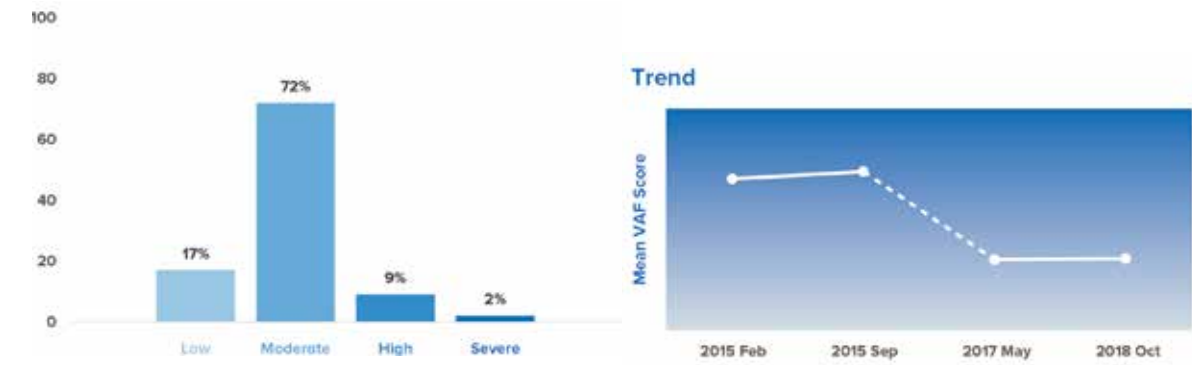
1. How composite indicators were weighted was revised so that the worst-case scenario of the sub-indicators was no longer considered.
2. The source of water increased its weighting for cases not connected to municipal water distribution systems.
3. The value of five per cent of income expenditure on WASH was determined to be a more realistic threshold based on current WASH literature.
4. The indicator relating to diarrhoea and WASH related health was determined as irrelevant to Jordan context and was removed.
5. Solid waste management increased its weighting.
6. Sharing latrine increased its weighting, at the same time eliminating the WASH hygiene indicator as it duplicated information on sharing facilities.
7. Frequency without water was deleted. Source of water was identified as a more accurate measure of refugee's access to water.



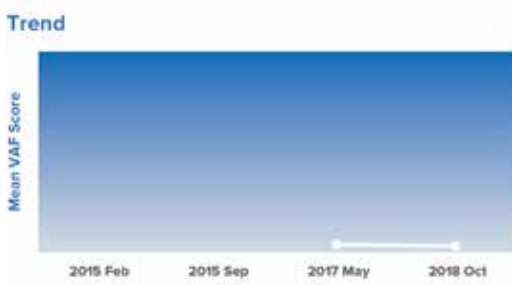
### Overall distribution of vulnerability

11 per cent of the population are identified as having high or severe VAF WASH indicator vulnerability. While this indicator might appear very low, several sub-indicators reveal much higher levels of vulnerability, namely expenditure on WASH items (58 per cent), Accessibility to safe drinking water (64 per cent) and solid waste management (82 per cent).

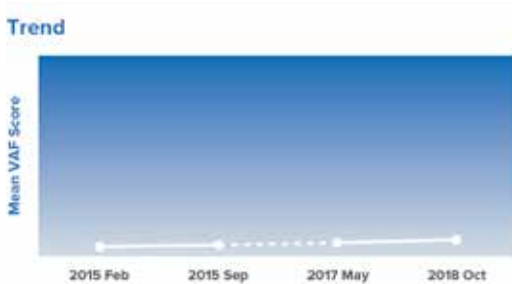
Figure 46: VAF WASH rating, proportion of individuals in each vulnerability category and trend over time



**Accessibility to latrine:** This indicator changed in 2017 and is a combination of the physical accessibility of facilities, sharing latrines between families and the perception of security. 43 per cent of the population are identified as having moderate vulnerability.



**Physical accessibility:** This indicator was introduced in 2017. Persons with disabilities may encounter specific difficulties when it comes to the use of latrine, shower and access to safe water. This indicator assesses to what extent people with difficulties from the household can use the different hygiene equipment in their home. If the family has no or un-adapted access to water or toilet and is considered as eligible, accessibility should remain important criteria if the household includes one person with disability. Four per cent of the population were identified as living in accommodation where the facilities were not physically accessible by all family members.



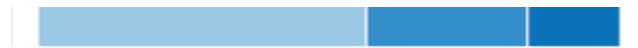
**Perception of security:** This indicator changed in 2017, where the responses were re-weighted. Eight per cent of the population living in houses where the perception of the access to latrines is not perceived to be safe and secure.



**Trend**



**Sharing latrine:** This indicator changed in 2017. The working group confirmed the number of persons per latrine and the safe access to it for all family members is more significant than the number of latrines per household. It was concluded by sector partners that the ‘person per latrine’ would provide a stronger understanding of vulnerability or overcrowding than ‘sharing a toilet’. 28 per cent of the population share a latrine between two cases, 16 per cent of the population share a latrine with more than two cases.



**Trend**



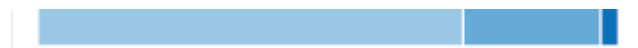
**Reliability of sanitation:** This indicator is the same as the sub indicator type of wastewater disposal.



**Trend**



**Type of wastewater disposal:** This indicator was introduced in 2017. It describes the connection to the public sewage system. 73 per cent of the population are in houses connected to the network sewage system, about a quarter of the population are in houses connected to a tank or unlined pit, and three per cent of the population report being in houses utilising unlined pits, buckets, bags or outdoor spaces.



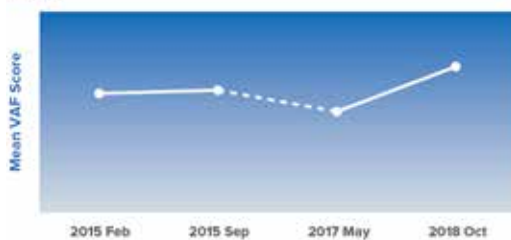
**Trend**



**Reliability of solid waste management:** This indicator is the same as the sub indicator vector evidence rating.



**Trend**



**Vector evidence rating:** The definition for this indicator was modified in 2016 where the weightings were modified. 52 per cent of cases experienced visible vector evidence more than twice a year, 30 per cent of cases experienced vector evidence once or twice a year.



Trend



**Accessibility to water:** The definition for this indicator changed in 2016 and is now a combination of the source of water and WASH expenditure. The number of days without water is no longer reflected. The high number of severely vulnerable (64 per cent) is largely driven by high expenditures.



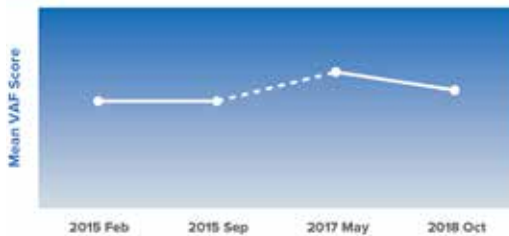
Trend



**Source of water:** The definition for this indicator changed in 2016 where the ratings for each level were modified. 11 per cent of the population live in houses not connected to the municipality or piped sources.



Trend



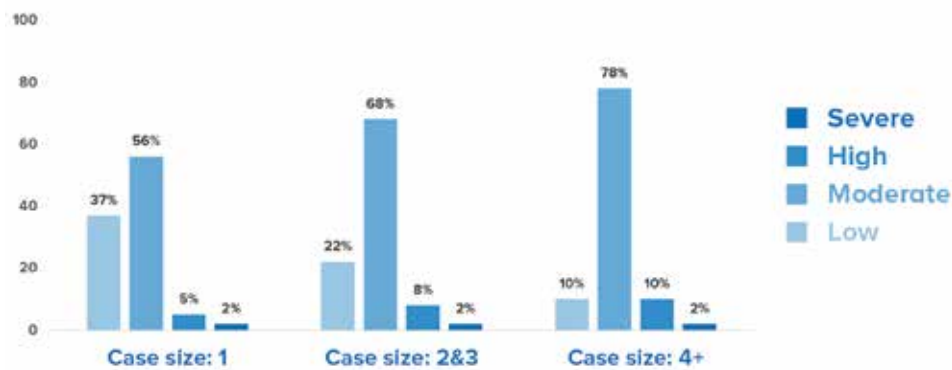
**Expenditure on WASH:** WASH expenditure was addressed in 2016 MEB Review. Sources of household water present varying household cost implications. As most refugees are connected to the public water network, having the economic means to increase access to water through water storage (private water tank), or primary and supplementary water through water truck delivery was therefore seen as a key factor. Although there is no internationally recognized threshold for the affordability of water, water spending above five per cent of overall expenditures was deemed too expensive for vulnerable households. 58 per cent of cases reported more than five per cent of expenditures on water.



### Overall distribution of vulnerability segmented by case size

The VAF WASH indicator shows that smaller cases are less vulnerable than larger cases. 37 per cent of the population of case size one are assigned the lowest vulnerability category compared to ten per cent of the population of case size four or more.

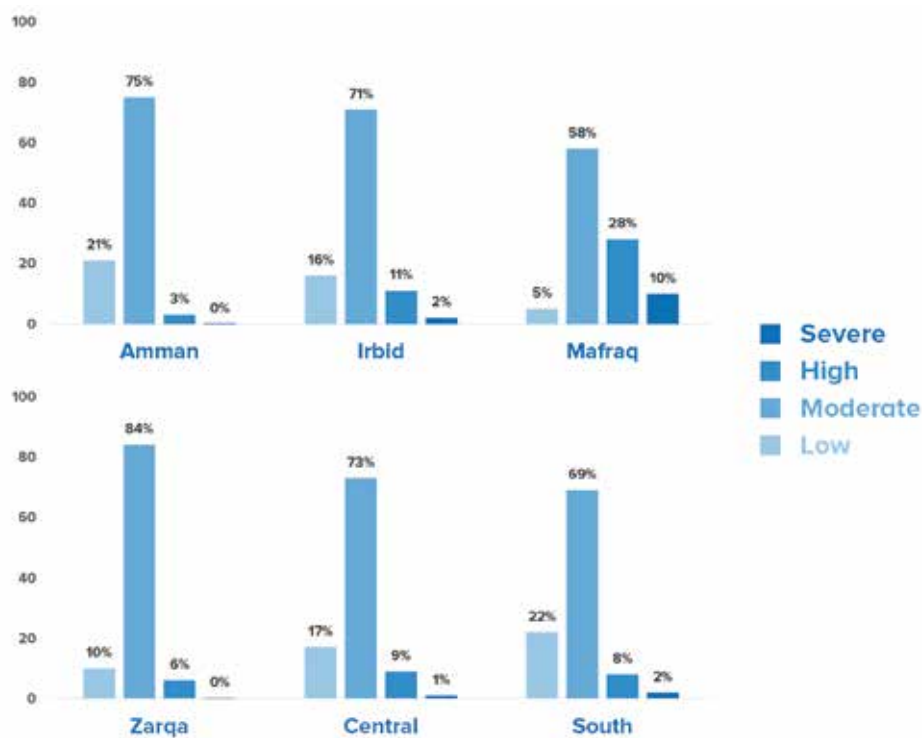
Figure 47: VAF WASH rating, proportion of individuals in each vulnerability category according to case size



### Overall distribution of vulnerability by geographic segmentation

The VAF WASH indicator shows comparable vulnerability levels across most geographic areas, apart from Mafraq, which has a far larger proportion of its population identified as highly or severely vulnerable (38 per cent) compared to the average of around ten per cent.

