JORDAN REFUGEE RESPONSE

VULNERABILITY ASSESSMENT FRAMEWORK S



This report and the background analysis has been produced by the Vulnerability Assessment Framework (VAF) team within UNHCR Jordan: Kate Washington, Harry Brown and Marco Santacroce, together with Alex Tyler. The VAF maps have been created by Koen Van Rossum.

The VAF team has worked under the oversight of the VAF Steering Committee, led by UNHCR and composed of ACTED, CARE, DRC, Handicap International, PU-AMI, UNICEF, UN Women, WFP, WHO, ECHO and BPRM.

The sector members who have been involved in the VAF process number in the hundreds. Particular thanks are due to the following people who provided support to the project since January 2014: Yara Maasri, Byron Pakula, Volker Schimmel, Becky Achan, Hazem Almahdy, Eugene Ha, Edgar Luce, Anthony Dutemple, Andrew Merat, Aoife Dineen, Vitor Serrano, Carlos Afonso, Matteo Paoltroni, Heather Kalmbach, Lizzie Wood, Elizabeth Vikman, Frank Lavigne, Giacomo Hijazin, Mary Sweidan, Melinda Wells, Dorte Jessen, Nicole Carn, Daniel Osnato, Lucio Melandri, Jonathan Campbell, Celina Heleno, Gregory Aversenq, Edouard Legoupil, Rachel Dore-Weeks, Carolyn Davies, Maurizio Crivellaro, Eman Ismail, Mukesh Karn, Wadih Al-Eid, Diego Batista, Paolo Verme, Susanne Butscher, Karen Whiting, Laksiri Nanayakkara and Lito Dokopoulou. Lynnette Larsen facilitated the start of the VAF process in early 2014, building on work by Hisham Khogali of ACAPS.

The VAF Steering Committee is composed of:





BASELINE SURVEY VULNERABILITY ASSESSMENT FRAMEWORK



Table of Contents

Objectives of the VAF Baseline Report	6
The Syrian refugee context in Jordan	6
The Vulnerability Assessment Framework	8
VAF Baseline Survey	11
Key findings	12
Key Findings/ VAF Welfare Model	14
Key findings/Universal Indicators	20
Key findings/Sector Models	28
Cross-Model Analysis	46
Conclusions	58
Annexes	62
Annex 1: Vulnerability Assessment Framework background and development	64
Annex 2: Introduction to the VAF Welfare Model	69
Annex 3: Introduction to the sector models	72
Annex 4: Details of Sector Models	74

Objectives of the VAF Baseline Report¹

- 1. To present the results of the Vulnerability Assessment Model from a randomised statistically representative survey across the Kingdom of Jordan.
- 2. To present an introduction to both the Welfare Model and the Sector Vulnerability rating models and to provide context and background to their design.
- 3. To identify the limitations of VAF data and models thereby providing guidance on their application.

The Syrian refugee context in Jordan

Since March 2011, hundreds of thousands of Syrian men, women, girls and boys have sought refuge in the Kingdom of Jordan. As of May 2015, over 628,000 Syrian refugees are registered with UNHCR in Jordan². The vast majority – over 520,000 – are living in urban and rural areas, outside of the refugee camps, primarily in Jordan's cities and towns.

Through a combination of the generosity of the Jordanian government and people, a substantial international and national humanitarian aid programme, and the efforts of the refugees themselves, most refugees have had access to resources and services and humanitarian standards have been met.

Refugee households vary in their skills, capacities and other assets. Some brought savings with them or benefit from remittances. Others fled Syria with little more than they could carry. Factors such as gender, age and disabilities have also affected different refugees' ability to access assistance and services.

¹ Note: the VAF process has been designed to identify and track the multi-sectoral vulnerabilities of Syrian non-camp based refugees registered with UNHCR in Jordan. For the purposes of this report 'Syrian refugee' refers to this group only.

² In addition, the Government of Jordan estimates that there are up to 1.4 million Syrians currently living in Jordan.

With the Syria crisis in its fourth year, humanitarian aid and the absorption capacity of Jordanian communities have become stretched. Reflecting the difference between their income and expenditure, and with limited access to sustainable livelihood options, many refugees have now entered a cycle of asset depletion, with savings gradually exhausted and levels of debt increasing. The most vulnerable refugees are particularly affected. Many are increasingly adopting negative coping strategies, including a reduction in food consumption, withdrawing children from school and taking on informal, exploitative or dangerous employment.³

Humanitarian assistance is a crucial element in the welfare of many refugee households in Jordan. The expansion of the response to include longer term, resilience based strategies, led by the Government of Jordan through the Jordan Response Plan (JRP), is also an important step in strengthening both Jordanian and refugee communities' capacities to cope with the crisis.

In parallel, humanitarian agencies are committed to ensuring that assistance is efficient and effective, targeting the most vulnerable areas and households. To facilitate this targeting, the humanitarian community in Jordan has developed the Vulnerability Assessment Framework (VAF). This report explains the purpose, process and structure of the VAF, and in particular outlines the results of the Baseline Survey, applying the vulnerability models developed to the surveyed Syrian refugee population.

³ According to a recent Assessment (February 2015), WFP Rapid Impact 89% of refugees are relying on opting for less preferred and less expensive food, 62% are reducing the number of meals per day and 55% are borrowing food or seeking help from relatives, while 24% have reduced essential expenditures on education and health.

THE VUNERABILITY ASSESSMENT FRAMEWORK



At the beginning of the VAF project in late 2013, considerable amounts of data on Syrian refugees was available. However, the tools used to analyse and collect this data varied between partners. The use of different vulnerability criteria meant that data was not fully comparable or able to be combined to form a comprehensive picture.

The terms 'vulnerable' and 'vulnerability' are common terms in the humanitarian aid and development sectors, but their use can be vague, often being seen as substitutes for 'poor' and 'poverty'. Vulnerability has to be defined in terms of what it is that a population is vulnerable to. The definition of vulnerability therefore requires specificity.

Against this background the VAF Steering Committee¹ was established in January 2014 to oversee the development of the VAF as a tool to facilitate better analysis and targeting of Syrian refugees with humanitarian assistance, on the basis of vulnerability.²

The VAF process seeks to put in place an observation and reporting system that, using a mixture of static and dynamic indicators, supports the humanitarian community to:

- Establish a profile of vulnerability across Syrian refugee households and enable monitoring of changes in vulnerability over time;
- 2. Target assistance in a more efficient and equitable manner, based on the application of common vulnerability criteria;
- 3. Strengthen the coordination and decision-making of the delivery of humanitarian assistance.

1 VAF Steering Committee members are: ACTED, BPRM, CARE International, DRC, ECHO, Handicap International, PU-AMI, UN Women, UNHCR, UNICEF, WFP, and WHO.

2 Methodologies for delivery of protection services and identification of protection vulnerability are conducted through separate processes. Please see Annex 1 for more information on the VAF and Protection. During a series of workshops and consultations with sectors in early 2014, a set of common indicators of vulnerability were agreed. The indicators were then checked against refugees' own explanation of vulnerability through 70 focus group discussions with Syrian refugees, disaggregated by age, gender and disability. The finalized indicators were compiled into a 'VAF questionnaire', which was then piloted and further refined.

Since mid-2014, data has been collected using this VAF questionnaire through a brief and rolling multi-sector assessment, recorded into a central database. So far, 45,000 refugee families have been visited. The criteria include information collected at the registration stage by UNHCR, as well as through partners' Home Visits. The use of dynamic indicators and the collection of data on an ongoing basis are intended to facilitate monitoring of changes in vulnerability and enable trend analysis across time and by geographic area.

Also 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 model³ that can predict Syrian non-camp refugees' economic welfare.

The World Bank's econometric modelling methodology, which uses predicted expenditure as a proxy for refugee welfare, was presented to the VAF Steering Committee. It was decided to conduct the same methodology on the VAF dataset to be able to predict refugee expenditure as a proxy for refugee household 'economic' vulnerability. This resulted in the 'VAF Welfare Model', which assigns a welfare rating to each refugee family interviewed with the VAF questionnaire.

In tandem, sector-specific vulnerability models have been developed through consultative processes with technical experts, using different combinations of the agreed indicators. These models can then assign sector vulnerability scores to the same data-set. Together with the Welfare Model, these sectors models can now provide a nuanced and comprehensive spatial analysis identifying those geographic areas with concentrations of vulnerable refugee families.

Spatial analysis can facilitate decision-making and prioritization by geographical area. The individual refugee family scores can facilitate partners' decisions on who should be assisted with what type of assistance. The VAF models are now being used to support UNHCR, UNICEF and WFP with their targeting of assistance, and will be further rolled out for other partners in mid-2015.

The application of this analysis will vary from sector to sector. While some sectors may use VAF analysis to inform eligibility for assistance for refugee families, other sectors may use the analysis to identify priority areas for additional technical assessment and follow-up.

More information on the VAF development process can be found in Annex.

³ The econometric process produces a formula which uses a set of data points that have a strong statistical predictive power to expenditure.

VAF Baseline Survey

While to date 45,000 cases have had a VAF Home Visit conducted, this baseline report uses a randomized representative baseline to measure relative vulnerability. The larger dataset of 45,000 Home Visits use a methodology that may have some bias towards the most vulnerable. UNHCR Home Visits are scheduled based on the most recent refugee cases registered with UNHCR, cases referred for a cash assistance eligibility review and protection cases or other types of referrals. Therefore in January and February 2015 a randomised VAF baseline survey was conducted, designed around a statistically representative sample of 2,163 Syrian Refugee cases living outside of the refugee camps.

The baseline survey was divided into six discreet strata: four geographical regions (North, East, Centre and South) to allow geographical differences in the Syrian refugee vulnerability to be identified; and a gender analysis allowing any differences between male and Female-headed cases to be identified.

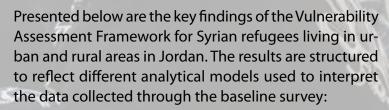
Segment name	No. cases	Included governorates
Geo Centre	372	Amman, Balqa, Zarqa and Madaba
Geo East	353	Mafraq
Geo North	361	Irbid, Jerash and Ajloun
Geo South	347	Kerak, Tafilah, Ma'an and Aqaba
Gender of PA = Male	363	National
Gender of PF = Female	367	National

Sample sizes

For the baseline survey, a total of **2,163 cases** (7,817 individuals) were randomly selected to create both gender and geographical segments. The result was six segments representing the Northern, Eastern, Central and Southern regions as well as the male and female-headed households.

Following a validation exercise with the sectors, where initial results were assessed and revisions to models suggested, the models have been updated. The results of the modifications are presented in this report, creating a baseline against which future analysis of the vulnerability of the non-camp based Syrian refugee population will be analysed.

KEY FINDINGS/ VAF Welfare Model



- The VAF Welfare Model;
- Universal Indicators;
- Sector Models;
- Cross-Model Analysis.

The analysis below refers to both refugee 'individuals' and 'cases'. Cases are the nuclear family unit registered by UNHCR in its proGres registration database. There may be several cases living in the same 'household', if the latter is taken to encompass, for instance, all persons living in the same apartment. While the primary unit of analysis for the VAF is at the case level, the total number of individuals within these cases is on occasion specified. This is especially true when the total percentage of vulnerable individuals may be higher than the percentage of vulnerable cases – implying that cases with more family members tend to be more vulnerable.

Note: more comprehensive analysis of the components of model can be found in annex.

Key Findings: VAF Welfare Model

Overall Welfare Score

The VAF Welfare Model uses predicted expenditure as a proxy for multi-dimensional vulnerability. By predicting the approximate levels of expenditure that a case with a certain set of characteristics will have, the model is able to demonstrate where that case falls within the economic vulnerability thresholds. For the purposes of this analysis, the VAF is using the Jordanian abject poverty line of 28 JOD per capita per month as the threshold for severely vulnerable, the absolute poverty line of 68 JOD for the highly vulnerable threshold, 100 JOD as the threshold for moderately vulnerable and 100 JOD plus for low levels of vulnerability.¹

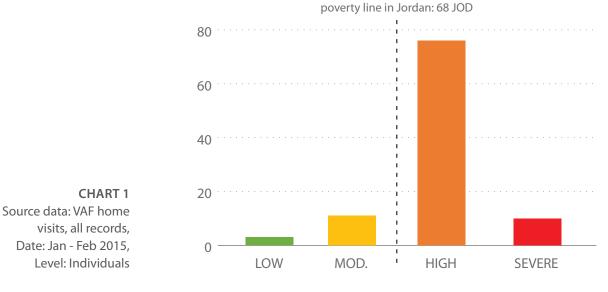
It is particularly important to be able to capture and track economic vulnerability amongst refugees in non-camp settings as many of the risks that refugee families' face could be mitigated if they had sufficient financial means. For example many families are Shelter, Education and Health vulnerable not because these services are not available but because they are not able to afford them or because of the associated costs (for example: transportation).

Although reported expenditure is an indicator of welfare (i.e. expenditure per capita net of assistance), many studies suggest that it can be inaccurately captured. The Welfare Model has been created in order to generate a more accurate prediction of expenditure to reduce outliers and inaccuracies. It is also able to predict an expenditure value where the reported expenditure figure is not present.