Figure 48: VAF WASH rating, proportion of individuals in each vulnerability category according to region



## Descriptive analysis

### Water and hygiene expenditure

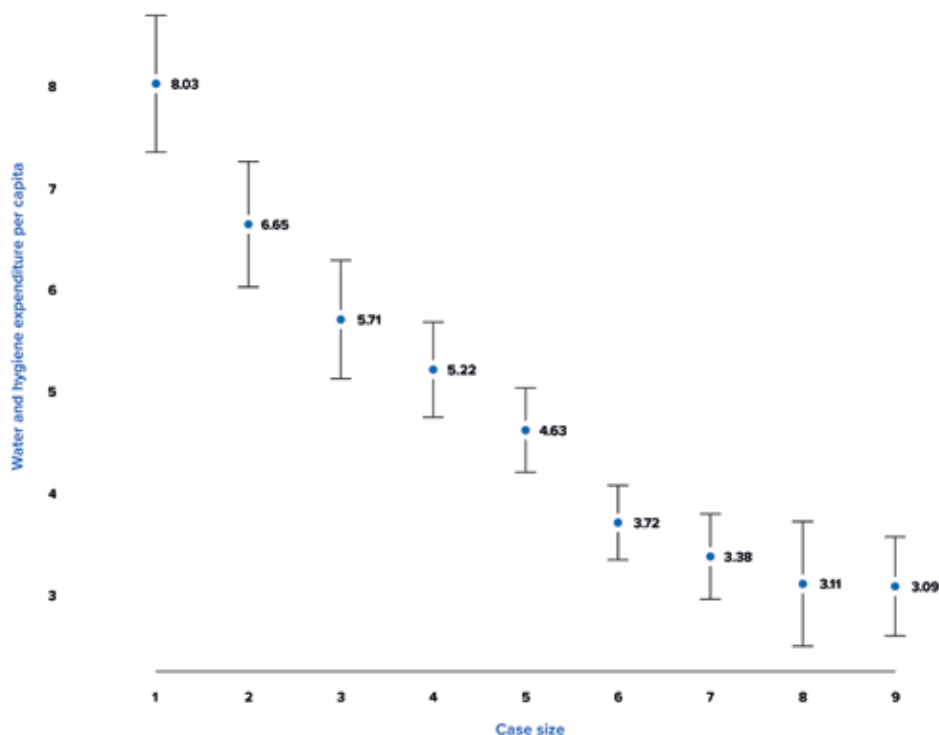
Total water expenditure per capita per month has a mean of four JOD and a median of two JOD. This includes spending on bottled water and monthly water bills. Hygiene expenditure per capita (including sanitary napkins, diapers and personal care items) has a mean of just over four and a half (4.64) JOD per month and a median of over two (2.37) JOD per month. Approximately 40 per cent of respondents



cannot afford to buy some basic hygiene items<sup>19</sup> while a further three and a half per cent of the sample reported extreme WASH poverty and cannot buy any of the basic items to meet their WASH needs.

Water and hygiene expenditure per capita decreases as case or household size increase (see figure 49). Single cases have a mean expenditure of just over eight (8.03) JOD per capita each month. This figure is approximately double the equivalent per capita value of case size of six which spends on average four (3.72) JOD per month on these items. This trend is replicated when the relationship between household size and water or hygiene expenditure per capita is analysed.

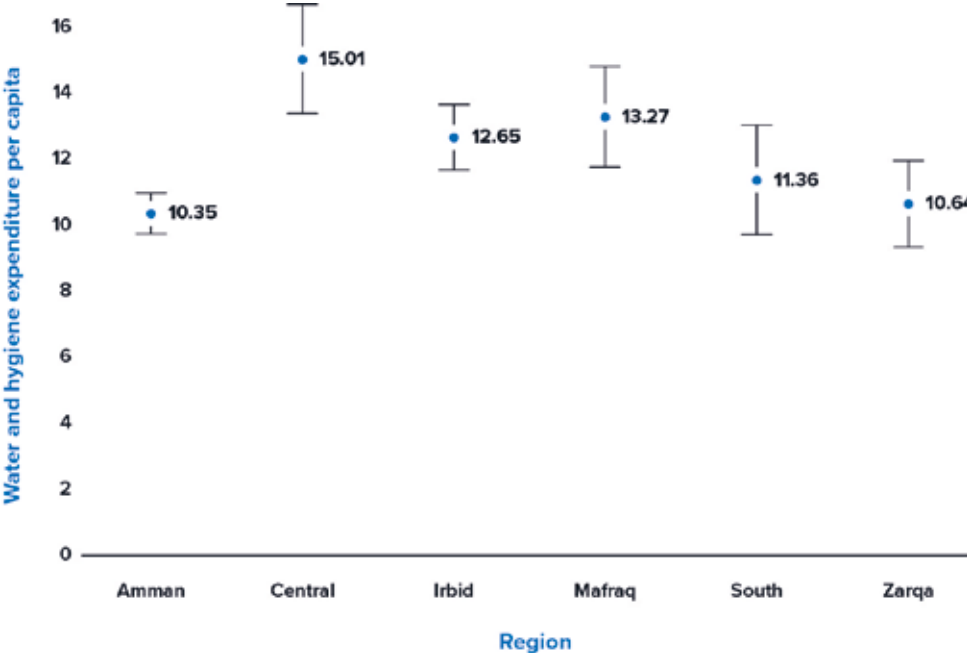
Figure 49: Water and hygiene expenditure per capita and case size (mean and inter-quartile range)



The geographic variances related to spending on WASH items are weaker. Although the mean water and hygiene expenditure per capita are highest in Irbid (7.03 JOD per capita) and lowest in Zarqa (5.45 JOD per capita), there is a lot of overlap within the inter-quartile range (see figure 50). The Central region has the most people reporting inability to afford any of basics water and hygiene items (61 per cent), while Irbid has highest levels of respondents reporting the ability to purchase all of them at 76 per cent.

19 These basic hygiene items include diapers, sanitary towels, soap, shampoo, toothpaste, toothbrush, detergent, household cleaning products.

Figure 50: Water and hygiene expenditure per capita and location (mean and inter-quartile range)



There are also regional variations in the reported level of water storage capacity. Refugee households in the South region are most likely report to sufficient water storage capacity for their family’s needs and nearly 89 per cent of them do so. By comparison, approximately 61 per cent of households in the Central region report having enough water storage capacity.

**Water, hygiene and expenditure per capita**

There is a strong relationship between water expenditure per capita and total expenditure per capita. In general, the same factors that determine overall expenditure per head effect water expenditure per person. Variables such as the number of work permits, the level of income or debt per capita, the number people per room determine both spending on water and total spending. Low water expenditure is also closely associated with other areas of WASH vulnerability, such as sharing toilets with households.

There is a gendered dimension to spending on water and hygiene items. As the proportion of females increases, water and hygiene spending decreases. Families with larger number of women spend less on water and hygiene; however, the gender of the head of household has no detectable influence on this type of expenditure. This finding is contrary to typical assumptions about the spending patterns of men and women.





## 4. New in the 2019 study



## 4.1. Livelihoods, debt, income and expenditure

### Summary

- The presence of work permits increases expenditure per capita and income per capita. Employment in both the regular and irregular economy is a crucial determinant of economic welfare.
- Median income from employment falls below the necessary level to maintain the Minimum Expenditure Basket (MEB) for every sector of the economy. Respondents employed in agriculture, services and mining, have median earnings that are below the level required for the Survival Minimum Expenditure Basket (SMEB). Cases that work in construction, the food and beverage industry and manufacturing have median employment incomes that fall between the MEB and the SMEB.
- On average, respondents report less income than expenditure and the difference between earning and spending is financed by debt. Approximately two thirds of the sample are indebted.
- 55 per cent of cases borrow money to pay for basic needs (such as, housing, food and healthcare). There is a strong relationship between debt and rent: nearly three out of ten (27 per cent) cases accumulate debt to pay the rent.
- Cases living in male-headed households have a higher median income and median debt than cases living in female-headed households. Smaller or single cases living in households lead by males are especially likely to have high levels of debt per person.

### The Jordan Compact

The Jordan Compact, signed in February 2016, combined humanitarian and development funding through multi-year grants and concessional loans. It included pledges of \$700 million in grants annually for three years and concessional loans of \$1.9 billion. The payment of grants and loans is linked to specific targets and one of these targets is related to formal labour market access for Syrian refugees.

As part of the Compact, the Government of Jordan pledged to issue 200,000 work permits for Syrian refugees in specified sectors, formalise Syrian businesses and provide school places for all Syrian children as well as some vocational training opportunities. According to the Ministry of Labour, 125,392 work permits have been issued or renewed to Syrians since early 2016. Further reforms in November 2018 enabled Syrian refugees to register and operate home-based businesses.

In response to this changing context, additional livelihoods questions were added to the 2019 VAF survey relating to work permits, employment sectors and income sources.

### Correlations between income, expenditure and debt

The inter-play between income, debt, rent and expenditure is the critical juncture to understand livelihood patterns. The presence of work permits increases expenditure per capita. In addition, the overall relationship between income, debt and rent flows improves with the existence of work permit.

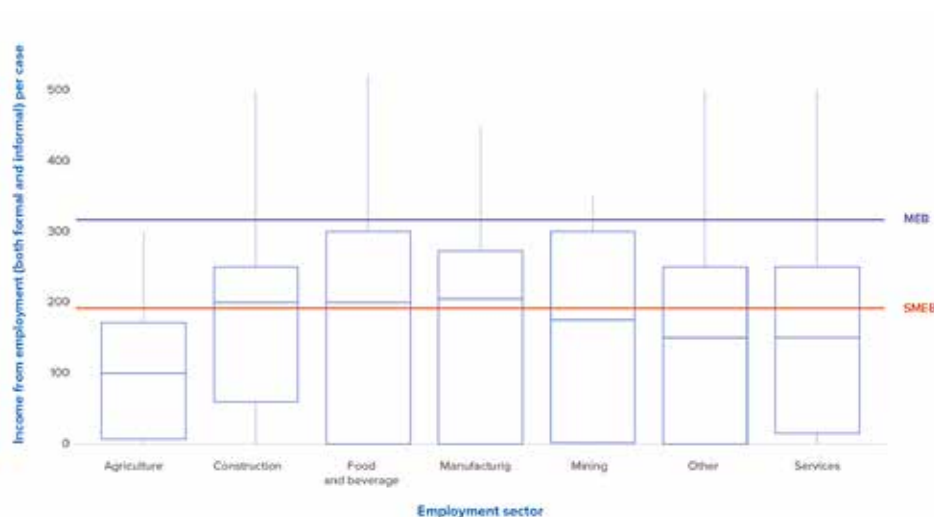
There is a relationship between regular employment and income per capita. 65 per cent of the variation in income per capita is explained by income earned in the regular economy. The relationship between irregular employment and income per capita is less strong. 35 per cent of the variation in income per capita is explained by income earned in the irregular economy. Rent is moderately correlated with income per capita. 54 per cent of the variation in housing costs is explained by income per capita (from both regular and irregular sources). Further details on these relationships are provided in **Appendix 6.2**.

## Income and employment sector

For all sectors of the economy, average income from employment falls below the level necessary to maintain the Minimum Expenditure Basket (MEB). The MEB specifies the level of expenditure necessary in order to meet basic needs (which include education, shelter, food and WASH). The mean case size of the sample is three. A case with three people obtains the MEB if they earn 317 JOD or more per month. As is shown by the blue line in figure 51 below, the interquartile range of employment income falls below this level for every sector. The highest paid sector, manufacturing, has a median monthly income per case of 205 JOD. This figure 112 JOD lower than the MEB.

For some employment sectors, earnings also fall beneath the Survival Minimum Expenditure Basket (SMEB). The SMEB specifies the minimum amount of spending necessary to survive (and only captures food, shelter and water). A case with three people reaches the SMEB if they earn 192 JOD. As the red line in figure 51 demonstrates, median monthly income from employment for cases working in agriculture (100 JOD), services (150 JOD) and mining (175 JOD) is beneath this threshold. Cases that work in construction, the food and beverage industry and manufacturing have median earnings that fall between the MEB and the SMEB.

Figure 51: Income from employment (both formal and informal) per case across different employment sectors with the Minimum Expenditure Basket (MEB) for three people depicted by the blue line and the Survival Minimum Expenditure Basket (SMEB) for three people depicted by the red line



## Debt

Approximately two thirds of the sample (64 per cent) reported having debts. Debt has two divergent interpretations from a livelihoods perspective. Firstly, debt levels can be understood as a proxy measure for vulnerability. Debts incurred to pay for food, healthcare and rent fit into this category. As is demonstrated by table 15, 55 per cent of cases in the sample reported accumulating debts due to these reasons.

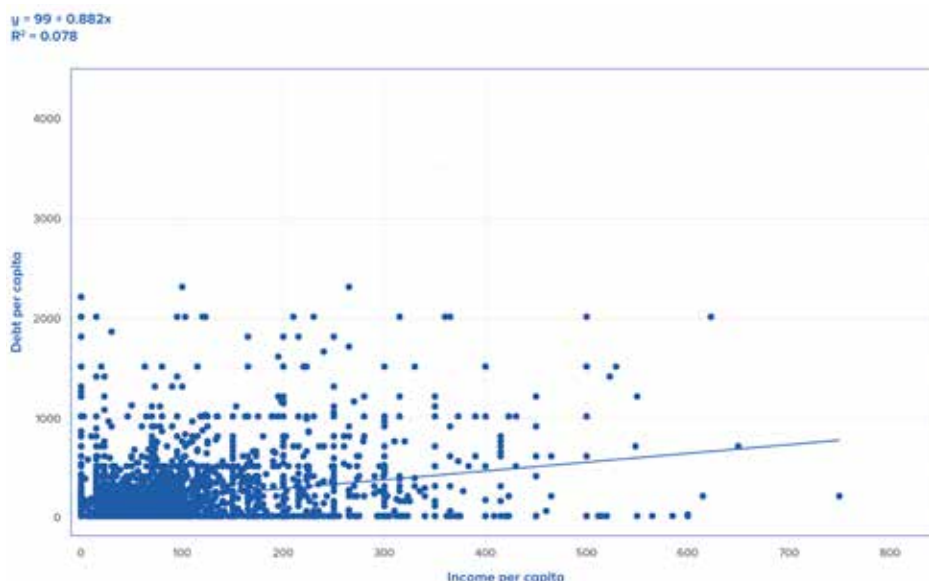
Secondly, debt can be viewed as an indicator of future economic resilience and an income accelerator. Debts related to business or education expenses may have this positive interpretation. Only a small proportion of the sample (one per cent) report borrowing money for business purposes.

Table 15: Reason for incurring into debt and related amounts

Reason to borrow money	Proportion of cases in the sample (%)	Mean debt per capita (JOD)
No debt reported	36	0
Paying rent	27	363
Healthcare expenses	17	370
Buying food	11	287
Other reasons	7	500
Business related expenses	1	1,143
Educational expenses	1	408
<b>Total</b>	<b>100</b>	<b>244</b>

Debt per capita is weakly and positively associated with income per capita (as is shown in the figure 52 below). As debts per person increase, income also increases by a small amount. This may indicate that having debt enables business borrowing, which leads to higher income payoffs. An alternative explanation of this correlation is that as income increases, credit-worthiness improves and respondents are able to borrow more money.

Figure 52: Income per capita and debt per capita



The relationship between income and debt may become more explicit as more Syrian refugees in Jordan gain access to micro-finance. Questions related to business related debt should be retained in the VAF survey in order to monitor this change over time. Focus groups and individual interviews may be necessary to investigate barriers to access business finance.

### Rent and debt

As is demonstrated by table 15 above, housing costs are the most common reason why respondents borrow money. Nearly three out of ten (27 per cent) cases accumulate debt to pay the rent. Rent is also a strong predictor of indebtedness. As is demonstrated by figure 53, there is a positive relationship between debt and rent; cases with higher rents tend to have higher debt. Approximately 11 per cent of the variation in indebtedness across the sample can be explained by reference to housing costs alone.

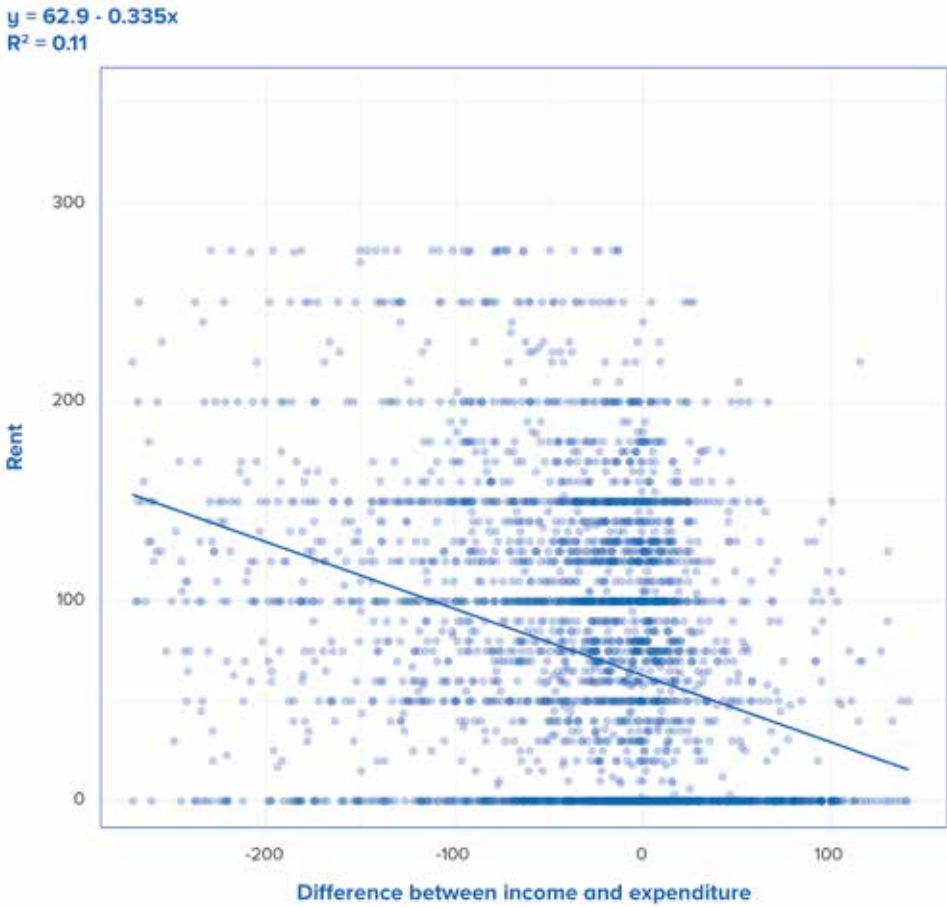
Figure 53: Total debt and monthly rent at the case-level



Figure 54 reiterates this relationship from another perspective. On average, respondents report less income than expenditure and the difference between earning and spending is financed by debt. The median value for this difference is approximately –26 JOD per month for each case. As the ‘gap’ between expenditure and income narrows, rent costs fall. It is estimated that a narrowing of the gap by ten JOD is associated with 3.35 JOD decrease in rent.



Figure 54: Difference between income and expenditure and rent at the case-level

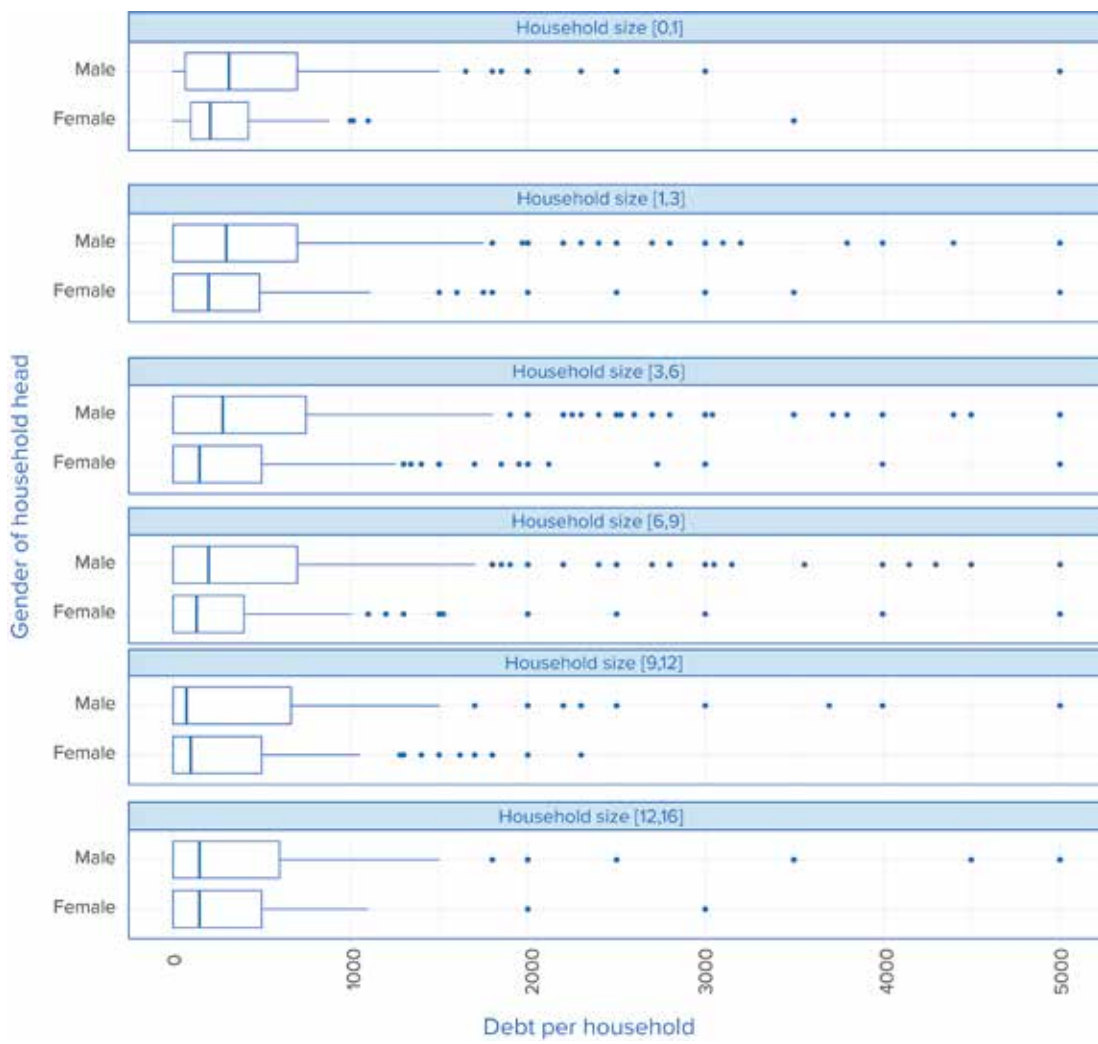


**Income, debt, household structure and gender**

Debt is also associated with case size and gender. On average, cases in female-headed households have less income, but more debt than cases in male-headed households. For a case in a household lead by a woman or girl, the median income is 123 JOD per month and the median debt is 150 JOD. For a case in a household headed by a man or boy, median income is 200 JOD per month and the median debt level is 200 JOD.