The VAF Welfare Model results show that 86% of Syrian refugee individuals are living below the Jordanian poverty line of 68 JOD per capita per month, and are therefore rated as being highly or severely vulnerable.² This corresponds with 68% of family units or 'cases'. Further 10% of Syrian refugee individuals, or 6% of cases, are living below the abject poverty line of less than 28 JOD. This demonstrates that in general highly and severely vulnerable families have larger family sizes.

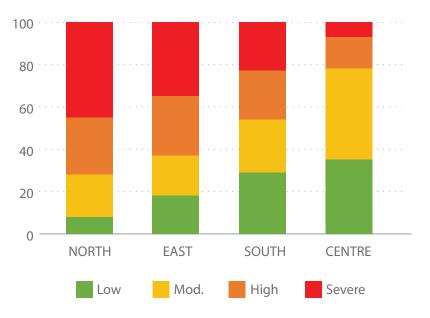
¹ The VAF Steering Committee identified these thresholds in line with the Government of Jordan's national poverty lines and standards; however the thresholds will be carefully monitored and maybe revised in the future to be in line with ongoing work on a Minimum Expenditure Basket analysis for Syrian non-camp based refugees.

² This finding is in line with the 2014 WFP/REACH Comprehensive Food Security Monitoring Exercise (CFSME), which found that without WFP food assistance, 85% of Syrian refugees would not have economic access to sufficient food.



Geographic Variations

There are differences in the levels of vulnerability across the four geographical regions. The Welfare Model identifies 64% of cases in the Northern region as highly vulnerable or above, versus only 30% in the Central region. The Central region includes Amman and Zarqa where the majority of least vulnerable families live, more rural areas of the central region including Madaba and Balqa have higher levels of vulnerability.



North	Irbid, Jerash, Ajloun
East	Mafraq
Centre	Amman, Balqa, Zarqa, Madaba
South	Karak, Tafileh, Ma'an, Aqaba

CHART 2 Source data: VAF home visits, Geo segments (1,433 records), Date: Jan - Feb 2015, Level: Cases These results match anecdotal evidence from the field and the results of other nationwide surveys. A larger percentage of Syrian refugees living in urban centres, such as Amman, Irbid, Zarqa fall into the low vulnerability categories, while those living in the northern governorates, rural areas or Jordanian poverty pockets have higher levels of vulnerability.

The Welfare Model predicts 64% of cases in the Northern region are rated as highly vulnerable or above, versus 30% in the Central region.

Segmentation by Gender

Initial analysis of the VAF dataset suggests that the majority of Female-headed cases are not in the most vulnerable category, and that in terms of economic welfare, there is little identifiable difference in vulnerability as a result of the gender of the principle applicant. It should be noted that within the Home Visit questionnaire questions related for the most part to protection based issues are not included many of which address specific gender issues, challenges and vulnerabilities. It should also be noted that this analysis is at the case level and there are many Female-headed cases living within Male-headed households; the vulnerability dynamics of which are not captured in this analysis. Agencies wishing to provide assistance based on gendered vulnerabilities will need to conduct additional analysis.

The Welfare Model predicts similar levels of vulnerability for both male and Female-headed cases. The percentage of Female-headed cases that fall into the severely vulnerable category is marginally higher than the Male-headed cases. However the percentage of cases falling under the Jordanian poverty

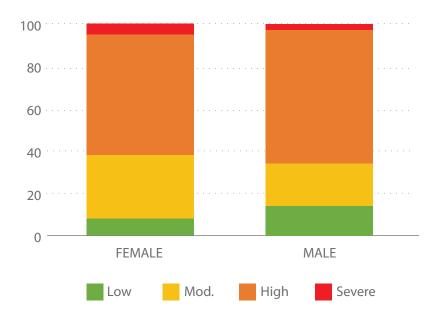


CHART 3 Source data: VAF home visits, Gender segments (730 records), Date: Jan - Feb 2015, Level: Cases

line for male and Female-headed cases was almost identical. A smaller percentage of Female-headed cases fall into the low vulnerability threshold.³

In the two charts below, 12% of Male-headed cases have low vulnerability compared to 6% only of Female-headed cases. 19% of Male-headed cases are moderately vulnerable compared to 27% Female-headed cases. High and Severe is almost the same for both genders.

There is a difference in spending among the two groups, but it is quite small. Female-headed cases are only marginally poorer than Male-headed cases. Severely vulnerable is almost the same for both genders. Female-headed cases have an average expenditure per capita of 55 JOD, compared to Male-headed cases 61 JOD, the difference is approximately 10%.

There is a difference in spending among the two groups, but it is quite small. Female-headed cases are only marginally poorer than Male-headed cases.

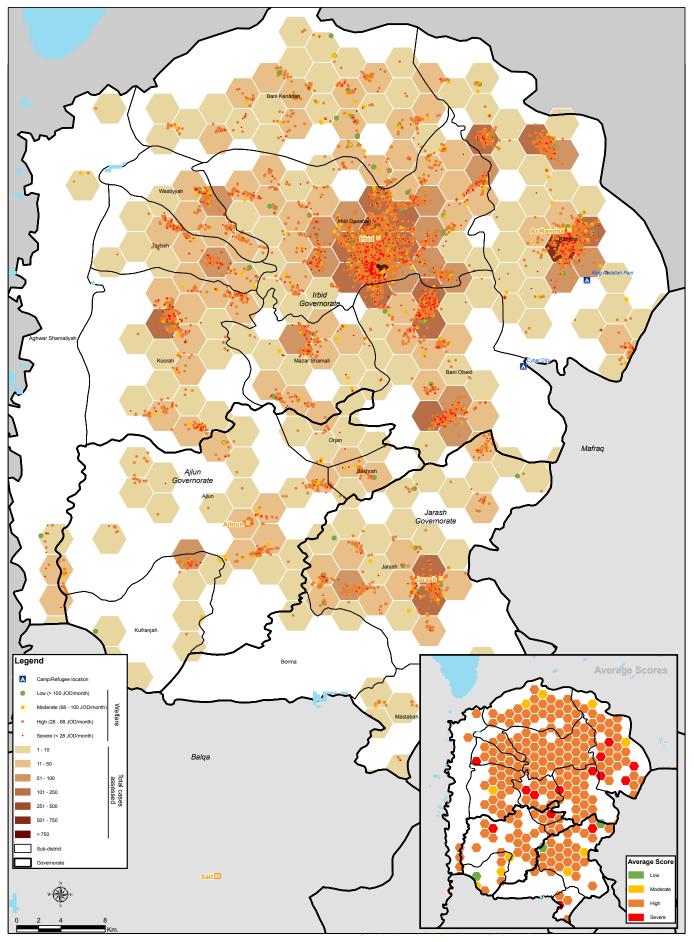
CHART 4 70 70 Source data: VAF Home 60 60 Visits; Male HH (1,249 50 50 records), 40 40 Date: Jan - Feb 2015, 30 30 Level: Cases 20 20 CHART 5 10 10 Source data: VAF Home 0 Visits; Female HH (906 LOW MOD. HIGH HIGH SEVERE IOW MOD SEVERE records), MALE HEADED CASES (4) **FEMALE HEADED CASES (5)** Date: Jan - Feb 2015,

Level: Cases

Note: 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 deliberately left out from VAF data collection, noting that the VAF was not the most appropriate tool to collect such data. 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.

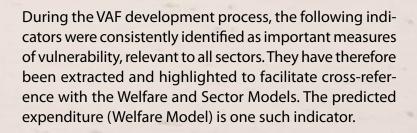
³ For example a Syrian Female-headed case may have the financial means to make that case secure and not highly or severely vulnerable but social and cultural factors may influence the cases ability to cope in Jordan. The VAF survey methodology does not have the capacity to capture these risk factors. Work is on going to identify ways in which additional gender sensitive analysis can be applied to the VAF models and results.

MAP 1 Welfare Northern region



This map is based on 8,606 cases (not individuals) to which the VAF model has been applied in the Northern Region. The cases were assessed between July 2014 and April 2015.

KEY FINDINGS/ Universal Indicators



20.

Documentation status

The VAF includes questions related to the type of document held by the Principal Applicant (head of family) and family members, and related to the validity of these documents. The majority of Syrian refugee cases interviewed for this baseline report have low levels of documentation vulnerability. However the survey methodology has a clear bias in this regard, with the sample selected from those currently registered in the UNHCR proGres database.

- 75% of Syrian refugee individuals have low vulnerableity with regard to their documentation status.
- 13% are severely vulnerable where either the Principle Applicant or multiple family members are missing documents.

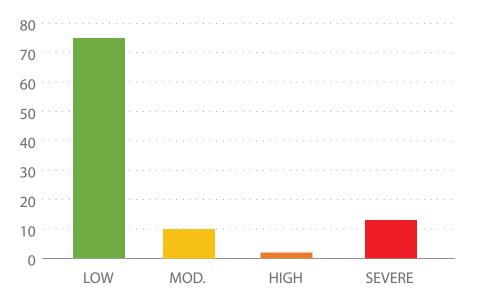
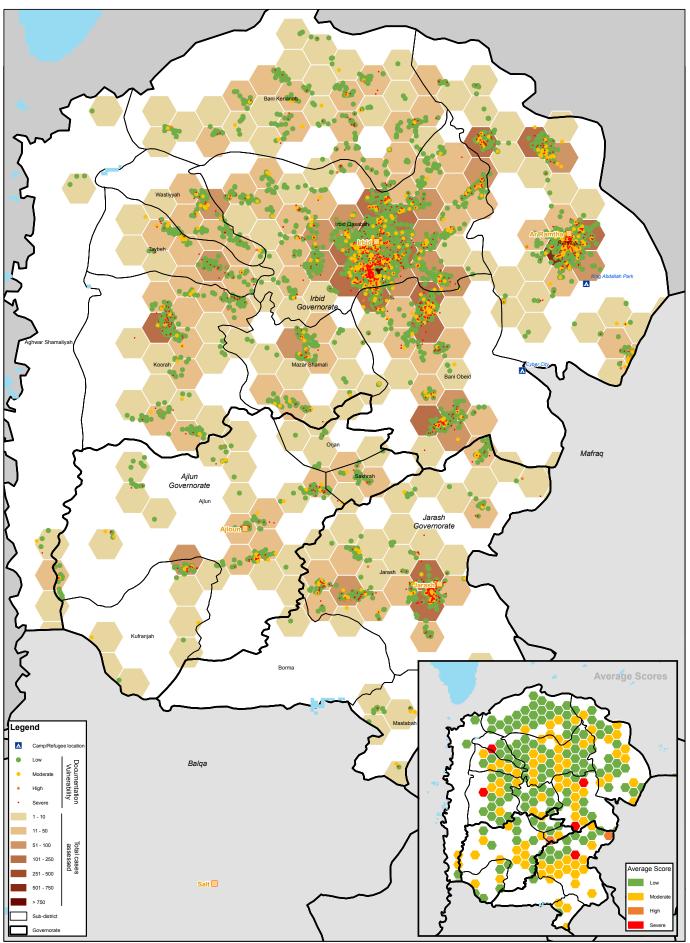


CHART 6 Source data: VAF baseline home visits, Date: Jan - Feb 2015, Level: Individuals

The Government of Jordan requires all refugees to have a valid Ministry of Interior (MOI) card from the area where they are living. Holding a valid MOI card is mandatory for access to Government public services, in particular Health and Education services. Additionally, refugees require UNHCR's Asylum Seeker certificate to access many services and assistance provided by humanitarian agencies. Without valid documents, refugees may be at risk of arrest and refoulement.

Documentation status was considered important by all sectors as a defining factor in accessing protection services and assistance packages, and is therefore treated as a standalone indicator of vulnerability.

The current methodology and sample identified low levels of documentation vulnerability. However, this may shift as other partners conduct assessments using the VAF questionnaire, and as Government policy changes take effect over the issuance of documents, including the ongoing Urban Verification exercise.



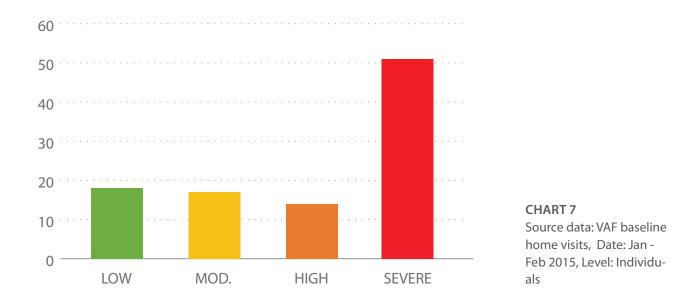
MAP 2 Documentation vulnerability for Northern region

This map is based on 8,606 cases (not individuals) to which the VAF model has been applied in the Northern Region. The cases were assessed between July 2014 and April 2015.

Dependency ratio

Dependency ratio is calculated by dividing the number of autonomous or able bodied adults by the number of dependants (non-autonomous adults, children, and the elderly). A high level of dependency is a common characteristic for the most vulnerable families across the VAF sector models.