Smaller cases living in male-headed household are particularly prone to high per capita levels of debt. The mean debt of a single case living in a male-headed household is 284 JOD. The mean debt of a case size one living in a female-headed household is only 176 JOD. This figure is close to the sample average. The mean level of debt per capita for all respondents is 178 JOD. As is demonstrated by figure 55, median debt levels for all case sizes less than nine, are lower for cases living in female-headed household compared to male-headed households.

Figure 55: Debt amounts across household size and gender household head



## 4.2. Working children and child labour

For the first time, the 2019 VAF population report includes an assessment of child labour. Produced in partnership with the International Labour Organization (ILO), this section presents a short descriptive assessment of the prevalence of working children in the Syrian refugee population. This section presents preliminary observations, which will be expanded upon in future publications.

### Summary

The findings from the VAF study show that 5.1 per cent of the child population were identified as working children, of which 94.5 per cent are engaged in child labour and 77.4 per cent are engaged in hazardous forms of child labour. The survey finds that boys are more likely to be involved in child labour than girls are. These results may in part reflect the involvement of girls in less visible and therefore under-reported forms of child labour and in particular, the performance of household chores in their own households.

The proportion of children in the sample who work is higher than estimates of the national average for Jordan as a whole. One study in 2016 estimates that only 1.8 per cent of Jordanian children work (see table 16 for more details).

#### BOX 4: Definitions

Although the definition of child labour and hazardous work used in this analysis is aligned in terms of age groups and hour thresholds with the national definition used in the *Jordan National Child Labour Survey 2016: Analytical Report*<sup>20</sup>, there are differences in terms of the specific elements that define hazardous work. Hazardous work in this report was defined based on standard questions included in the ILO model questionnaires on child labour.

**Working children:** These are all children identified as carrying out any form of work. Not all work conducted by children is a protection concern. Anyone under the age of 18 who has worked for more than one hour over the last month is classified as a working child.

**Child labour:** Physical and emotional development is negatively impacted by child labour, either due to long work hours, school dropouts or reduced development opportunities. It includes all children in employment under the age of 16 years.

**Hazardous work:** In this category are children involved in work that has a severe negative effect on physical and emotional wellbeing. Hazardous work includes children aged 16 to 17 years and employed for more than 36 hours per week, or any child under the age of 18 years engaged in designated hazardous work (for example, if they carry heavy loads, are exposed to dangerous products or are subject to abuse in the work place).

#### Target population

Considering the minimum age for admission to employment or work in Jordan is 16 years<sup>21</sup>, the group of children age five to seventeen is further divided into two groups:

- All children: 4,692
- Those below the minimum legal working age (5-15 years): 3,188
- Those above the minimum working age (16-17 years): 403

20 <http://www.ilo.org/ipecinfor/product/download.do?type=document&id=29695>.

Source: Jordan National Child Labour Survey 2016 – Analytical Report / International Labour Office, Fundamental Principles and Rights at Work Branch (FUNDAMENTALS); Centre for Strategic Studies. - Amman: ILO, 2017.

21 Where age is measured as the number of completed years at the child's last birthday.

- Not considered in this analysis (0-4 years): 1,101

While 16 to 17-year-olds have attained the minimum age to work, they are at-risk if they are engaged in any activity deemed to be hazardous because it has a negative effect on emotional or physical well-being.

## Extent of working refugee children

An estimated 5.1 per cent of the 3,188 children aged 5 to 17 years are engaged in working activities. This figure is considerably higher than the proportion of 1.8 per cent estimated by the National Child Labour Survey in 2016. It is estimated that the proportion of Syrian refugee children who work is 3.3 percentage points higher than the proportion of all children in Jordan.

According to table 16, a higher percentage of boys are working than girls (8.8 per cent as opposed to 1.2 per cent). This may be in part a reflection of an under-reporting of some forms of work performed by girls, such as household chores in their own homes. Domestic labour is a form of work that is inadequately measured by the 2019 VAF study.

The involvement of children in work increases with age, with a considerably higher increase for boys than for girls. For boys there was an increase from 5.1 per cent to 32.9 per cent from five to 15-year-olds to sixteen to seventeen-year-olds, while for girls the increase was from one per cent to 2.2 per cent. A similar trend can also be observed when comparing the children under study to the national figures<sup>22</sup>.

Table 16: Percentage of working children by age category and sex derived from VAF 2019 survey compared to the Jordan National Child Labour Survey 2016: Analytical Report.

Age group	Gender	Proportion of working children (%) according to the VAF	Proportion of working children (%) according to the National Child Labour Survey
<b>5 to 15</b>	<b>Female</b>	1.0	0.2
	<b>Male</b>	5.1	0.9
	<b>Total</b>	3.2	0.4
<b>16 to 17</b>	<b>Female</b>	2.2	0.9
	<b>Male</b>	32.9	9.9
	<b>Total</b>	18.9	3.3
<b>5 to 17</b>	<b>Female</b>	1.2	0.8
	<b>Male</b>	8.8	5.6
	<b>Total</b>	5.1	1.8

## Child Labour

It is worth noting that 94.5 per cent (155/164) of working children are involved in child labour (see table 17). This means that most children identified as working are at-risk (due to the extended working hours, the type of work or the exposure to additional protection concerns at the workplace).

22 <http://www.ilo.org/ipecinfo/product/download.do?type=document&id=29695>

There is also a gendered dimension to child labour. 8.4 per cent of boys aged five to 17 years are engaged in child labour. Only one per cent of girls aged five to 17 are engaged in child labour. This gender difference in the incidence of child labour is also reflected in UNHCR case management data<sup>23</sup>.

## Hazardous work

77.4 per cent (127/164) of working children are exposed to hazardous work (see table 17). This demonstrates that most children who work are exposed to protection risks requiring case management and related services to address this concern.

A higher percentage of older boys (aged 16 to 17) are exposed to hazardous work compared to younger boys (aged five to 16). The difference between the two age categories for males is associated with an increase a 20 per cent increase in exposure hazardous work.

Table 17: Incidence of working children, child labour and hazardous work in the sample

	Observations	Proportion of all children in the sample (%)	Notes
<b>Children population (5-17)</b>	3,591	100	NA
<b>Working children</b>	164	4.5	NA
<b>Child labour</b>	155	4.3	94.5 per cent of working children
<b>Hazardous work</b>	127	3.5	77.4 per cent of working children

## Sectors and types of work

Children are most commonly employed in the services sector (see table 18). Construction, considered the most hazardous form of employment for children of all ages, also accounts for a high proportion of working children.

Table 18: Employment sector for working children disaggregated by age

Sector	Proportion of all working children (%)	Proportion of working children aged 5-15 (%)	Proportion of working children aged 16-17 (%)
<b>Services</b>	31	26	37
<b>Construction</b>	17	18	16
<b>Agriculture</b>	16	18	14
<b>Food and beverage</b>	16	17	16
<b>Manufacturing</b>	1	0	1
<b>Other</b>	19	21	16

The main types of work are wage related activities, running a business, working on own land and paid domestic work. There are important differences by age group, but the general trend is that older children are less likely to work within the family domain (“Work on own land”, “Construction on own land”, “Fetch water and collect firewood”) than their younger peers, and more likely to work for wages or run a business.

23 Child Protection Case management data (CPIMS) places a strong emphasis on the identification and response to child labour given its high prevalence and potential negative impact on the children’s well-being. Out of the 6,742 children that were supported with Child Protection case management services in 2018, 31 per cent were exposed to child labour. Out of the 18 per cent of children exposed to child labour, 82 per cent were boys.

Table 19: Types of work for working children disaggregated by age

Type of work	Proportion of working children (%)	Proportion of working children aged 5-15 (%)	Proportion of working children aged 16-17 (%)
Work for wage	63	48	80
Run business	6	9	13
Work on land	6	9	3
Paid domestic work	2	4	0
Unpaid domestic work	1	2	0
Construction on own land	1	1	1
Fetch firewood	1	2	0
None of the above	11	25	3

## Working hours

Working children tend to work for long hours, which is a critical variable in the identification of child labour. The number of hours that children spend working deprives them from their right to education and positive development not only in terms of school attendance but also in terms of other learning achievements.

In addition, it is important to consider that hours dedicated to household chores have been excluded from the analysis, and therefore the actual number of working hours could be higher for children who are additionally performing household chores. Table 20 below suggests that when considering all children, boys work for more hours per week than girls. It is likely that if unpaid domestic labour were included in the calculations, then the gendered difference in working hours would be reduced.

Table 20: Mean number of hours worked per week by working children disaggregated by age and gender

Age group / Sex	Female	Male	Total
5-15	29.8	27.4	27.7
16-17	25.3	38.6	38.1
Total	28.5	33.6	33.2

## School attendance and working children

Overall 80 per cent of children surveyed report attending school and not working. This figure is approximately ten percentage points lower than the Jordanian national average<sup>24</sup>. To assess the relationship of children working on school attendance the responses were split into four mutually exclusive categories:

- Children only attending school (and not working)
- Children working and studying
- Children working only (not attending school)
- Children neither working nor attending school

24 <http://www.ilo.org/ipeinfo/product/download.do?type=document&id=29695>

Over two thirds of working children in the sample are not attending school (see table 21). Given the long working hours identified earlier, work is likely to be a strong contributing factor to school dropouts. In addition, 13 per cent of the children are neither working nor attending school, double the national average<sup>25</sup>. This group of children might be a group at risk of child labour or exposed to other forms of risk, including specific needs.

Table 21: School attendance and working children

	Number of children	Proportion of children in the sample (%)
<b>Total Children (5-17 years)</b>	3,591	100
<b>Attending school and not working</b>	2,441	69
<b>Working children</b>	164	5
<b>Working and attending school</b>	53 (32%)	1
<b>Working only</b>	111 (68%)	3
<b>Neither working nor attending school</b>	423	12

25 National Survey on Child Labour, 2016



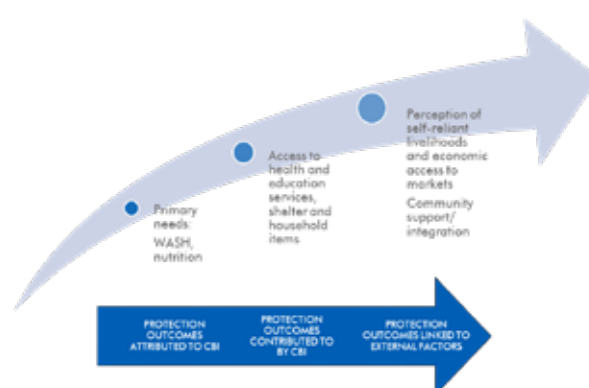
# 5. Recommendations and Conclusion

## 5.1. The VAF and the protection continuum

The VAF study is a valuable means to measure vulnerability from a protection continuum perspective, by assessing a range of sectors and crosscutting dimensions of households' structure, characteristics and vulnerabilities. This exercise led by UNHCR is a recommended important entry point for multi-agency collaboration in designing targeted strategies that can favour programme integration. The recognition that the refugee population in Jordan has evolving needs is also corroborated by evidence displaying expenditure changes led by cash transfers have influence in both addressing basic needs as well as in accelerating income and more livelihood-oriented changes.

The influence of cash-based interventions towards the achievement of longer-term protection outcomes can be described as a theory of change (figure 56), which can be used to outline the expected parameters of protection (in particular, for meeting basic needs) that can be attributed or contributed to by the cash programme. This theory of change also highlights how cash expenditures can affect the short, medium and long-term needs and vulnerabilities of refugee populations while accounting for external forces (such as freedom of movement, access to services and access to the labour market) that hold significant weight in shifting livelihood patterns. The theory of change illustrates a spectrum along which change can be categorised and targeting strategies tailored by multi-agency approaches, from meeting basic immediate needs through cash all the way to graduation models focused on livelihood stabilization and community integration.

Figure 56: Theory of change describing the protection continuum



## 5.2. Recommendations for the VAF

### Build on the livelihood focus

Cash programmes are an accelerator for income. Therefore, financial inflows should be further considered in the structure of the VAF tool to address sources and barriers of livelihood related to micro-entrepreneurship, such as home businesses. This would help address the existing evidence gaps for those respondents that selected “no sector identified”. Future versions of the VAF tool should explicitly identify the types of employment and skills related this sub-set of the refugee labour force.

### Welfare model forms the basis for reviewing cash effect on the protection continuum

Recognising that vulnerabilities are correlated with each other leads to a theory of change as the best approach to outline a sequence of interplays between different types of expenditures, protection threats and financial inflows at the household-level. The welfare model discussed in this report forms the basis on which to link current vulnerabilities with a range of financial values that can include global rent, income and debt per capita figures as explanatory variables, amongst others. The parameters for targeting will also need to consider the new poverty line that will be released in 2019.

### **Further enhancements for research into child labour**

To explore the connection of household chores, school dropouts of girls and social norms, additional questions could be added to future iterations of the VAF study or alternative data collection methods used, such as focus group discussions. This could include an assessment of the root causes of child labour through quantitative and qualitative data. This information could then be triangulated with information and analysis from case management agencies and other recent studies on child labour by different child protection agencies. Further research should also be conducted on the “not in school and not working” group as these children are also exposed to protection and development risks. Finally, it would be valuable to explore identify any geographic areas with high prevalence of child labour and undertake a focused assessment.

### **Focus on socio-cultural norms**

Future research should explore more about the cultural and social factors related to decision-making in the household across areas such as NFI expenditure, education, and livelihoods and their relationship with welfare vulnerability. For example, the categorical frequency table provided in this study on the reasons for households with out-of-school youth provides insight into causal triggers related to social and cultural norms of decision making for education,

beyond financial, market-based and regulatory barriers. Deepening the social and cultural understanding around decision making of the refugee population in Jordan can help to improve the VAF and related policy and programming.

## **5.3. Recommendations for policy**

### **Work permits are uncommon but can accelerate regular employment**

The proportion of the sample population with work permits, especially for women, is very small (only 4 per cent of the sample), and thus the findings are only indicative. However, they show a positive direction of overall income gains. Such evidence should be used to encourage the Jordanian Government to expand and prioritize the issuance work permits for refugees, and especially for women, covering different types of work, such as self and home-based employment (home business grants and registrations).

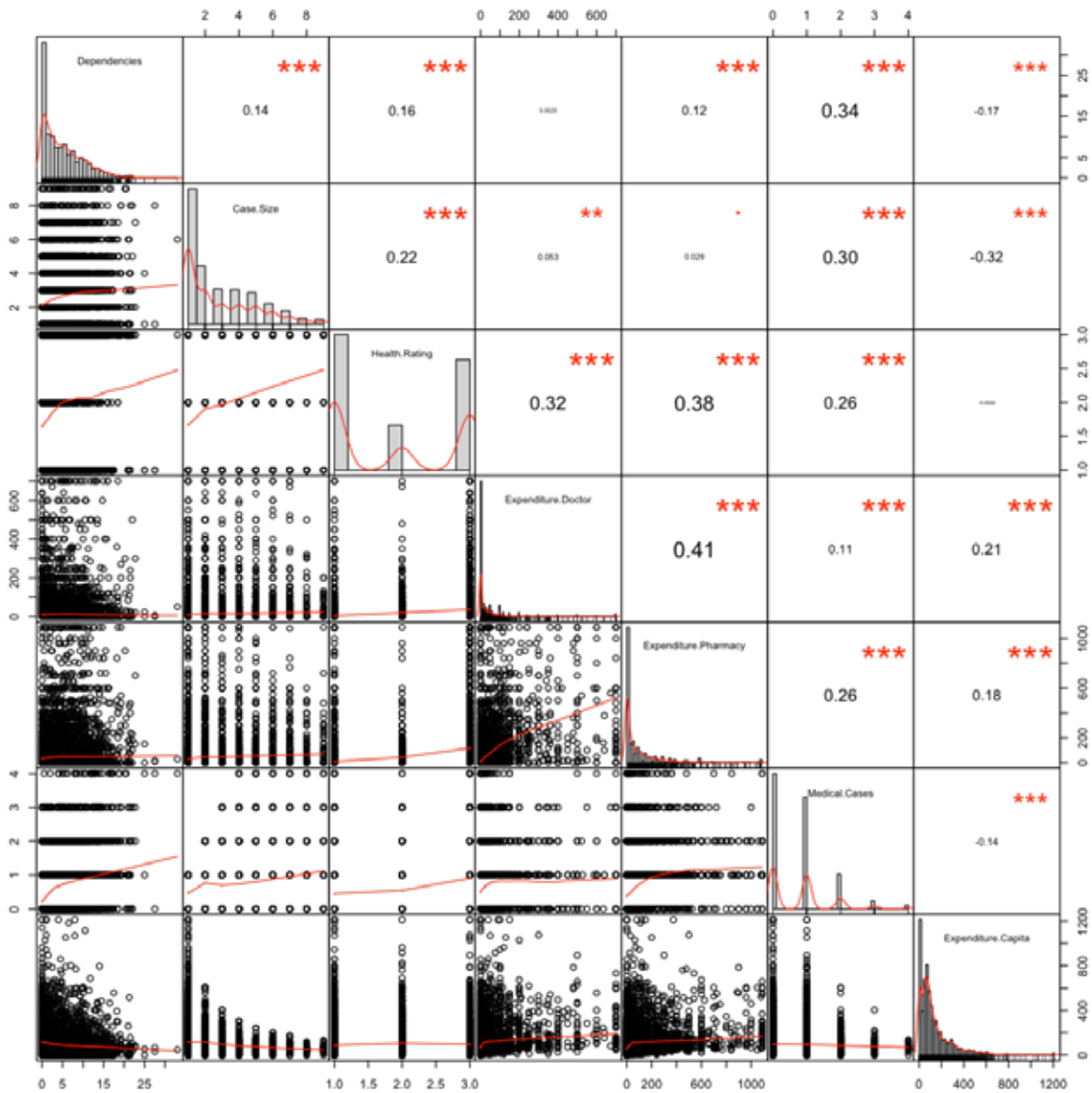
### **Evidence from the protection continuum should be directed to discuss policy changes**

Due to social and cultural norms, along with other gender norm barriers, women are more constrained from engaging in the labour market. For this reason, there is a need for multi-agency efforts to advocate donors for an enabling policy and regulatory environment to increase women’s access to income generation opportunities that are in dignifying conditions.

# 6. Annexes

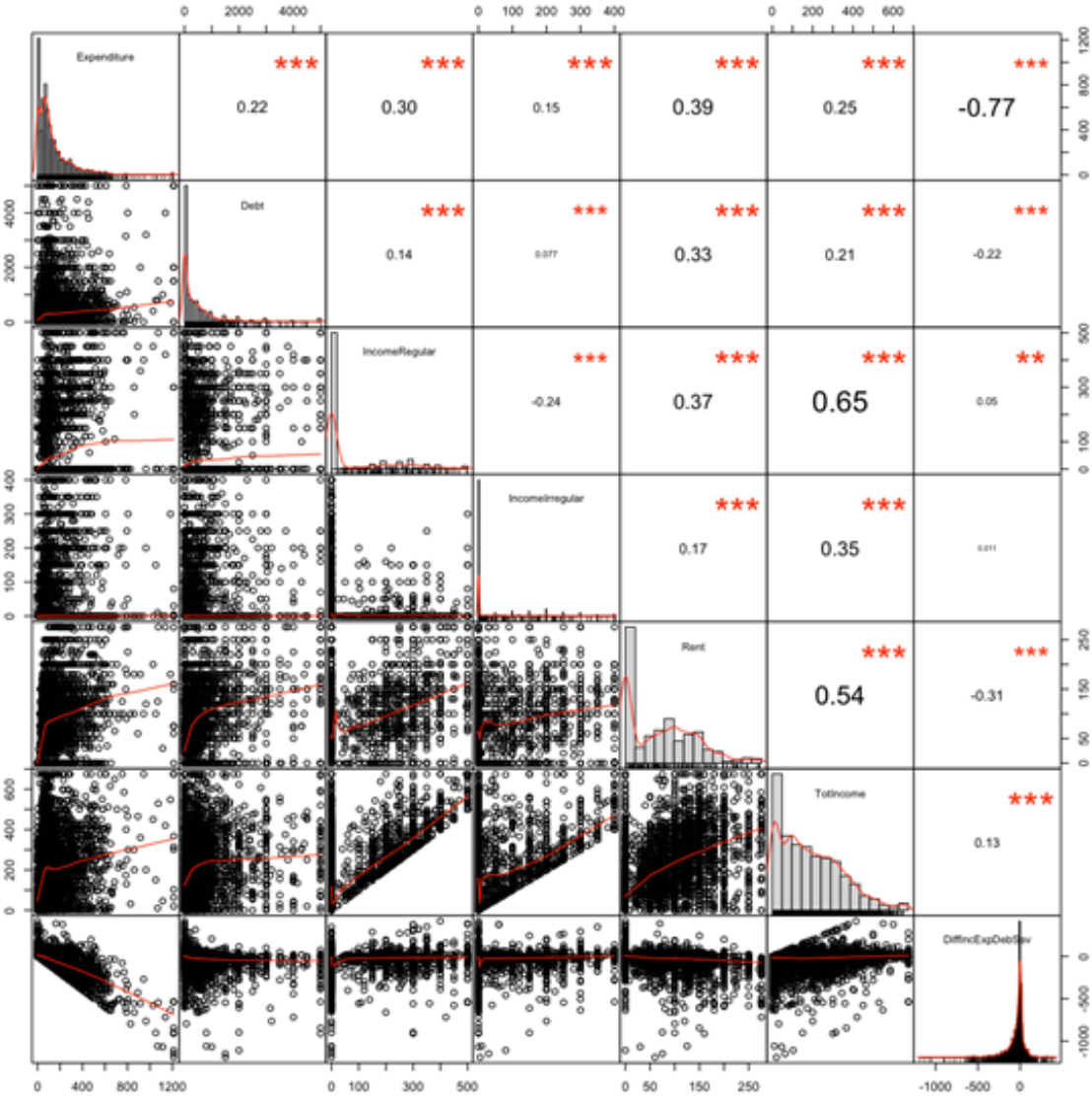
## 6.1. Annex: Health-related correlations

Figure 57: Correlation table for health variables



## 6.2. Annex: Welfare-related correlations

Figure 58: Correlation table for welfare variables



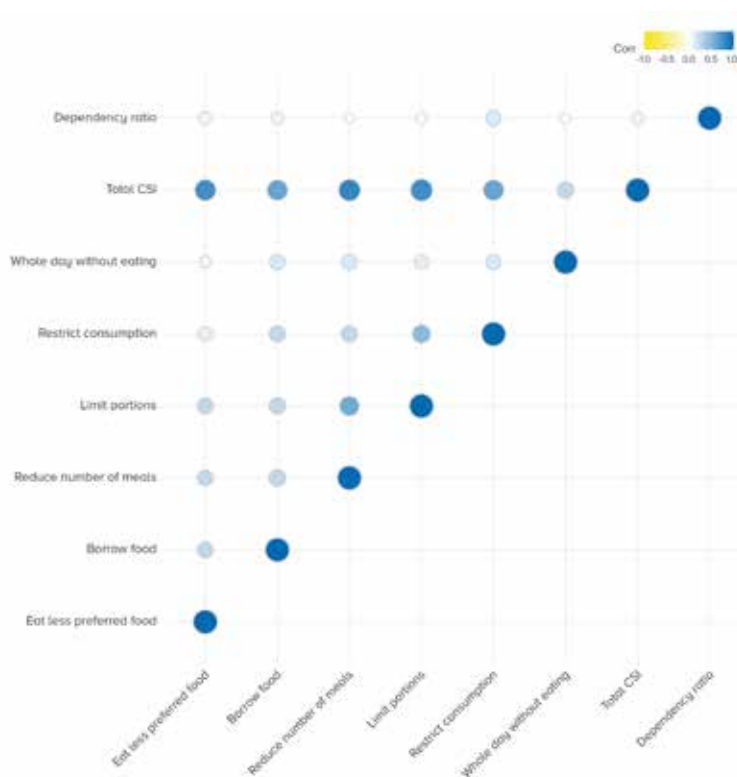
## 6.3. Annex: Explanation of some statistical techniques used in this report

### Correlation coefficient

A correlation coefficient measures the strength of correlation between two variables. The range of the estimate is between +1 and -1. A coefficient of zero indicates no correlation. A positive number represents a positive relationship (as one variable increases, the other variable increases). A negative number demonstrates a negative relationship (as one variable increases, the other variable decreases).