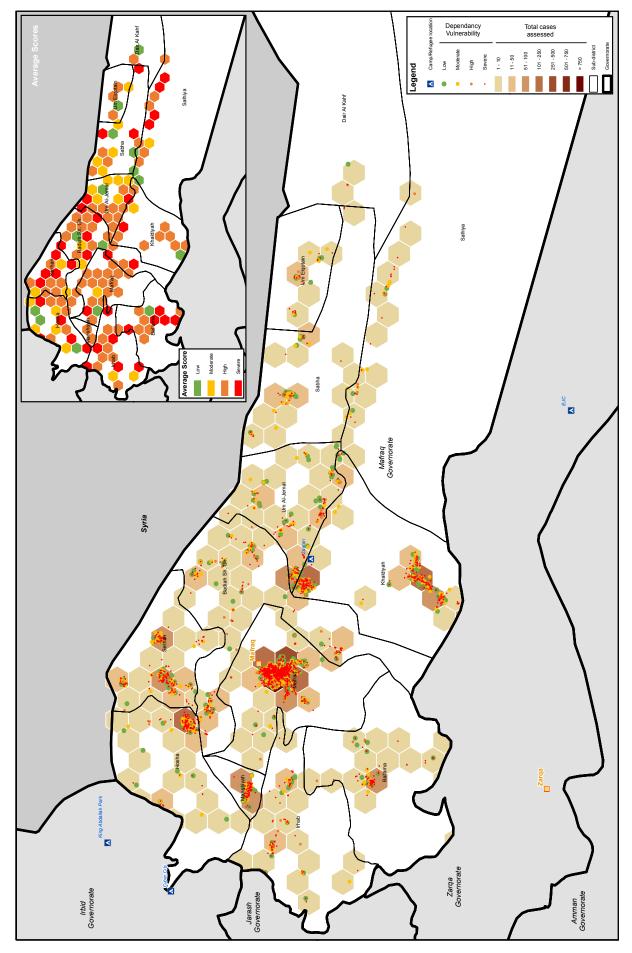
 51% of Syrian refugee individuals belong to cases that have a severely vulnerable dependency ratio. When partnered with additional indicators in the sector models, the dependency ratio can rapidly increase the vulnerability of that case.



Most sectors identified the dependency ratio as a factor that contributes to both refugees' resilience and vulnerability.

The dependency ratio is an indicator of the economically active to economically inactive people in a family. 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 18 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).

May 2015



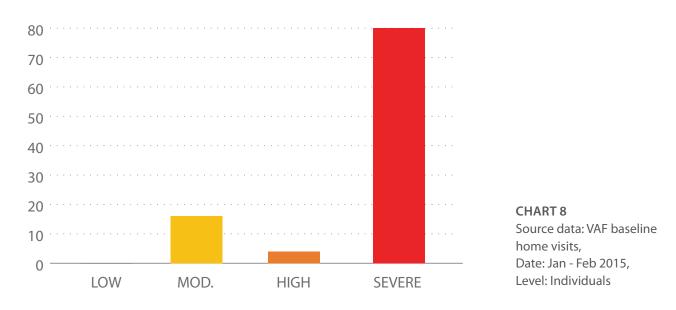
MAP 3 Dependency ratio for Eastern region

This map is based on 4,099 cases (not individuals) to which the VAF model has been applied in the Eastern Region. The cases were assessed between July 2014 and April 2015.

Coping strategies

The use of coping strategies in order to meet Basic Needs and maintain family welfare is taken as an indicator of vulnerability. Very high incidences of negative or unsustainable coping strategies were found across the Syrian refugee population.

• 80% of Syrian refugee individuals are using crisis or emergency coping strategies and have exhausted their savings, are decreasing their food intake or resorting to high risk, informal or socially degrading jobs.



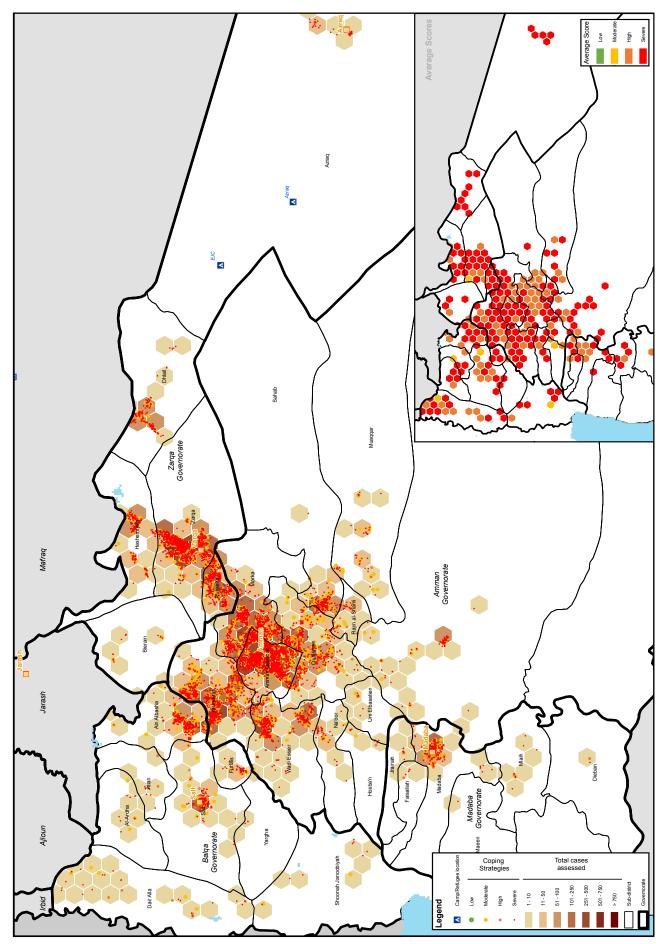
Most sectors identified employing coping strategies as a factor that contributes to resilience/vulnerability. For consistency, the same coping strategy list and approach is used across all sectors. Different coping strategies are graded differently according to their severity, some of the coping strategies are sustainable, but their employment reflects an extreme state of vulnerability. Other coping strategies reflect less extreme coping mechanisms, but are unsustainable (such as the depletion of resources, i.e. savings or assets).

As demonstrated above the vast majority of Syrian families have exhausted most sustainable coping strategies and are now employing or at risk of employing the most severe coping strategies; including resorting to sending family members (including children) out to beg and working in informal or dangerous jobs. (See Annex for full breakdown of categories and characteristics).

Crisis Coping Strategies	Directly reduce future productivity, includ- ing human capital formation
Emergency Coping Strategies	Affect future productivity and are more dif- ficult to reverse, or more dramatic in nature including loss of human dignity

Source: Report on Continued Development and Testing of a Standardized Approach, Food Security, World Food Programme, December 2013.





This map is based on 12,437 cases (not individuals) to which the VAF model has been applied in the Central Region. The cases were assessed between July 2014 and April 2015.

All and

I TI

In

KEY FINDINGS/ Sector Models



Every sector provides different services based on different needs. Therefore a single, universal vulnerability indicator may not be sufficiently nuanced for sector-specific targeting. Specific sector algorithms have been developed using the questions and data points that were identified by the sectors to be indicators of vulnerability for each sector.

The sector model characteristics, including the data points and weighting, were chosen by experts and practitioners from each sector. The models have gone through several rounds of statistical analysis and revision by the VAF team and the sector leads.

Note: Further detail on the indicators below can be found in Annex.

Basic Needs

Basic Needs are the financial and non-financial minimum standards a family needs to be able to maintain their welfare and dignity. The vast majority of Syrian refugee families have limited access to sustainable livelihood options and are in need of financial, non-financial and non-food assistance. In particular refugees living in unfurnished apartments face considerable hardship during the winter months; lacking adequate bedding, heating and floor coverings etc.

- 92% of the individuals are identified as high or severely vulnerable for Basic Needs.
- There were no individuals identified as having low rates of vulnerability for Basic Needs.
- 8% of individuals have moderate vulnerability for Basic Needs.
- Over 60% of Syrian non-camp families have a high or severely vulnerable level of debt per capita, influencing their ability to ensure their Basic Needs even if receiving an income/assistance.

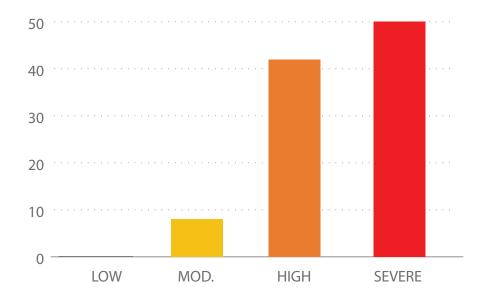


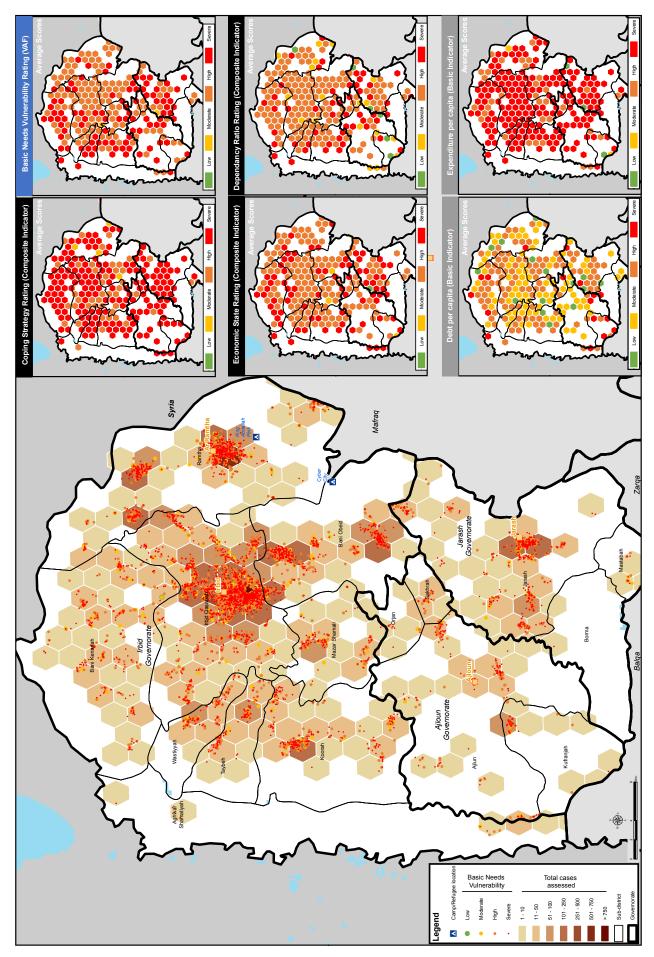
CHART 9 Source data: VAF baseline home visits, Date: Jan - Feb 2015, Level: Individuals

The Basic Needs sector identified the use of coping strategies, high dependency ratios, high levels of debt and a low level of expenditure per capita as the critical elements contributing to a risk of increased vulnerability.

Families who exhibit these characteristics are considered to be unlikely to be able provide for their Basic Needs and would therefore be in need of sector specific assistance packages.

High levels of debt per capita, low levels of expenditure per capita, high dependency ratios and the adoption of crisis or emergency coping mechanism make families vulnerable in this sector. Many families have depleted all assets and are living in unfurnished or semi-furnished apartments without access to regular income or financial support that would allow them to manage their own needs.

May 2015



MAP 5 Basic Needs vulnerability for Northern region

This map is based on 8,606 cases (not individuals) to which the VAF model has been applied in the Northern Region. The cases were assessed between July 2014 and April 2015.

Education

Access to education for registered Syrian refugee school aged children is currently free in Jordanian state schools; however Syrian families face a number of barriers to ensuring all their children are able to enrol and remain in education.¹ These include social, economic and educational barriers: i.e. distance to school, availability of places in a school, financial/economic barriers, missed education, etc.

- Almost all of refugee individuals were identified as living within families with high or severe Education vulnerability.²
- Only 2% were moderately vulnerable. There are no individuals with low education vulnerability.
- 97% of the school aged children are at high risk for non-attendance at school:
 - Almost 90% of the cases are highly vulnerable in terms of having adequate financial resources to maintain school attendance for their children.
 - 6% of the cases are severely vulnerable due to the participation of at least one child in child labour.³
 - A number of protection related concerns also affect families' abilities to maintain children in school; including but not limited, to early marriage, violence or perceived threat of violence, psychological distress, children's disabilities, mobility of the family and distance to school. There were very low levels of reporting in the VAF baseline for these issues, but other reports indicate that these issues act as barriers to children remaining in school.⁴

Note: The Education vulnerability is shown only for cases that have school aged children. If the analysis included all cases without children, education vulner-ability would have a higher proportion of low and moderately vulnerable cases.

The Education sector identified various factors associated with a refugee case being at risk of educational vulnerability. These include the number of school aged children a family needs to support, the level of current and previous attendance in school and factors related to a risk of non-attendance. The Education sector

¹ Education vulnerability in the VAF relates to primary and secondary education only. Education vulnerability here is the risk of being unable to access and remain in schooling for all children within a case.

² Education vulnerability was only calculated for those families with school aged children.

³ This is the reported rate of child labour through the VAF data collection methodology. Sector level assessments suggest much higher levels of child labour within the Syrian refugee population. In some cases children may be attending school and participating in labour but in the majority of cases it is suspected that children have been withdrawn from school.

⁴ Low levels of reporting of these issues were discussed with the Education sector, and it was agreed to track reporting over time and review.

divided out risks for non-attendance into economic, social and physical (see Annex for full breakdown).

The results demonstrate that while a high percentage of children are attending government schools, many families and children are still facing challenges with assess and regular attendance. Families with more than three school aged children are particularly at risk of withdrawing one or two children from schooling. Families identified economic barriers and distance to school as contributing to their inability to send all children to school.

Currently, the Government of Jordan is accommodating registered Syrian refugee children into the state schooling system. This significantly reduces the levels of Education vulnerability. However if this service was withdrawn or if Syrians were asked to pay for access to schooling the vast majority of Syrian school age children would likely fall into severe Education vulnerability.