In the diagram below, for example, limiting portions is positively correlated with reducing the number of portions. The relevant circle is coloured red for this reason. The dependency ratio is unrelated to all the other variables, so its corresponding circles are white.

Figure 59: Example correlation table



### Ordinary Least Square (OLS) regression

OLS regression (referred to as ‘linear regression’) is a simple statistical technique to measure linear relationships between variables. In the table below, for example, the dependent variable (the variable that depends on other variables in the model) is medical expenditure per capita. The variables listed on the left-hand side are independent.

The table below shows that overall expenditure is positively associated with medical expenditure. Holding the other independent variables constant, it is estimated that a one JOD increase in expenditure per capita is associated with a 0.48 JOD increase in medical expenditure per capita. Income, on the other hand, is negatively associated with medical expenditure. Holding the other independent variables constant, a one JOD increase in income per capita decreases medical expenditure per capita by 0.13 JOD.

The numbers of stars adjacent to the estimate denote the level of significance. With three stars (\*\*\*), we reject the hypothesis that the coefficient is zero at a 99 per cent level of confidence.

The R-squared value indicates the proportion of variance in the dependent variable explained by the model. A value of 0.161 indicates that 16.1 per cent of the variation in medical expenditure is accounted for by the independent variables included in the model.

Figure 60: Example regression results

<b>Dependent Variable:</b>	
<b>Medical Expenditure Capita</b>	
<b>Expenditure per capita</b>	0.476*** (0.029)
<b>Income per capita</b>	-0.134*** (0.037)
<b>Monthly rent per capita</b>	-0.355*** (0.089)
<b>Case size</b>	-11.929*** (1.569)
<b>Head household sex male</b>	0.557 (6.049)
<b>Ratio females case size</b>	12.037*** (2.260)
<b>Number medical cases</b>	8.034** (3.173)
<b>Constant</b>	46.393*** (9.863)
<b>Observations</b>	3,682
<b>R<sup>2</sup></b>	0.161
<b>Adjusted R<sup>2</sup></b>	0.159
<b>Residual Std. Error</b>	164.182 (df = 3674)
<b>F Statistic</b>	100.712*** (df = 7; 3674)

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## 6.4. Annex: VAF indicator tables

The following table present the percentage of the population that are identified under each vulnerability category for each VAF indicator based on the data collected in 2018. For custom data requests relating to VAF data please contact [JORAMDAT@UNHCR.ORG](mailto:JORAMDAT@UNHCR.ORG).

Table 23: All VAF indicators

Basic Needs	LOW	MOD	HIGH	SEVERE
01.00_Basic_Needs_rating	0%	6%	40%	55%
01.11_Debt_per_capita	27%	11%	23%	39%
01.12_ExpenditureVSMEB	0%	0%	24%	76%
Coping strategies	LOW	MOD	HIGH	SEVERE
08.00_Coping_strategies_rating	17%	7%	31%	46%
Dependency ratio	LOW	MOD	HIGH	SEVERE
09.00_Dependency_ratio_rating	13%	21%	16%	49%
Education	LOW	MOD	HIGH	SEVERE
02.00_Education_rating	28%	53%	18%	1%
02.10_Formal_education	23%	23%	25%	29%
02.11_School_aged_children	32%	28%	22%	18%
02.12_Attending	70%	11%	8%	11%
02.13_Missed_education	86%	8%	0%	6%
02.20_Risk_of_non_completion	63%	13%	21%	4%
02.21_Difficulty_experienced	63%	13%	21%	4%
02.30_Access	72%	14%	6%	8%
02.31_Reasons_not_attending	85%	4%	10%	1%
02.32_Not_enrolled	72%	0%	11%	17%
Food security	LOW	MOD	HIGH	SEVERE
03.00_Food_security_rating	1%	50%	15%	33%
03.10_Social_vulnerability	7%	53%	8%	33%
03.11_Dependency_ratio	13%	21%	16%	49%
03.12_SHH_or_fragile	43%	0%	50%	7%
03.20_CARI	19%	67%	13%	0%
03.21_FCS	90%	0%	8%	2%
03.22_Expenditure_on_food	86%	3%	2%	9%
03.23_Coping_strategies	17%	7%	31%	46%
Health	LOW	MOD	HIGH	SEVERE
04.00_Health_rating	32%	18%	40%	9%
04.10_Access_and_availability	63%	0%	0%	37%
04.11_MOI_registration	97%	0%	0%	3%
04.12_Medical_access	65%	0%	0%	35%
04.20_Family_composition	46%	54%	0%	0%
04.21_Children_below_six	55%	25%	16%	4%
04.22_Adult_over_sixty	90%	7%	2%	0%
04.30_Existing_conditions	25%	25%	13%	37%
04.31_Disabilities	41%	21%	13%	25%



04.32_Chronic_illness	35%	35%	19%	12%
04.33_Affects_daily_life	79%	0%	0%	21%
04.40_Health_expenditure	40%	8%	17%	35%
<b>Shelter</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
05.00_Shelter_rating	48%	47%	4%	1%
05.11_House_crowding	28%	66%	1%	5%
05.12_Housing_type	95%	0%	3%	3%
05.20_Housing_condition	38%	42%	3%	17%
05.21_Shelter_condition	61%	8%	3%	28%
05.22_Security_of_tenure	57%	0%	0%	43%
05.x_Mobility_and_accessibility	94%	0%	0%	6%
05.x_Threat_of_eviction	89%	3%	7%	0%
<b>WASH</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
06.00_WASH_rating	17%	72%	9%	2%
06.10_Accessibility_to_latrine	51%	43%	4%	1%
06.11_Physical_accessibility	96%	0%	4%	0%
06.12_Perception_of_security	92%	0%	0%	8%
06.13_Sharing_latrine	56%	0%	28%	16%
06.20_Reliability_sanitation_system	73%	24%	0%	3%
06.21_Type_of_disposal	73%	24%	0%	3%
06.30_Reliability_solid_waste_management	18%	0%	30%	52%
06.31_vector_evidence	18%	0%	30%	52%
06.40_Access_to_water	36%	0%	0%	64%
06.41_Source_of_water	89%	0%	0%	11%
06.42_WASH_expenditure	42%	0%	0%	58%
<b>Welfare</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
10.00_welfare	6%	16%	67%	11%

Table 24: All VAF indicators segmented by case size

Basic Needs	LOW	MOD	HIGH	SEVERE
<b>01.00_Basic_Needs_rating</b>				
CASE SIZE = 1	0%	17%	61%	21%
CASE SIZE = 2&3	0%	9%	60%	31%
CASE SIZE = 4+	0%	2%	28%	70%
<b>01.11_Debt_per_capita</b>				
CASE SIZE = 1	50%	2%	6%	42%
CASE SIZE = 2&3	37%	5%	11%	47%
CASE SIZE = 4+	18%	15%	31%	36%
<b>01.12_ExpenditureVSMEB</b>				
CASE SIZE = 1	0%	0%	46%	54%
CASE SIZE = 2&3	0%	0%	41%	59%
CASE SIZE = 4+	0%	0%	13%	87%
<b>Coping strategies</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
08.00_Coping_strategies_rating				

CASE SIZE = 1	31%	6%	27%	35%
CASE SIZE = 2&3	19%	7%	32%	42%
CASE SIZE = 4+	13%	7%	31%	49%
<b>Dependency ratio</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>09.00_Dependency_ratio_rating</b>				
CASE SIZE = 1	37%	31%	8%	24%
CASE SIZE = 2&3	23%	28%	14%	36%
CASE SIZE = 4+	5%	16%	19%	60%
<b>Education</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>02.00_Education_rating</b>				
CASE SIZE = 1	32%	53%	14%	1%
CASE SIZE = 2&3	24%	57%	19%	1%
CASE SIZE = 4+	29%	52%	18%	1%
<b>02.10_Formal_education</b>				
CASE SIZE = 1	25%	22%	24%	29%
CASE SIZE = 2&3	21%	21%	22%	36%
CASE SIZE = 4+	23%	24%	27%	26%
<b>02.11_School_aged_children</b>				
CASE SIZE = 1	35%	27%	20%	18%
CASE SIZE = 2&3	34%	26%	18%	22%
CASE SIZE = 4+	30%	30%	23%	17%
<b>02.12_Attending</b>				
CASE SIZE = 1	71%	8%	9%	12%
CASE SIZE = 2&3	67%	12%	7%	14%
CASE SIZE = 4+	70%	11%	8%	10%
<b>02.13_Missed_education</b>				
CASE SIZE = 1	83%	10%	0%	7%
CASE SIZE = 2&3	83%	9%	0%	7%
CASE SIZE = 4+	87%	7%	1%	5%
<b>02.20_Risk_of_non_completion</b>				
CASE SIZE = 1	69%	11%	19%	2%
CASE SIZE = 2&3	63%	9%	23%	5%
CASE SIZE = 4+	61%	14%	20%	4%
<b>02.21_Difficulty_experienced</b>				
CASE SIZE = 1	69%	11%	19%	2%
CASE SIZE = 2&3	63%	9%	23%	5%
CASE SIZE = 4+	61%	14%	20%	4%
<b>02.30_Access</b>				
CASE SIZE = 1	74%	13%	7%	7%
CASE SIZE = 2&3	72%	14%	7%	7%
CASE SIZE = 4+	73%	14%	6%	8%
<b>02.31_Reasons_not_attending</b>				
CASE SIZE = 1	86%	5%	8%	1%
CASE SIZE = 2&3	84%	3%	9%	3%
CASE SIZE = 4+	85%	4%	10%	1%
<b>02.32_Not_enrolled</b>				