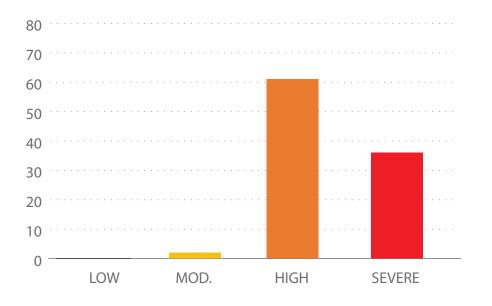
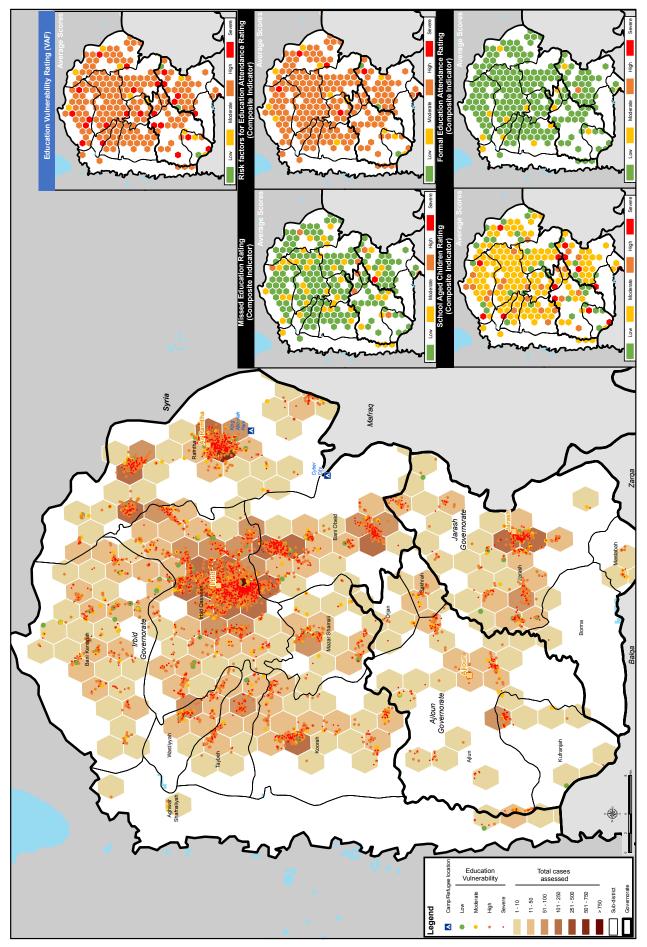


CHART 10

Source data: VAF baseline home visits, Records with school aged children, Date: Jan - Feb 2015, Level: Individuals





This map is based on 8,606 cases (not individuals) to which the VAF model has been applied in the Northern Region. The cases were assessed between July 2014 and April 2015.

Food Security

WFP provides targeted food voucher assistance to approximately 80% of the Syrian refugee population living outside camps. All refugees living in camps receive WFP food voucher assistance along with a daily provision of fresh bread. Nonetheless, the VAF analysis, in line with the 2014 WFP/REACH CFSME results, demonstrates that Syrian families still face considerable difficulties in maintaining their food security. A reduction in WFP food assistance would have a dramatic impact, putting many refugee families at risk of falling into high or severe food insecurity.

- Nearly 79% of Syrian individuals are highly or severely vulnerable to food insecurity, while 20% are moderately vulnerable. This is in line with WFP's current tiered targeting approach.⁵
- Almost all the cases have low vulnerability for the Food Consumption Score rating.⁶
- 46% of Syrian cases have severe vulnerability scores for expenditure on food and 72% are severely vulnerable due to the adoption of emergency coping strategies to meet food needs.

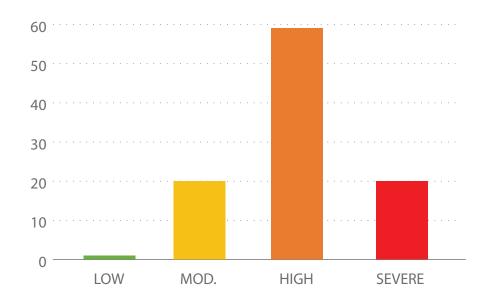


CHART 11 Source data: VAF baseline home visits, Date: Jan - Feb 2015, Level: Individuals

The Food Security sector identified factors related to food vulnerability based on globally recognised standards and tools. The CARI (Consolidated Approach

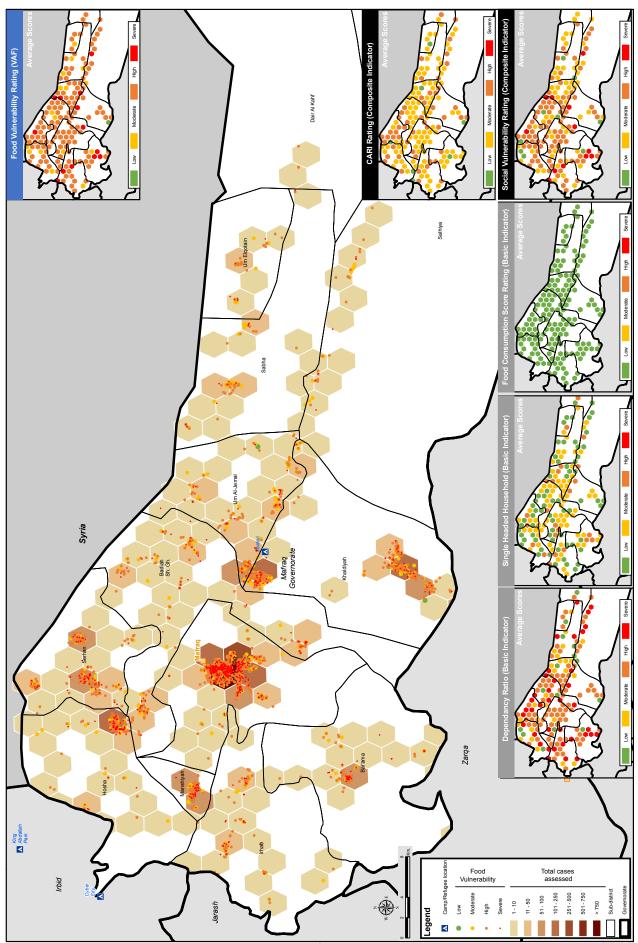
5 As of April 2015 WFP introduced a tiered approach to Syrian refugees living in host communities, analysing poverty and assessing vulnerability using data from various sources, particularly the VAF and the 2014 WFP/REACH CFSME, based on which it was determined that 34,000 individuals no longer relied on WFP assistance and as such they were excluded from food assistance; 190,000 extremely vulnerable individuals should receive 20JOD per person per month; while 240,000 moderately vulnerable individuals should receive 10JOD.

6 The WFP food assistance targeting had not affected the majority of cases interviewed for this baseline survey and at the time of interview the majority were receiving assistance in line with global food security minimum standards (2,100 kcal/person/day).

for Reporting Indicators of Food Security) is a WFP global methodology for assessing food vulnerability. In addition to the CARI the Food Sector identified Social vulnerability, which is assessed through identifying high dependency ratios and single headed households as significant in identifying vulnerability.

WFP was able to provide blanket food assistance to registered Syrian refugees until October 2014. Since then it has incrementally reduced food assistance by adopting targeted assistance. The VAF Baseline reflect similar findings to WFP Food Security monitoring conducted in 2015. If funding limits WFP's ability to provide food assistance for the most vulnerable families, it is anticipated that there will be significant shifts in the vulnerability ratings above.

MAP 7 Food Security vulnerability for Eastern region



This map is based on 12,437 cases (not individuals) to which the VAF model has been applied in the Central Region. The cases were assessed between July 2014 and April 2015.

Health

As of November 2014 access to Primary Health Care for Syrian refugees is charged at the same rate as for uninsured Jordanians and is subsidized by the Government of Jordan. Nonetheless, families with ongoing health issues or complicated health needs face considerable financial and other burdens in securing appropriate healthcare. It should also be noted that many Syrian refugees came to Jordan with pre-existing health problems both conflict and non-conflict related.

- 41% of Syrian individuals are part of families with severe health vulnerability, 15% are part of highly health vulnerable families.
- 15% of cases were identified as severely vulnerable in terms of being able to access health services when needed.
- 16% of cases have the presence of pre-existing medical conditions (disabilities or chronic illnesses) that are negatively impacting a family members' day to day life.
- 10% of cases report that they spend more than 25% of their expenditure on health related items.

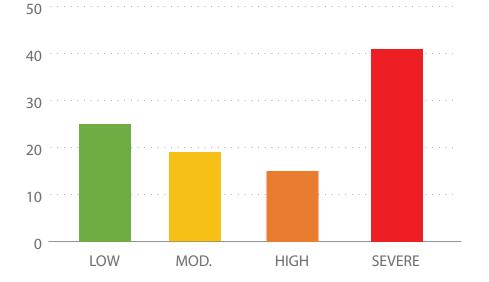
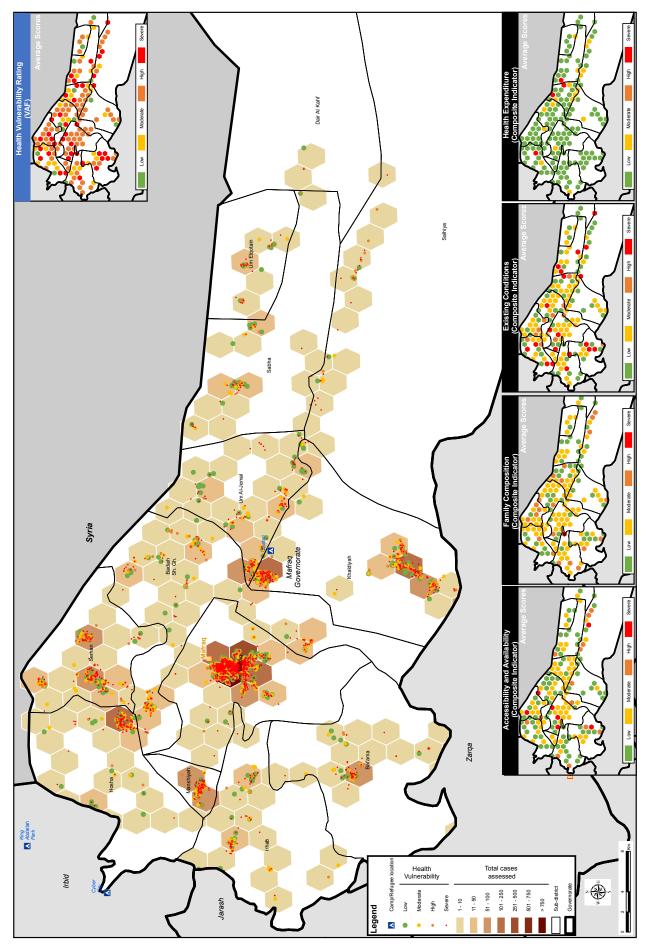


CHART 12 Source data: VAF baseline home visits, Date: Jan - Feb 2015, Level: Individuals

The Health sector vulnerability indicator is not assessing the extent of medical issues within families, rather the factors that are likely to impact a family's ability to mitigate health shocks. The sector identified the following factors: access and availability of health care, family composition, the existence of existing conditions and the proportion of expenditure on health related items as influencing Health vulnerability.

The Health vulnerability results demonstrate that over 56% of the Syrian registered refugee population are highly or severely vulnerable. This is based on baseline data collected in January and February, which was after the change in government Health policy for Syrian refugees in November 2014.



MAP 8 Health vulnerability for Eastern region

This map is based on 12,437 cases (not individuals) to which the VAF model has been applied in the Central Region. The cases were assessed between July 2014 and April 2015.

It should be noted that Health vulnerability is not static and a family's health vulnerability can change dramatically based on illness or accident. The results above demonstrate the Health vulnerabilities of these families at the time of interview and their current capacity to mitigate health risks; however a family that currently has low health vulnerability might in the future find themselves severely at risk or vulnerable due to a change in the health status of one or more family members.

Shelter

The vast majority of Syrian refugees living outside of the camps are living in formal housing. However, as demand for apartments has increased many Syrian families are accepting substandard housing arrangements, often in unfurnished apartments with insecure or informal tenancy agreements. For the majority of Syrian families who have insecure livelihoods or income, maintaining rental commitments is a considerable burden and rental arrears have both financial and protection implications. Additionally, although not identified within this baseline survey some Syrian families are living in informal housing or tented settlements; within the Shelter vulnerability model these families are automatically considered severely Shelter vulnerable.

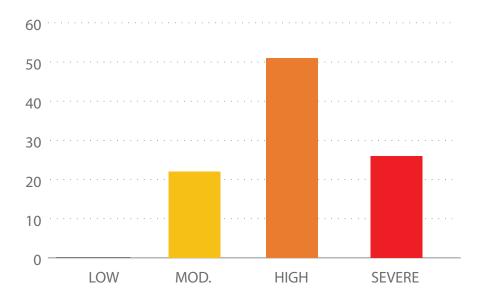
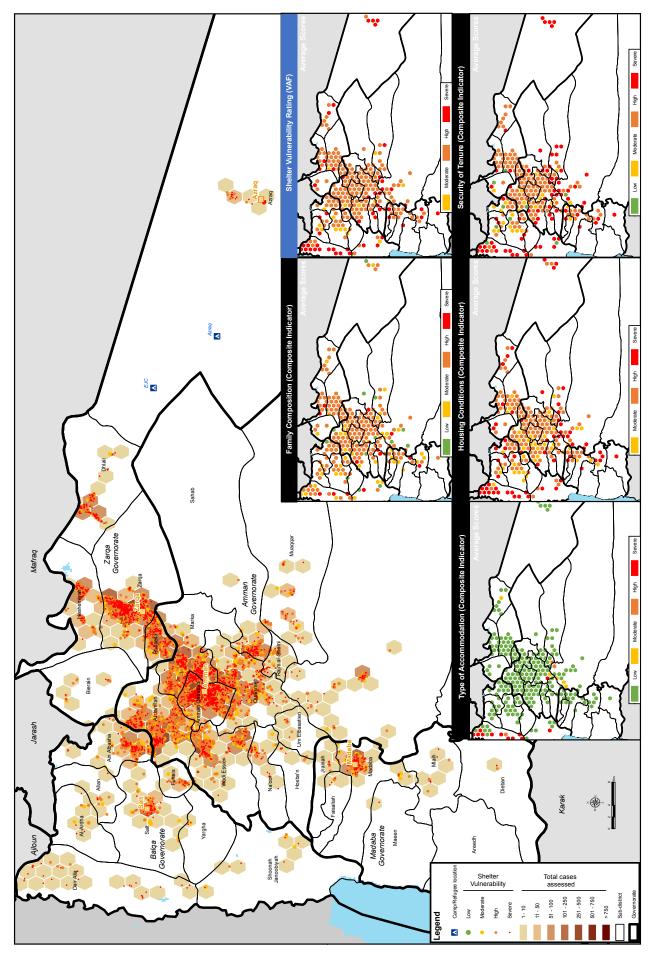


CHART 13 Source data: VAF baseline Home Visits, Date: Jan - Feb 2015, Level: Individuals

- 25% of individuals are severely shelter vulnerable and 50% are highly shelter vulnerable.
- Over 50% of all cases have all the standard basic house assets and 95% of cases are not suffering from overcrowding in their houses.

MAP 9 Shelter vulnerability for Central region



This map is based on 12,437 cases (not individuals) to which the VAF model has been applied in the Central Region. The cases were assessed between July 2014 and April 2015.

- However over 50% of the cases' properties are showing at least one sign of poor quality, with 34% identified as having two or more instances of poor quality.⁷
- 23% of cases properties were judged to be unsatisfactory by the enumerator.
- 60% of cases have a high or severe debt per capita. One third of cases did not have a rental agreement.
- 100% of the cases surveyed were in formal accommodation, no informal cases were surveyed.

The Shelter sector identified three main factors contributing to shelter vulnerability and risks; namely those relating to housing conditions, the security of tenure and family composition.

Multiple assessments have demonstrated that Syrian refugees living outside camps are for the most part living in formal housing, however in the majority of cases this is poor housing with poor ventilation, light, heating etc., this vulnerability is exacerbated by insecurity of tenure.

Currently, Syrian refugees are allowed to rent formal housing in non-camp areas but any change in the policy framework related to this would result in additional levels of severe Shelter vulnerability across the Syrian refugee population.

⁷ See Shelter sector documentation for a full breakdown of Shelter quality indicators.

WASH

The majority of Syrian refugee families have access to the formal Jordanian national water and sewage networks; including regular mains water supply. However, in different areas of the country and at different times of year the Jordanian mains water supply varies in quality and reliability. Similarly, sector assessments have identified that while mains water maybe available, the most severely vulnerable families may not have access to sufficient or safe water storage.

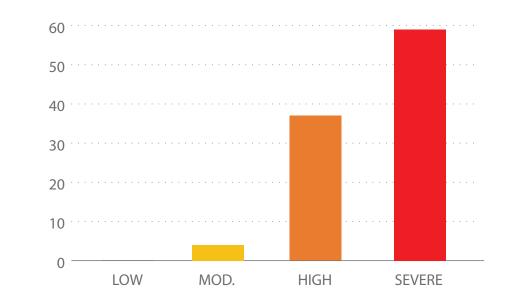


CHART 14 Source data: VAF baseline Home Visits, Date: Jan - Feb 2015, Level: Individuals

- 60% of Syrian individuals are severely vulnerable to WASH related risks.
- There are no Syrian families with low WASH vulnerability.
- This is predominantly caused by solid waste management where 80% of cases have experienced solid waste vector evidence more than twice in the last year and 20% of cases have experience waste-water overflows more than once in the last year.
- More than 50% of cases have secure access to bathing facilities; but 15% of cases are identified as severely vulnerable due to sharing facilities with three or more other cases. However, almost all refugee families report feeling secure when accessing these services.
- There are no highly or severely vulnerable cases with regards to safe access to water.⁸ The majority of cases have low vulnerability. Nearly all cases surveyed have their water supplied through the municipality and 88% of cases report have never having had issues with water supply.

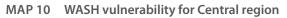
⁸ This may be due to the season when the VAF baseline study was conducted (winter) when nationally Jordan's water network has the capacity to meet public demand, during the summer months some areas of Jordan experience water scarcity.

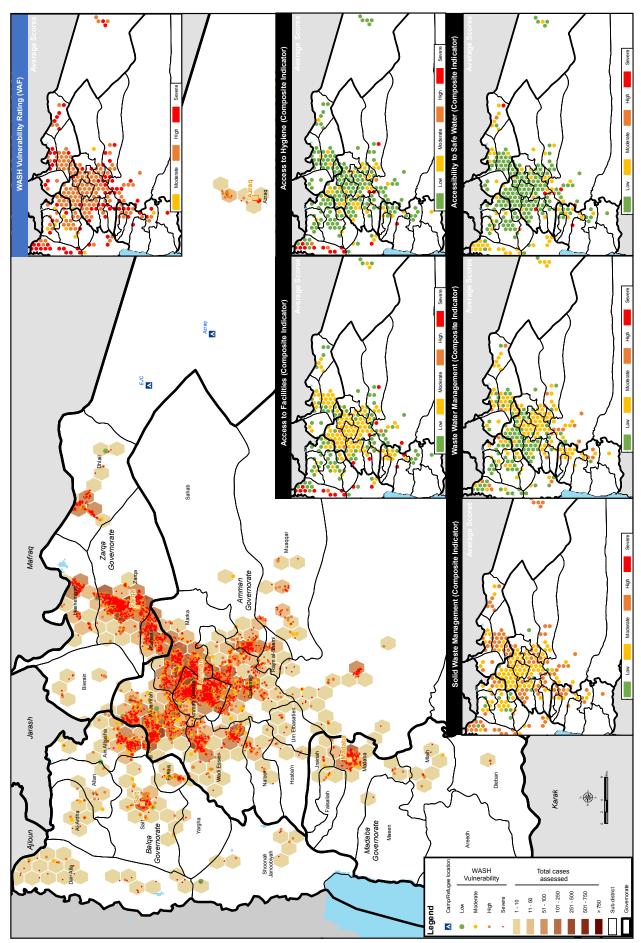
 The WASH expenditure rate varies significantly among cases. 32% of cases are identified as severely vulnerable due to spending over 25% of their expenditure on WASH items.

Effective access to WASH services is crucial to many aspects of a refugee's daily life, from hygiene, to drinking water and waste disposal facilities. As such there are many discrete, non-related, contributing factors that make up the WASH sector rating.

While the majority of Syrian refugees living in urban or peri-urban areas do have access to the Jordanian water and sewage networks almost 60% of individuals remain severely vulnerable to WASH vulnerability. The WASH sector also remains concerned about seasonal changes in the Syrian refugees' ability to access adequate WASH facilities. The ongoing VAF analysis will consider changes in refugee responses to WASH indicators over time.

Additionally many WASH risks are communal rather than at the household level and include the capacity of public services to meet demand in some areas; for example waste disposal services. The WASH sector has also identified that the Syrian communities' perception of the safety of Jordanian public water affects their usage.





This map is based on 12,437 cases (not individuals) to which the VAF model has been applied in the Central Region. The cases were assessed between July 2014 and April 2015.

CROSSENDDE ANALYSIS

A nuanced and holistic picture of vulnerability

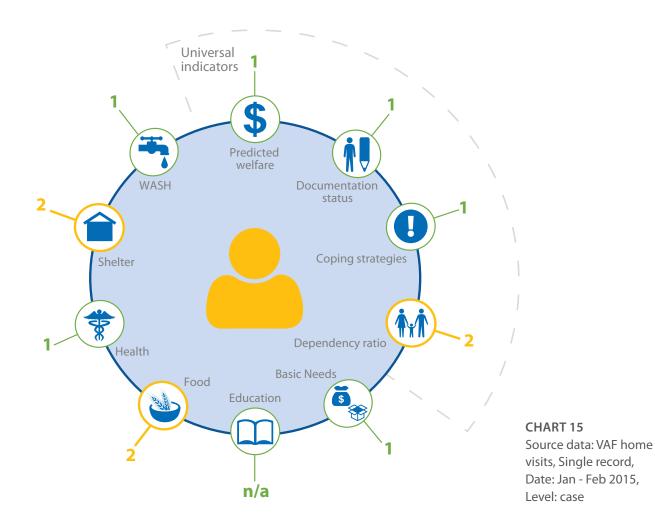
The VAF models recognise that refugees' vulnerabilities are complex, varied and dynamic. A refugee family may have low health vulnerability, but have specific problems in relation to Education and Basic Needs vulnerability. There is also considerable interplay between variables. For example a change in the health status of a family member may significantly change the family's dependency ratio, and therefore impact on other sector vulnerability scores.

When analysing a specific family's situation applying the Welfare, Universal Indicators and Sector Models, the VAF's ability to present a nuanced picture of vulnerability is evident.

Displayed below are four case studies of Syrian refugee families that have been assessed and their relative VAF ratings across the different vulnerability categories. This analysis can be conducted at the case, district, region and national level and is displayed here to help agencies understand the potential of the VAF thresholds for analysing the inter-play between vulnerabilities when developing programming or providing assistance. 48

Sample case-level snapshot Moderately vulnerable

34 year old Syrian man living with mother, no children, high expenditure with no debt.

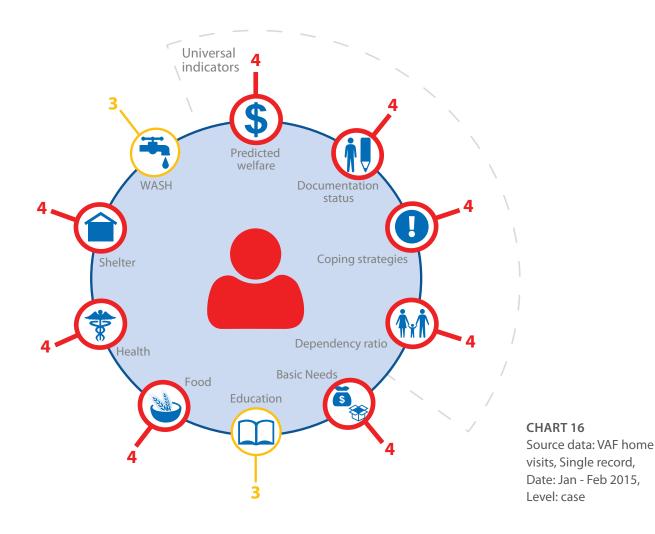


Sample case-level snapshot/Moderately vulnerable 34 year old Syrian man living with mother, no children, high expenditure with no debt.

\$	Predicted expenditure 1	Predicted per capita 387 JOD			
Î.	Documentation status 1	PA Documentation PA is registered	Family Documentation Registered		
0	Coping strategies 1	No coping strategies being used		-	
İ	Dependency ratio 2	1 autonomous adult 1 dependent			
\$	Basic Needs 1	Coping strategies No coping strategies being used	Dependency ratio 1 autonomous adult, 1 dependent	Economic state No debt 387 JOD per capita / month	
	Education n/a	Attendance risks 0 school aged children			
	Food 2	Social vulnerability 2 adults 1:1 dependency ratio	CARI score FCS = 65 39% spent on food		
	Health 1	Access to services No problems	Family composition No 60+ or < 5s	Existing conditions No conditions 0 health expenditure	
	Shelter 2	Housing conditions Missing 1 essential item	Security of tenancy No debt, has contract	Family composition Non-autonomous adult	
-	WASH 1	Health No issues	Access to latrines Not shared and safe access	Access safe water Municipality source instances without	Waste management 1 instance water 1 instance solid

Sample case-level snapshot Severely vulnerable

41 year old Syrian man living with wife, 4 children and elderly mother in law.