CASE SIZE = 1	74%	0%	11%	15%
CASE SIZE = 2&3	72%	0%	15%	14%
CASE SIZE = 4+	73%	0%	10%	18%
<b>Food security</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>03.00_Food_security_rating</b>				
CASE SIZE = 1	0%	53%	21%	26%
CASE SIZE = 2&3	3%	51%	16%	30%
CASE SIZE = 4+	1%	50%	14%	36%
<b>03.10_Social_vulnerability</b>				
CASE SIZE = 1	0%	58%	16%	26%
CASE SIZE = 2&3	17%	43%	10%	30%
CASE SIZE = 4+	4%	55%	6%	35%
<b>03.11_Dependency_ratio</b>				
CASE SIZE = 1	37%	31%	8%	24%
CASE SIZE = 2&3	23%	28%	14%	36%
CASE SIZE = 4+	5%	16%	19%	60%
<b>03.12_SHH_or_fragile</b>				
CASE SIZE = 1	0%	0%	79%	21%
CASE SIZE = 2&3	37%	0%	57%	6%
CASE SIZE = 4+	54%	0%	41%	4%
<b>03.20_CARI</b>				
CASE SIZE = 1	31%	60%	9%	0%
CASE SIZE = 2&3	23%	67%	10%	0%
CASE SIZE = 4+	15%	69%	15%	1%
<b>03.21_FCS</b>				
CASE SIZE = 1	86%	0%	10%	4%
CASE SIZE = 2&3	88%	0%	10%	2%
CASE SIZE = 4+	91%	0%	7%	2%
<b>03.22_Expenditure_on_food</b>				
CASE SIZE = 1	94%	2%	1%	3%
CASE SIZE = 2&3	92%	3%	1%	4%
CASE SIZE = 4+	82%	4%	3%	12%
<b>03.23_Coping_strategies</b>				
CASE SIZE = 1	31%	6%	27%	35%
CASE SIZE = 2&3	19%	7%	32%	42%
CASE SIZE = 4+	13%	7%	31%	49%
<b>Health</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>04.00_Health_rating</b>				
CASE SIZE = 1	56%	19%	22%	3%
CASE SIZE = 2&3	37%	21%	35%	8%
CASE SIZE = 4+	25%	17%	47%	10%
<b>04.10_Access_and_availability</b>				
CASE SIZE = 1	53%	0%	0%	47%
CASE SIZE = 2&3	65%	0%	0%	35%
CASE SIZE = 4+	65%	0%	0%	35%
<b>04.11_MOI_registration</b>				

CASE SIZE = 1	93%	0%	0%	7%
CASE SIZE = 2&3	97%	0%	0%	3%
CASE SIZE = 4+	98%	0%	0%	2%
<b>04.12_Medical_access</b>				
CASE SIZE = 1	56%	0%	0%	44%
CASE SIZE = 2&3	66%	0%	0%	34%
CASE SIZE = 4+	66%	0%	0%	34%
<b>04.20_Family_composition</b>				
CASE SIZE = 1	81%	19%	0%	0%
CASE SIZE = 2&3	44%	56%	0%	0%
CASE SIZE = 4+	39%	61%	0%	0%
<b>04.21_Children_below_six</b>				
CASE SIZE = 1	100%	0%	0%	0%
CASE SIZE = 2&3	64%	29%	7%	0%
CASE SIZE = 4+	42%	29%	23%	6%
<b>04.22_Adult_over_sixty</b>				
CASE SIZE = 1	81%	19%	0%	0%
CASE SIZE = 2&3	80%	12%	8%	0%
CASE SIZE = 4+	96%	3%	1%	0%
<b>04.30_Existing_conditions</b>				
CASE SIZE = 1	43%	27%	8%	21%
CASE SIZE = 2&3	32%	25%	12%	30%
CASE SIZE = 4+	18%	25%	15%	43%
<b>04.31_Disabilities</b>				
CASE SIZE = 1	56%	18%	12%	14%
CASE SIZE = 2&3	47%	20%	10%	23%
CASE SIZE = 4+	35%	22%	15%	28%
<b>04.32_Chronic_illness</b>				
CASE SIZE = 1	52%	48%	0%	0%
CASE SIZE = 2&3	42%	33%	23%	2%
CASE SIZE = 4+	28%	32%	22%	18%
<b>04.33_Affects_daily_life</b>				
CASE SIZE = 1	85%	0%	0%	15%
CASE SIZE = 2&3	80%	0%	0%	20%
CASE SIZE = 4+	78%	0%	0%	22%
<b>04.40_Health_expenditure</b>				
CASE SIZE = 1	63%	8%	13%	16%
CASE SIZE = 2&3	44%	9%	17%	30%
CASE SIZE = 4+	33%	7%	19%	41%
<b>Shelter</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>05.00_Shelter_rating</b>				
CASE SIZE = 1	46%	49%	4%	1%
CASE SIZE = 2&3	50%	46%	3%	1%
CASE SIZE = 4+	48%	46%	4%	2%
<b>05.11_House_crowding</b>				
CASE SIZE = 1	21%	74%	1%	4%

CASE SIZE = 2&3	24%	71%	1%	5%
CASE SIZE = 4+	32%	62%	1%	5%
<b>05.12_Housing_type</b>				
CASE SIZE = 1	96%	0%	1%	3%
CASE SIZE = 2&3	96%	0%	2%	2%
CASE SIZE = 4+	94%	0%	3%	3%
<b>05.20_Housing_condition</b>				
CASE SIZE = 1	40%	41%	3%	17%
CASE SIZE = 2&3	40%	43%	2%	15%
CASE SIZE = 4+	37%	42%	3%	18%
<b>05.21_Shelter_condition</b>				
CASE SIZE = 1	62%	8%	2%	28%
CASE SIZE = 2&3	64%	6%	2%	27%
CASE SIZE = 4+	60%	9%	3%	29%
<b>05.22_Security_of_tenure</b>				
CASE SIZE = 1	58%	0%	0%	42%
CASE SIZE = 2&3	57%	0%	0%	43%
CASE SIZE = 4+	56%	0%	0%	44%
<b>05.x_Mobility_and_accessibility</b>				
CASE SIZE = 1	94%	0%	0%	6%
CASE SIZE = 2&3	95%	0%	0%	5%
CASE SIZE = 4+	94%	0%	0%	6%
<b>05.x_Threat_of_eviction</b>				
CASE SIZE = 1	87%	4%	9%	0%
CASE SIZE = 2&3	89%	3%	8%	0%
CASE SIZE = 4+	89%	3%	7%	0%
<b>WASH</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>06.00_WASH_rating</b>				
CASE SIZE = 1	37%	56%	5%	2%
CASE SIZE = 2&3	22%	68%	8%	2%
CASE SIZE = 4+	10%	78%	10%	2%
<b>06.10_Accessibility_to_latrine</b>				
CASE SIZE = 1	47%	48%	4%	1%
CASE SIZE = 2&3	41%	55%	3%	1%
CASE SIZE = 4+	56%	38%	5%	1%
<b>06.11_Physical_accessibility</b>				
CASE SIZE = 1	96%	0%	4%	0%
CASE SIZE = 2&3	96%	0%	4%	0%
CASE SIZE = 4+	96%	0%	4%	0%
<b>06.12_Perception_of_security</b>				
CASE SIZE = 1	93%	0%	0%	7%
CASE SIZE = 2&3	94%	0%	0%	6%
CASE SIZE = 4+	91%	0%	0%	9%
<b>06.13_Sharing_latrine</b>				
CASE SIZE = 1	51%	0%	31%	17%
CASE SIZE = 2&3	44%	0%	32%	24%

CASE SIZE = 4+	62%	0%	25%	13%
06.20_Reliability_sanitation_system				
CASE SIZE = 1	79%	18%	0%	3%
CASE SIZE = 2&3	77%	20%	0%	3%
CASE SIZE = 4+	71%	26%	0%	3%
06.21_Type_of_disposal				
CASE SIZE = 1	79%	18%	0%	3%
CASE SIZE = 2&3	77%	20%	0%	3%
CASE SIZE = 4+	71%	26%	0%	3%
06.30_Reliability_solid_waste_management				
CASE SIZE = 1	20%	0%	31%	49%
CASE SIZE = 2&3	22%	0%	29%	49%
CASE SIZE = 4+	16%	0%	30%	54%
06.31_Vector_evidence				
CASE SIZE = 1	20%	0%	31%	49%
CASE SIZE = 2&3	22%	0%	29%	49%
CASE SIZE = 4+	16%	0%	30%	54%
06.40_Access_to_water				
CASE SIZE = 1	75%	0%	0%	25%
CASE SIZE = 2&3	50%	0%	0%	50%
CASE SIZE = 4+	23%	0%	0%	77%
06.41_Source_of_water				
CASE SIZE = 1	90%	0%	0%	10%
CASE SIZE = 2&3	91%	0%	0%	9%
CASE SIZE = 4+	88%	0%	0%	12%
06.42_WASH_expenditure				
CASE SIZE = 1	82%	0%	0%	18%
CASE SIZE = 2&3	56%	0%	0%	44%
CASE SIZE = 4+	27%	0%	0%	73%
<b>Welfare</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
10.00_welfare				
CASE SIZE = 1	41%	43%	16%	0%
CASE SIZE = 2&3	3%	37%	57%	3%
CASE SIZE = 4+	0%	2%	82%	16%

Table 25: All VAF indicators segmented by geography

Basic Needs	LOW	MOD	HIGH	SEVERE
01.00_Basic_Needs_rating				
Amman	0%	11%	52%	37%
Irbid	0%	3%	32%	65%
Mafraq	0%	2%	29%	69%
Zarqa	0%	1%	30%	70%
Central	0%	3%	33%	64%
South	0%	4%	34%	62%
01.11_Debt_per_capita				
Amman	33%	6%	17%	44%
Irbid	25%	15%	26%	34%

Mafrq	17%	16%	32%	35%
Zarqa	25%	15%	24%	36%
Central	24%	11%	25%	40%
South	20%	8%	29%	43%
<b>01.12_ExpenditureVSMEB</b>				
Amman	0%	0%	40%	60%
Irbid	0%	0%	13%	87%
Mafrq	0%	0%	16%	84%
Zarqa	0%	0%	7%	93%
Central	0%	0%	15%	85%
South	0%	0%	22%	78%
<b>Coping strategies</b>				
	LOW	MOD	HIGH	SEVERE
<b>08.00_Coping_strategies_rating</b>				
Amman	18%	4%	27%	51%
Irbid	23%	12%	30%	35%
Mafrq	11%	13%	38%	38%
Zarqa	12%	1%	35%	52%
Central	11%	7%	36%	46%
South	12%	5%	25%	58%
<b>Dependency ratio</b>				
	LOW	MOD	HIGH	SEVERE
<b>09.00_Dependency_ratio_rating</b>				
Amman	18%	22%	17%	43%
Irbid	11%	24%	16%	49%
Mafrq	9%	18%	11%	62%
Zarqa	9%	17%	21%	53%
Central	11%	16%	22%	52%
South	13%	20%	11%	55%
<b>Education</b>				
	LOW	MOD	HIGH	SEVERE
<b>02.00_Education_rating</b>				
Amman	30%	53%	16%	1%
Irbid	28%	55%	17%	0%
Mafrq	26%	48%	26%	0%
Zarqa	37%	52%	10%	1%
Central	26%	51%	23%	0%
South	15%	67%	19%	0%
<b>02.10_Forma1_education</b>				
Amman	26%	21%	21%	32%
Irbid	22%	22%	32%	24%
Mafrq	17%	28%	23%	32%
Zarqa	30%	30%	21%	19%
Central	18%	19%	31%	32%
South	13%	25%	30%	33%
<b>02.11_School_aged_children</b>				
Amman	36%	26%	18%	20%
Irbid	31%	29%	27%	14%
Mafrq	29%	31%	22%	17%