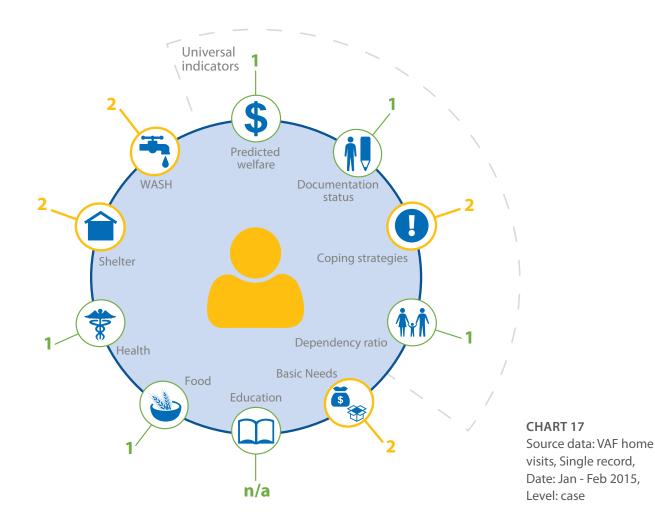


Sample case-level snapshot/Severely vulnerable 41 year old Syrian man living with wife, 4 children and elderly mother in law.

\$	Predicted expenditure 4	Predicted per capita 39 JOD			
¥	Documentation status 4	PA Documentation PA is missing MOI	Family Documentation One family member is not registered		
	Coping strategies 4	1 emergency strategy being implemented			
	Dependency ratio 4	2 autonomous adult 4 children 1 60+			
\$	Basic Needs 4	Coping strategies Emergency strategies	Dependency ratio Poor dependency	Economic state High debt per capita	
	Education 3	Attendance risks Finance main risk	3 school aged children 2 years missed educa- tion 2 children attending schooling		
	Food 4	Social vulnerability High dependency ratio	CARI score FCS = 7, high% of expenditure on food, Emergency		
	Health 4	Access to services Missing MOI, had not had problems access- ing	Family composition Under 5's and over 60s in Case	Existing conditions High health expendi- ture (13%)	
	Shelter 4	Housing conditions Adequate	Security of tenancy Has contract but high debt (167 JOD per capita)	Family composition Male-headed house High dependency ratio	
	WASH 3	Health No issues	Access to latrines Not shared and safe access	Access safe water Municipality source No instances without	Waste management 0 instance water 1 instance solid

Sample case-level snapshot Moderately vulnerable

32 year old Syrian female living with brother, one child, high expenditure with moderate debt.

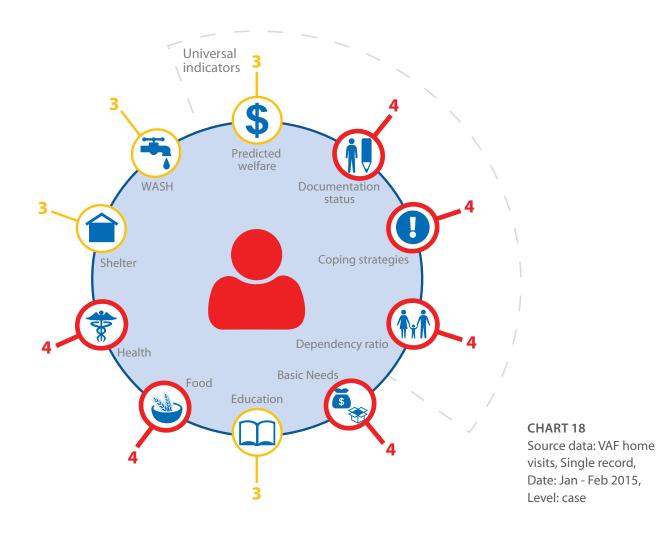


Sample case-level snapshot/Moderately vulnerable 32 year old Syrian female living with brother, one child, high expenditure with moderate debt.

\$	Predicted expenditure 1	Predicted per capita 129 JOD			
Î.	Documentation status 1	PA Documentation PA is registered	Family Documentation Registered		
	Coping strategies 2	Stress coping strategies being used			
Ť íŤ	Dependency ratio 1	2 autonomous adults 1 child			
\$	Basic Needs 2	Coping strategies stress coping strategies being used	Dependency ratio 2 adults, 1 child	Economic state 100 JOD debt 129 JOD per capita / month	
	Education n/a	Attendance risks 0 school aged children			
	Food 1	Social vulnerability 2 adults 1 child	CARI score FCS = 95 15% spent on food		
*	Health 1	Access to services No problems	Family composition No 60+ or < 5s	Existing conditions No conditions 0 health expenditure	
	Shelter 2	Housing conditions Missing 0 essential item	Security of tenancy Some debt, has contract	Family composition Female head of family	
	WASH 2	Health No issues	Access to latrines Not shared and safe access	Access safe water Municipality source instances without	Waste management 1 instance solid Over 5% spent on WASH

Sample case-level snapshot Severely vulnerable

38 year old widowed Syrian female with 4 children.



Sample case-level snapshot/Severely vulnerable 38 year old widowed Syrian female with 4 children.

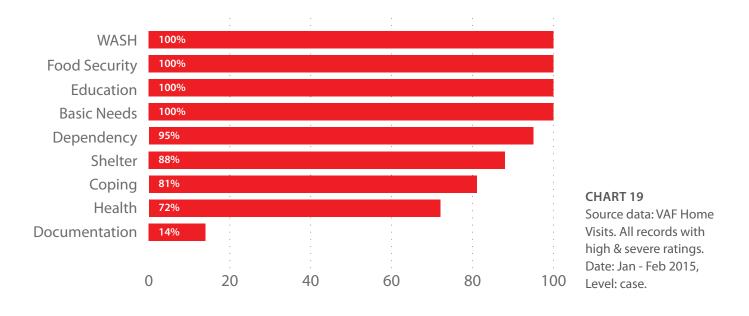
\$	Predicted expenditure 3	Predicted per capita 43 JOD			
¥	Documentation status 4	PA Documentation PA is missing MOI	Family Documentation Family registered		
	Coping strategies 4	1 emergency strategy being implemented			
İ	Dependency ratio 4	1 autonomous adult 4 children			
\$	Basic Needs 4	Coping strategies Emergency strategies	Dependency ratio Poor dependency	Economic state High debt per capita	
	Education 3	Attendance risks Finance main risk	3 school aged children 2 years missed educa- tion 2 children attending		
	Food 4	Social vulnerability High dependency ratio, Single headed	CARI score FCS = 103, 20% spent on food, Emergency		
*	Health 4	Access to services Missing PA doc, not had problems accessing	Family composition No under 5's and over 60s in case	Existing conditions Existing disabilities present	
	Shelter 3	Housing conditions Missing essential items, showing poor signs	Security of tenancy Has contract but high debt	Family composition Female-headed house, high dependency ratio	
	WASH 3	Health No issues	Access to latrines Shared access with 1 house and safe access	Access safe water Municipality source 1 instances without	Waste management 0 instance water 3 instances solid

Relationship between the Welfare and Sector models

Cross analysis of the VAF Welfare Model and other sector models demonstrates high levels of corresponding vulnerability. For example, refugee families rated as severely vulnerable by the Welfare Model have for the most part corresponding high or severe levels of vulnerability across the other sectors.

Of all of the vulnerability models, Welfare has the highest crossover with the other sectors. For instance, for Education, Food Security and WASH, 100% of those considered severely vulnerable by these sector models, are also severely vulnerable in the Welfare Model. For Basic Needs, 74% of those considered severely vulnerable are also severely vulnerable under the Welfare Model.

This implies that the Welfare Model can be used to cross-reference the sector models, while also recognizing that the sector models may be more nuanced, and lower levels of cross-over can be explained by the combination of nonwelfare factors selected to identify vulnerability.



CONCLUSIONS

Holistic approach to better understanding vulnerability

The VAF baseline survey provides a detailed overview of the different vulnerabilities of the non-camp Syrian refugee population and the interplay between these vulnerabilities.

Although there are significant differences between the sectors' definitions of vulnerability there are common themes; in particular the universal indicators that contribute to the different vulnerabilities of Syrian refugee cases. For example a case with severe documentation, dependency ratio and welfare vulnerabilities are extremely likely to be also experiencing risks associated with Shelter, WASH, Education etc.

If this cross-sectoral analysis is applied, it will facilitate a holistic analysis of vulnerability by agencies and sectors, and then allow for more comprehensive identification of needs, design of programs and ultimately the coordination of assistance.

It could also provide insights into how reductions in assistance or access to services in one sector – for instance, WFP food vouchers or a change in government policy towards public services – would have operation-wide ramifications and affect Syrian refugees' ability to maintain family welfare.

Benefits from a standardised criteria

The development of standardised criteria for vulnerability and the different thresholds also allows for humanitarian actors to talk about relative vulner-abilities in equivalent terms and to track those vulnerabilities across the refugee population and both map and respond to the vulnerabilities identified.

By using the VAF questionnaire as the standard and agreed tool within broader assessments, data collected by agencies for different purposes may be more comparable, contributing to a greater store of knowledge and analysis of the refugee population, beyond any one assessment.

Practical application of the VAF analysis

The capacity of the VAF to map vulnerabilities across specific sectors and geographic locations also allows for a more nuanced analysis of not only the inter-connectedness of refugees' experience of vulnerability at a case level but also at a community level. In the future the VAF analysis could be used to support the work of the Government of Jordan and the Ministry of Planning and International Cooperation in identifying Jordanian communities particularly impacted by the Syrian crisis and the influx of refugees. Simultaneously, by mapping vulnerability within the Syrian community and contrasting with Jordanian poverty pockets and or available services it will allow agencies wishing to adopt a community based response to identify those communities most in need of assistance.

The VAF model identifies and demonstrates different kinds of vulnerability across the different sectors. For example in Health and Education the vulnerability can be translated as a family's ability/capacity to mitigate or manage a Health or Education related risk in the future. One practical application of this analysis could then be in the decision making around eligibility for urgent cash assistance for health related reasons. A family that has a low Welfare vulnerability rating and a low Health vulnerability rating is much more likely to be able to absorb a health related shock than one with severe vulnerability rating and a high or severe Welfare vulnerability rating is far more at risk of removing children from school or adopting negative coping mechanisms such as children being sent to beg or to work informally.

This report represents the beginning rather than the end of the VAF analysis process. Working closely with the sectors, the VAF team can customise both sector and geographical analysis in line with specific priorities. The key application, however, will be in the targeting of assistance at the case level – a process already being applied by WFP, UNICEF and UNHCR – to ensure assistance is efficiently allocated to the most vulnerable.

TIMA

ANNEXES

Annex 1: Vulnerability Assessment Framework background and development

Background and Objectives

A key objective of the Jordan Refugee Response has been to ensure that humanitarian resources have been used effectively and efficiently, as a commitment to both donors, the Government of Jordan and to the refugees themselves. Targeting of assistance to the most vulnerable refugees is part of this commitment.

At the beginning of this project in January 2014, while considerable amounts of data were available, analysis of vulnerability was varied. The terms "vulnerable" and "vulnerability" are common terms in the humanitarian and development sectors, but their use is often vague, being seen as substitutes for "poor" and "poverty". A more systematic approach requires that vulnerability is defined in terms of what it is that a population is considered to be vulnerable to and its definition therefore requires specificity.

The use of different vulnerability criteria among agencies meant that data was not for the most part comparable or able to be combined to form a comprehensive picture. In addition, many vulnerability measurements focus on hazards and risks while minimizing or omitting capacities for addressing them giving only part of the full picture of vulnerability.

Against this background the Vulnerability Assessment Framework (VAF) Steering Committee¹ was established in January 2014 to oversee the development of the VAF to facilitate better the targeting of Syrian refugees with humanitarian assistance, on the basis of vulnerability.

The VAF process seeks to put in place an observation and reporting system that supports the humanitarian community to:

- 1. Establish a profile of vulnerability among Syrian refugee households and enable monitoring of changes in vulnerability over time;
- 2. Target assistance in a more efficient and equitable manner, based on the application of common vulnerability criteria;

¹ VAF Steering Committee members are: ACTED, CARE International, DRC, ECHO, Handicap International, BPRM, PU-AMI, UN Women, UNHCR, UNICEF, WFP, and WHO.

3. Strengthen the coordination and decision-making of the delivery of humanitarian assistance.

The VAF definition of vulnerability

Following consultations with the sectors in early 2014 and endorsement by the VAF Steering Committee, the Vulnerability Assessment Framework for Syrian Refugees defines vulnerability as:

The risk of exposure of Syrian refugee households to harm, primarily in relation to protection threats, inability to meet Basic Needs, limited access basic services, and food insecurity, and the ability of the population to cope with the consequences of this harm.

Development VAF Criteria and Indicators

In February 2014, a series of workshops and consultations with the sectors resulted in a list of common indicators, and a standardized questionnaire, designed to capture data related to the vulnerability of Syrian refugee households.

Agencies and sector representatives attended a workshop to develop a list of 34 indicators. These indicators were intended to be 'cross-sectoral', rather than just sector-specific. After further refinement by the VAF Steering Committee, the sectors were again consulted on the list, including in the reduction from 34 to 15 indicators (some indicators were removed, others were combined and/or reworded).

These indicators were then cross-checked with refugees through 70 focus group discussions, disaggregated by age, gender and disability, across the country.

The final list was then developed in to the VAF questionnaire. The questionnaire was piloted and incorporated into the UNHCR Home Visit form in the summer of 2014.

The VAF form was fully rolled out in the July of 2014 and from July 2014 to April 2015 over 45,000 Home Visits have been conducted. The results are recorded into a central database (RAIS).

The VAF models include information collected at the registration by UNHCR, as well as through partners' Home Visits. The use of dynamic indicators and the collection of data on an ongoing basis is intended to allow for monitoring changes in vulnerability and enable trend analysis across time and geographic areas.

VAF, Welfare Models and the World Bank

In spring 2014, a World Bank team conducted a detailed analysis of indicators used by UNHCR for Cash Assistance decisions, using proGres and Home Visit data. Based on their analysis the World Bank produced an econometric model² that can predict Syrian non-camp refugees' economic welfare based on data collected during registration with UNHCR.

The World Bank's econometric modelling methodology, which uses predicted expenditure as a proxy for refugee welfare, was presented to the VAF Steering Committee and it was decided to use the same methodology on the VAF dataset to be able to predict refugee expenditure as a proxy for refugee household 'economic' or welfare vulnerability.

In early 2015, the World Bank have continued their works on Welfare Models in the region, based on UNHCR Home Visit and registration data. The World Bank has worked closely with the VAF team, commenting on and reviewing the VAF Welfare Model. The World Bank's own analysis, developed with the VAF team, will be released in mid-2015.

Sector Models

In tandem, vulnerability models have been developed through consultative processes with the refugee sectors, using different combinations of data points.

The VAF team worked with the sectors to develop customised models based on the data points available in the VAF questionnaire and these models were then shared with the sector members for endorsement.

In March 2015 a technical review report was shared with sectors which mapped the results of the initial models across the VAF baseline survey results. Sectors were then invited to review and revise their models.

These models are then used to assign vulnerability scores at the case level, and together with other periodic surveys, will provide spatial analysis that identifies those geographic areas with concentrations of vulnerable refugee cases.

Spatial analysis can also facilitate decision-making and prioritization by geographical area. The individual case scores can support partners when taking decisions on who should be assisted with what type of assistance.

The application of this analysis will vary from sector to sector. While this multisector approach will encompass agreed upon indicators from many sectors, it will not be the sole basis of information for assistance for all agencies and for some will rather flag or refer cases for additional follow up and prioritisation.

² The econometric process produces a formula which uses a set of data points that have a strong statistical predictive power to expenditure.

Limitations to the VAF models and Baseline Survey

The VAF does not cover Protection-related risks comprehensively

The VAF represents a tool to facilitate common targeting and assessment on the basis of vulnerability. Data collection to inform this tool is and will continue to be undertaken by a number of different VAF partners in Jordan. The range of actors involved poses potential challenges to more sensitive areas of data collection.

While partners have been and will continue to be trained in the VAF methodology, and in Do No Harm approaches to data collection, not all field level enumerators will be trained in safe and ethical approaches to protection-specific data collection or in protection referrals (including the Inter-Agency CP/SGBV Standard Operating Procedures). Given these constraints, it has been agreed with the Protection Sector that the VAF will not collect data on key protection issues. Information on protection-specific concerns is collected and analysed using different methodologies and tools (e.g. proGres, the Child Protection Information Management System (CPIMS), the Gender-Based Violence Information Management System (GBVIMS)), and responses to protection vulnerabilities or risks are coordinated through the Protection Sector's strategic response and specific referral mechanisms.

The VAF is primarily focused on 'cases' rather than individual vulnerabilities

While individual vulnerabilities contribute to the overall case vulnerability rating, the VAF was not designed to comprehensively target individual refugees' vulnerabilities. The VAF does not replace the need for assessment and referral mechanisms that are able to focus on the needs and vulnerabilities of individual Syrian refugees. For example one family member may have a specific Health or Education related vulnerability and the VAF would not capture this; rather it would identify that the case the individual was registered in was at risk.

VAF partners will be able to access data on individual vulnerabilities using RAIS and proGres through customised data sharing agreements with UNHCR.

The VAF does not cover Jordanian households.

While there are some similarities between the vulnerability of Jordanians and Syrian refugees (debt, over-crowdedness, income/expenditure gap), there are

many differences (the short-term nature of debt, civil-political rights, documentation status, access to services, access to labour market etc.). Analysis of the needs of Jordanians is undertaken by the Government of Jordan, including by the Ministry of Social Development through its social security mechanisms and by the Ministry of Planning and International Cooperation. The VAF process will continue to support the work of the Government of Jordan in identifying needs and gaps in services.

Natural bias in Home Visits

There is an inherent bias in the VAF data collection process for the larger 45,000 data set, with cases selected for review on the basis of recently having registered with UNHCR, being referred for or having requested a review of eligibility for cash assistance, having been referred from the VAF appeals process or as a protection referral.

The VAF team anticipates that the Home Visit data will identify higher levels of vulnerability due to this methodological bias, with a higher than average number of cases being highly or severely vulnerable.

For this reason a randomised baseline survey was conducted. A separate report will be issued analysing and comparing the VAF ongoing Home Visit data and the VAF baseline results in June 2015. There after monthly VAF sector reports will be issued noting comparisons with the VAF baseline data.

Difference between case and household

The Home Visit form collects data at the case level, where a case represents a nuclear family, meaning that each record in the database represents one case. Other organisations analyse their data at different levels such as house, household, or individual. Although it may be possible to aggregate the data to the household level this transformation has not taken place for this survey.

See Case vs Household, A conundrum note for more details

Baseline survey: Informal Tented Settlements

No cases living in informal settlements were interviewed for the baseline survey.

The VAF Welfare Model

The Welfare Model is an algorithm created on the basis of an analysis of the econometric survey. The model created has been reviewed by the World Bank and is a formula that predicts the expenditure per capita for a Syrian non-camp refugee case.

The World Bank identifies welfare as the net predicted expenditure per capita in a household. The definition of welfare comes from the principle that a household with a higher expenditure per capita has more economic resources to deal with instances of certain types of risk than one with a lower expenditure per capita.

The VAF Welfare Model has been developed and tested on a number of different data sets from Jordan.

Since the Home Visit data does not currently cover the full urban refugee population an additional model has also been developed to predict expenditure based upon proGres data. This has a slightly lower predictive power than the Home Visit version but can be used as an indicator in absence of full data. This model is out of the scope of this document but is described in the document referenced below and available on the VAF page of the UNHCR Syrian Refugee Portal.

See VAF vulnerability modelling background discussion for a more detailed description on how the model was created

Contributing factors

The econometric process produces a formula which uses a set of data points that have a strong statistical predictive power to expenditure. The data points are chosen by the unbiased econometric process, in other words they are included purely because the formula identifies that they have a correlation with expenditure, they are not chosen with or influenced by other bias.

The following table presents the data points that are included in the model and average characteristics for both the low and severely vulnerable cases.

	LOW	SEVERE	
Case size	1	7	
Arrive through formal border crossing = Yes	20% entered through formal border crossings	77% entered through informal border crossings	
House crowding	2 rooms per person	4 people per room	
Enumerator judgement = Not vulnerable	14% of cases judged not vulnerable	1% of cases judged not vulnerable	
Work documentation = Yes	56% have work permits	27% have work permits	
Gender of PA = Male	73% of low vulnerability cases are Male-headed and 27% are Female-Headed	58% of severe vulnerability cases are Male-headed cases and 42% are Female- headed cases	
Household size	4 individuals in a household	9 individuals in a household	
Percentage of children in the case	1% of the average case size is made up of children	60% of the average case size is made up of children	
Marital status	Single households have an equal distribution across low, moderate and severely vulnerable	Married, divorced and widowed have approximately 50% or more highly vulnerable	
Occupancy type	Those who own or rent have 0% or 3% in severely vulnerable respectively	Humanitarian assistance, lodging in return for work and squatting have over 50% in severely vulnerable	
Location of MOI registration	Amman, Aqaba, Balqa, Jerash, Karak, Ma'an, Madaba, Mafraq have between 7-16% of cases as low vulnerable	Ajloun, Irbid, Tafileh and Zarqa have less than 7% or no low vulnerable cases	

Appeals Systems and Safeguards

To mitigate the exposure to risk caused by exclusion and to acknowledge potential inaccurate predictions, a VAF appeals framework has been established to allow refugees to request a re-evaluation of their eligibility for assistance after exclusion.

The VAF, WFP and UNHCR have collaborated to establish a comprehensive and customised appeals system in relation to WFP's targeting of assistance, based on models developed with the VAF team. The appeals process is designed to ensure accountability to the refugee population and represents a best practice in line with the Humanitarian Accountability Partnership Standards.¹ This process has also been put in place to mitigate the exclusion errors inherent in econometric modelling. When introducing the targeting of assistance WFP also applied several inclusion criteria, targeting widows and pregnant and lactating women, as an additional layer of safety for the beneficiaries. These inclusion criteria were identified on the basis of the 2014 WFP/REACH CFSME.

See VAF application guidance note for more details.

Limitations of the Welfare Model

The Welfare Model is regarded as a strong indicator of economic vulnerability. However it is not without limitations.

- 1. The model does not take into account risk used to gain a high expenditure. For example a refugee case may be using severe coping strategies (for example working informally in dangerous or demeaning jobs) in order to achieve a high expenditure, and as such have additional vulnerabilities which the model does not identify.
- 2. The model does not take into account sustainability, it predicts current expenditure. It does not take into consideration the economic reserves that a refugee case may have; so this model is unable to predict future economic vulnerability.
- 3. As a practical example, high predicted expenditure does not necessarily make a case secure for Health issues. Therefore in order to be able to identify the spectrum of vulnerabilities and risks that refugees face and to meet the objectives of the VAF the rating models must be able to provide specific view of other vulnerabilities. For the purposes of the VAF these have been divided into the different implementation sectors.

¹ http://www.hapinternational.org/

Annex 3: Introduction to the sector models

Development of the sector models

The sector models were created through consultation with sector chairs and members following a workshop on using the Home Visit data to identify vulnerability. Individual sector working groups reviewed the Home Visit data and provided draft versions of assessment criteria they identified as important. Rules were applied to criteria to create a model, or algorithm. The draft algorithm was then run on the entire database and the results were reviewed and compared against other data sources for validation. Following the review some adjustments were made until the final models presented in this report were confirmed.

The models have now been programmed into the UNHCR RAIS and the results will shortly be available for download by VAF partners.

Characteristics of the sector models

Together the algorithms use 161 data points from the Home Visit survey and proGres from which 80 new indicators were created which are used for the identification of vulnerability. The results can then be viewed at a granular level to help identify where the cause of the vulnerability comes from. These are:

- 10 sector level vulnerability ratings (including Welfare/predicted expenditure);
 - Six sectors: (Basic Needs, Education, Food Security, Health, Shelter and WASH);
 - Four Universal indicators: indicators which are either used in multiple sectors or that were identified as important across sectors;
- 26 composite indicators: a combination of one or more related atomic indicators;
- 44 atomic indicators: a raw or very lightly processed data field from the data collection form.

See the Sector rating specifications documents for more details on the exact composition of all the VAF models.

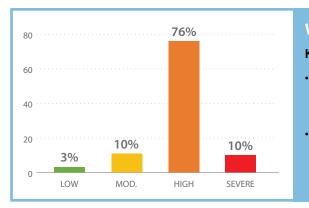
Limitations of the sector models

Producing individual vulnerability assessments for each sector provides a solution for sectoral needs, and the combination of all the sectors assessments can provide a profile of vulnerability for a case, however, the following limitations that exist and mean that a continued assessment and refinement of is required.

- 1. The models do not assess causality and cannot be used to predict future vulnerability. The data points chosen are known to be related to vulnerability in a given sector only.
- 2. The data used in the models was selected by practitioners working in those sectors, this may introduce a bias towards the data chosen. To mitigate this risk the practitioners were asked to examine data from the entire Home Visit report, not just data relating to their sector.
- 3. The models will be reviewed periodically and may evolve over time.