Zarqa	39%	36%	15%	9%
Central	25%	27%	25%	23%
South	18%	30%	25%	28%
<b>02.12_Attending</b>				
Amman	71%	8%	8%	13%
Irbid	69%	12%	7%	12%
Mafrq	66%	16%	4%	15%
Zarqa	70%	12%	8%	10%
Central	69%	11%	12%	9%
South	70%	15%	10%	5%
<b>02.13_Missed_education</b>				
Amman	86%	7%	0%	7%
Irbid	87%	9%	0%	5%
Mafrq	87%	6%	0%	8%
Zarqa	90%	5%	0%	5%
Central	82%	12%	1%	4%
South	84%	12%	2%	2%
<b>02.20_Risk_of_non_completion</b>				
Amman	64%	10%	23%	3%
Irbid	67%	9%	20%	5%
Mafrq	58%	18%	20%	3%
Zarqa	62%	12%	21%	4%
Central	63%	14%	17%	6%
South	50%	31%	14%	4%
<b>02.21_Difficulty_experienced</b>				
Amman	64%	10%	23%	3%
Irbid	67%	9%	20%	5%
Mafrq	58%	18%	20%	3%
Zarqa	62%	12%	21%	4%
Central	63%	14%	17%	6%
South	50%	31%	14%	4%
<b>02.30_Access</b>				
Amman	74%	13%	5%	7%
Irbid	71%	15%	8%	7%
Mafrq	67%	13%	8%	11%
Zarqa	76%	15%	4%	5%
Central	71%	17%	5%	7%
South	73%	12%	4%	10%
<b>02.31_Reasons_not_attending</b>				
Amman	86%	4%	9%	1%
Irbid	85%	1%	13%	1%
Mafrq	79%	7%	14%	1%
Zarqa	87%	7%	3%	3%
Central	86%	6%	8%	1%
South	83%	4%	10%	3%
<b>02.32_Not_enrolled</b>				
Amman	74%	0%	9%	17%

Irbid	71%	0%	14%	15%
Mafrq	67%	0%	11%	22%
Zarqa	76%	0%	11%	13%
Central	71%	0%	12%	17%
South	73%	0%	11%	16%
<b>Food security</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>03.00_Food_security_rating</b>				
Amman	1%	52%	17%	31%
Irbid	2%	57%	13%	28%
Mafrq	1%	44%	11%	44%
Zarqa	2%	39%	17%	42%
Central	1%	50%	19%	30%
South	1%	45%	14%	40%
<b>03.10_Social_vulnerability</b>				
Amman	7%	54%	8%	31%
Irbid	6%	59%	8%	27%
Mafrq	5%	45%	6%	44%
Zarqa	6%	42%	10%	42%
Central	6%	53%	10%	30%
South	6%	50%	5%	39%
<b>03.11_Dependency_ratio</b>				
Amman	17%	23%	17%	43%
Irbid	11%	24%	16%	49%
Mafrq	9%	17%	12%	62%
Zarqa	9%	17%	21%	53%
Central	11%	16%	21%	52%
South	13%	20%	11%	55%
<b>03.12_SHH_or_fragile</b>				
Amman	40%	0%	54%	6%
Irbid	50%	0%	43%	7%
Mafrq	39%	0%	50%	11%
Zarqa	37%	0%	56%	6%
Central	49%	0%	47%	4%
South	40%	0%	51%	9%
<b>03.20_CARI</b>				
Amman	19%	67%	14%	0%
Irbid	29%	60%	10%	1%
Mafrq	16%	71%	12%	1%
Zarqa	11%	74%	15%	0%
Central	15%	71%	14%	0%
South	14%	68%	17%	1%
<b>03.21_FCS</b>				
Amman	92%	0%	7%	1%
Irbid	90%	0%	7%	2%
Mafrq	76%	0%	17%	7%
Zarqa	93%	0%	6%	1%
Central	89%	0%	9%	2%

South	94%	0%	4%	2%
<b>03.22_Expenditure_on_food</b>				
Amman	85%	3%	2%	10%
Irbid	88%	3%	1%	8%
Mafrq	89%	5%	1%	5%
Zarqa	82%	5%	3%	9%
Central	88%	3%	1%	9%
South	79%	4%	4%	13%
<b>03.23_Coping_strategies</b>				
Amman	18%	4%	27%	51%
Irbid	23%	12%	30%	34%
Mafrq	11%	13%	38%	38%
Zarqa	12%	1%	35%	52%
Central	11%	7%	36%	46%
South	12%	5%	25%	58%
<b>Health</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>04.00_Health_rating</b>				
Amman	33%	17%	41%	8%
Irbid	32%	24%	32%	12%
Mafrq	52%	14%	31%	3%
Zarqa	27%	22%	43%	8%
Central	23%	12%	56%	10%
South	22%	18%	53%	6%
<b>04.10_Access_and_availability</b>				
Amman	65%	0%	0%	35%
Irbid	48%	0%	0%	52%
Mafrq	80%	0%	0%	20%
Zarqa	69%	0%	0%	31%
Central	59%	0%	0%	41%
South	80%	0%	0%	20%
<b>04.11_MOI_registration</b>				
Amman	98%	0%	0%	2%
Irbid	96%	0%	0%	4%
Mafrq	98%	0%	0%	2%
Zarqa	99%	0%	0%	1%
Central	97%	0%	0%	3%
South	99%	0%	0%	1%
<b>04.12_Medical_access</b>				
Amman	66%	0%	0%	34%
Irbid	50%	0%	0%	50%
Mafrq	82%	0%	0%	18%
Zarqa	70%	0%	0%	30%
Central	61%	0%	0%	39%
South	80%	0%	0%	20%
<b>04.20_Family_composition</b>				
Amman	50%	50%	0%	0%
Irbid	50%	50%	0%	0%

Mafrq	30%	70%	0%	0%
Zarqa	48%	52%	0%	0%
Central	38%	62%	0%	0%
South	48%	52%	0%	0%
<b>04.21_Children_below_six</b>				
Amman	60%	23%	13%	4%
Irbid	58%	26%	14%	1%
Mafrq	42%	28%	24%	6%
Zarqa	56%	23%	18%	3%
Central	47%	28%	21%	4%
South	58%	22%	13%	7%
<b>04.22_Adult_over_sixty</b>				
Amman	90%	8%	2%	0%
Irbid	92%	6%	2%	0%
Mafrq	89%	8%	3%	0%
Zarqa	91%	6%	2%	0%
Central	90%	8%	2%	0%
South	90%	7%	3%	0%
<b>04.30_Existing_conditions</b>				
Amman	29%	26%	13%	33%
Irbid	21%	26%	13%	39%
Mafrq	21%	22%	14%	42%
Zarqa	24%	27%	11%	38%
Central	22%	25%	15%	39%
South	23%	20%	15%	42%
<b>04.31_Disabilities</b>				
Amman	48%	20%	13%	19%
Irbid	32%	23%	13%	32%
Mafrq	34%	26%	13%	27%
Zarqa	41%	22%	14%	24%
Central	37%	22%	14%	27%
South	45%	16%	15%	25%
<b>04.32_Chronic_illness</b>				
Amman	37%	34%	18%	11%
Irbid	35%	37%	17%	12%
Mafrq	34%	35%	20%	11%
Zarqa	32%	37%	19%	12%
Central	32%	30%	23%	15%
South	25%	35%	30%	10%
<b>04.33_Affects_daily_life</b>				
Amman	79%	0%	0%	21%
Irbid	86%	0%	0%	14%
Mafrq	76%	0%	0%	24%
Zarqa	74%	0%	0%	26%
Central	81%	0%	0%	19%
South	66%	0%	0%	34%
<b>04.40_Health_expenditure</b>				

Amman	39%	7%	16%	38%
Irbid	46%	8%	16%	30%
Mafraq	56%	8%	16%	20%
Zarqa	34%	9%	23%	35%
Central	26%	6%	24%	44%
South	25%	9%	19%	46%
<b>Shelter</b>	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>05.00_Shelter_rating</b>				
Amman	49%	47%	4%	0%
Irbid	49%	46%	3%	2%
Mafraq	44%	49%	5%	2%
Zarqa	46%	49%	4%	1%
Central	51%	44%	3%	2%
South	45%	45%	5%	5%
<b>05.11_House_crowding</b>				
Amman	29%	66%	1%	3%
Irbid	24%	69%	1%	5%
Mafraq	30%	62%	1%	7%
Zarqa	27%	68%	1%	5%
Central	32%	62%	1%	6%
South	33%	60%	1%	6%
<b>05.12_Housing_type</b>				
Amman	96%	0%	2%	1%
Irbid	94%	0%	1%	4%
Mafraq	94%	0%	3%	4%
Zarqa	94%	0%	4%	1%
Central	93%	0%	4%	4%
South	90%	0%	3%	6%
<b>05.20_Housing_condition</b>				
Amman	38%	42%	2%	18%
Irbid	42%	40%	3%	15%
Mafraq	30%	45%	3%	22%
Zarqa	35%	46%	2%	16%
Central	40%	42%	4%	13%
South	33%	42%	3%	23%
<b>05.21_Shelter_condition</b>				
Amman	62%	8%	2%	28%
Irbid	61%	7%	3%	29%
Mafraq	59%	7%	3%	31%
Zarqa	57%	12%	3%	27%
Central	65%	9%	2%	24%
South	56%	7%	2%	35%
<b>05.22_security_of_tenure</b>				
Amman	56%	0%	0%	44%
Irbid	63%	0%	0%	37%
Mafraq	46%	0%	0%	54%
Zarqa	59%	0%	0%	41%

Central	58%	0%	0%	42%
South	51%	0%	0%	49%
<b>05.x_Mobility_and_accessibility</b>				
Amman	95%	0%	0%	5%
Irbid	93%	0%	0%	7%
Mafraq	92%	0%	0%	8%
Zarqa	97%	0%	0%	3%
Central	95%	0%	0%	5%
South	91%	0%	0%	9%
<b>05.x_Threat_of_eviction</b>				
Amman	89%	3%	8%	0%
Irbid	88%	4%	8%	0%
Mafraq	90%	2%	8%	0%
Zarqa	91%	5%	4%	0%
Central	88%	5%	7%	1%
South	89%	1%	8%	1%
<b>WASH</b>				
	<b>LOW</b>	<b>MOD</b>	<b>HIGH</b>	<b>SEVERE</b>
<b>06.00_WASH_rating</b>				
Amman	21%	75%	3%	0%
Irbid	16%	71%	11%	2%
Mafraq	5%	58%	28%	10%
Zarqa	10%	84%	6%	0%
Central	17%	73%	9%	1%
South	22%	69%	8%	2%
<b>06.10_Accessibility_to_latrine</b>				
Amman	52%	46%	2%	0%
Irbid	49%	46%	4%	1%
Mafraq	48%	37%	11%	4%
Zarqa	55%	43%	1%	0%
Central	48%	45%	6%	1%
South	63%	29%	7%	0%
<b>06.11_Physical_accessibility</b>				
Amman	98%	0%	2%	0%
Irbid	98%	0%	2%	0%
Mafraq	87%	0%	13%	0%
Zarqa	99%	0%	1%	0%
Central	96%	0%	4%	0%
South	93%	0%	7%	0%
<b>06.12_Perception_of_security</b>				
Amman	97%	0%	0%	3%
Irbid	91%	0%	0%	9%
Mafraq	75%	0%	0%	25%
Zarqa	97%	0%	0%	3%
Central	94%	0%	0%	6%
South	92%	0%	0%	8%
<b>06.13_Sharing_latrine</b>				
Amman	54%	0%	30%	16%







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Published by UNHCR (Jordan)

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