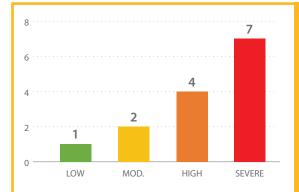
Annex 4: Details of Sector Models

The Welfare Model



WELFARE INDIVIDUALS KEY INSIGHTS

- 75% of the cases have low vulnerability with regards to their documentation status
 - 13% are severely vulnerable where either the PA or multiple family members are missing documents



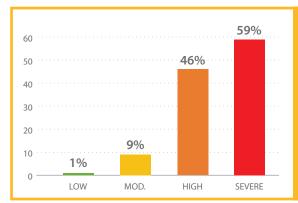
CASE SIZE

A low vulnerability case will have a case size of 1 and a severely vulnerable case will have a case size of 7



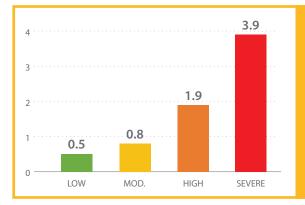
HOUSEHOLD SIZE

A low vulnerability case will have a household size of 4 and a severely vulnerable case will have a household size of 9



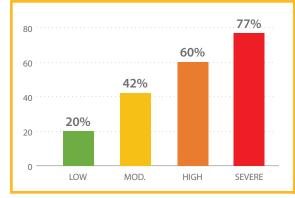
PERCENTAGE OF CHILDREN

A low vulnerability case will not have children and 59% percent of a severely vulnerable case will be children



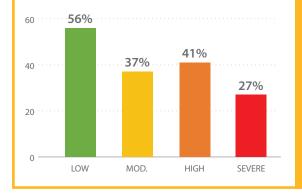
HOUSE CROWDING

A low vulnerability case will have 2 rooms per person and a severly vulnerable case will have 4 people per room



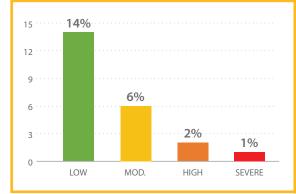
ARRIVE INFORMALLY = YES

20% of low vulnerability cases entered informally while 77% of severe vulnerability cases entered Jordan informally



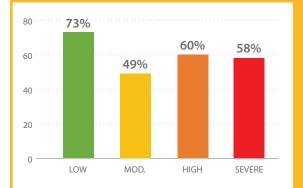
WORK DOCUMENTATION = YES

56% of low vulnerability cases have work permits while 17% of severely vulnerable have work permits



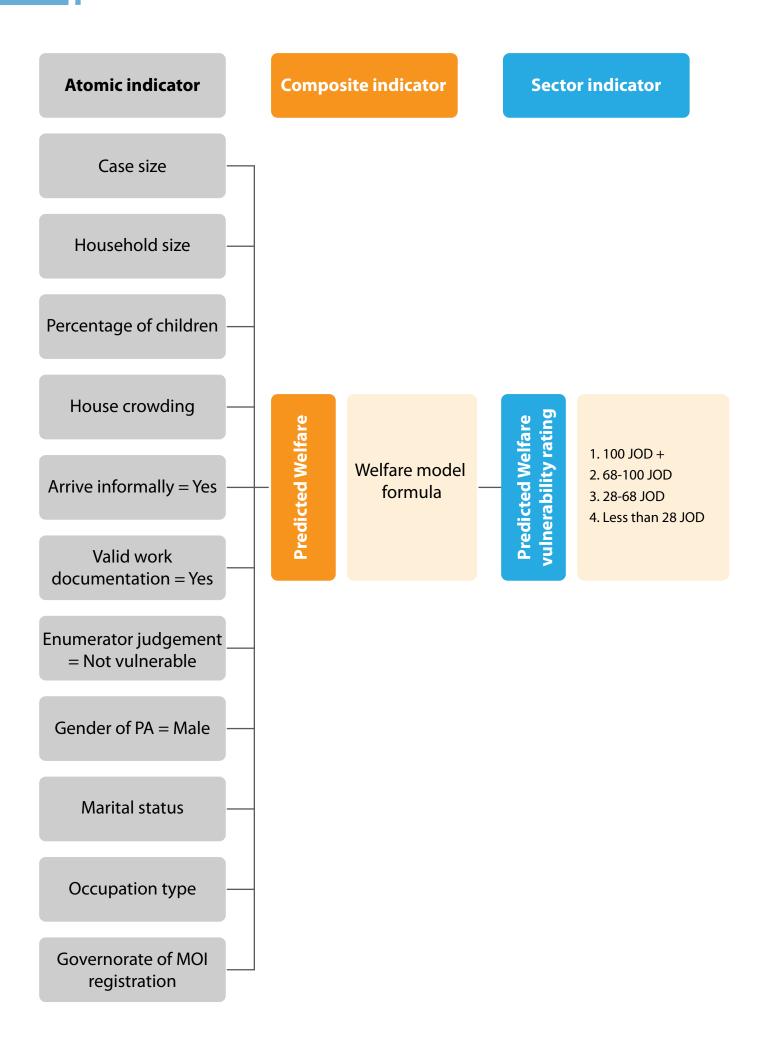
ENUMERATOR JUDGMENT

Enumerators judged 14% of low vulnerability cases as 'not vulnerable' and judged 1% of severely vulnerable cases as not vulnerable

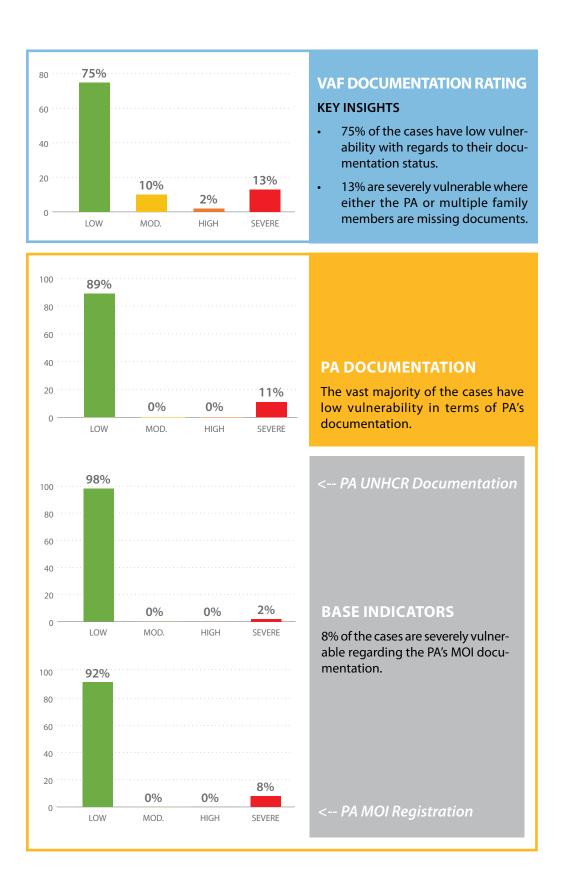


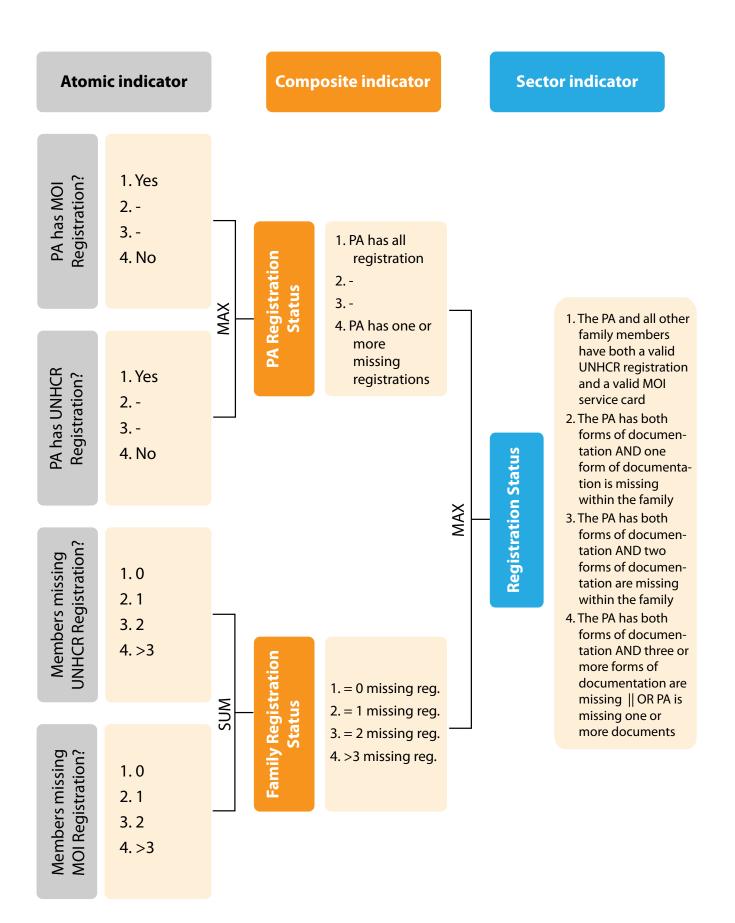
GENDER OF PA = MALE

73% of low vulnerability cases are Male-headed and 58% of severe vulnerability cases are Male-headed cases

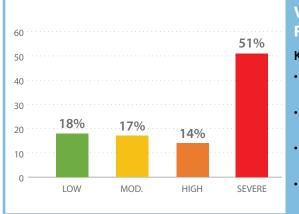


The Documentation Status model





The Dependency ratio model



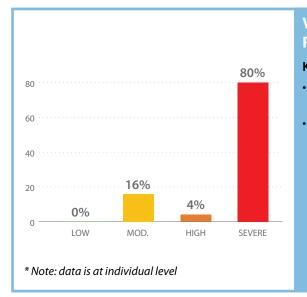
VAF DEPENDENCY RATIO RATING

KEY INSIGHTS

- More than half of the cases have a severe dependency ratio.
- 14% of the cases are highly vulnerable in this regard.
- 17% of the cases have a moderate dependency ratio.
- 18% of the cases have low dependency ratio.

No. of autonomous adults / (No. Juniors + No. of Elderly + No. of non-autonomous adults)	Atomic indicator	Composite indicator	Secto	or indicator
= X:XX ratio of depend- ents to non-dependents adults		adults / (No. Juniors + No. of Elderly + No. of non-autonomous adults) = X:XX ratio of depend- ents to non-dependents	 Coping strategies	2. 0.6 - 1.2 :1

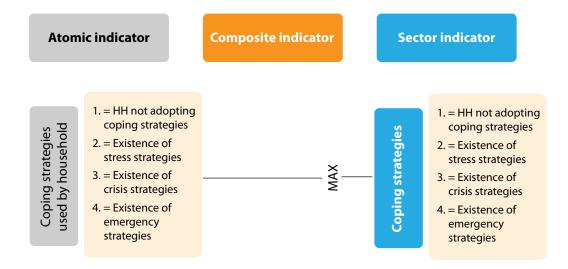
The Coping strategies model



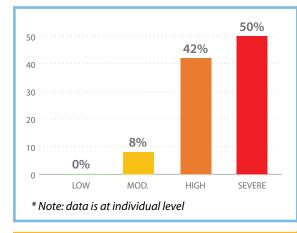
VAF COPING STRATEGY RATING

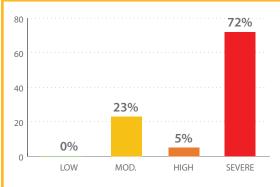
KEY INSIGHTS

- 80% of individuals are implementing emergency coping strategies.
- No individuals have low vulnerability with regards to coping strategies:
 - Having spent all savings, sold all household goods (furniture, jewellery etc.) and accepting high risk, informal, socially degrading or exploitive temporary jobs are cited as the main causes.



The Basic Needs model





VAF BASIC NEEDS VULNERABILITY RATING

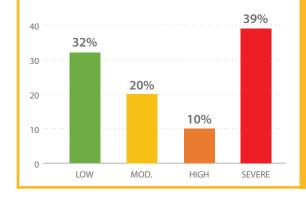
KEY INSIGHTS

•

- 50% of the cases are severely vulnerable with regards to their Basic Needs.
- Over 40% are highly vulnerable.
- Only 8% of the cases have moderate vulnerability.
- There are no cases that have low vulnerability.

COPING STRATEGIES

The vast majority of the cases are adopting coping strategies. There are no cases identified as low vulnerability in terms of coping strategies.



DEPENDENCY RATIO

Half of the cases have a severe or high dependency ratio. 32% of the cases have low dependency ratio.

82



ECONOMIC STATE

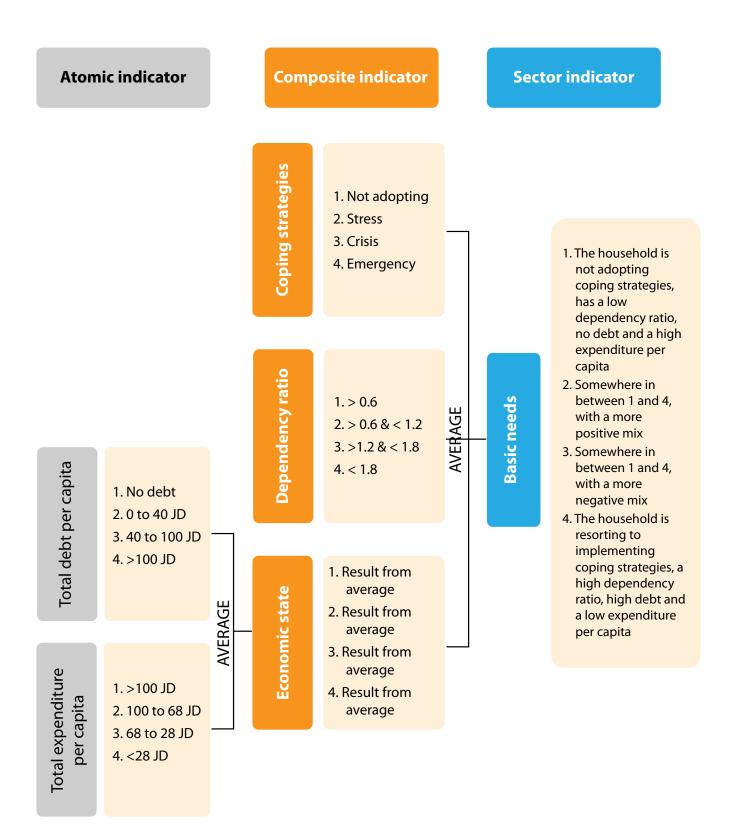
Half of the cases are identified as severely vulnerable in their economic state.

<-- Debt per capita

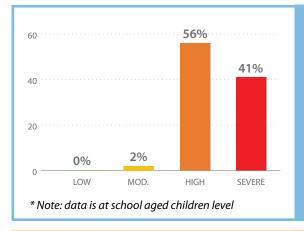
BASE INDICATORS

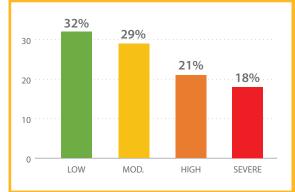
While a third of cases have no debt, two thirds of cases have less than 28 JOD per month expenditure so while they may not have debts to repay, they are still living far below the Jordanian poverty line. Over one third of cases have over 100 JOD in debt.

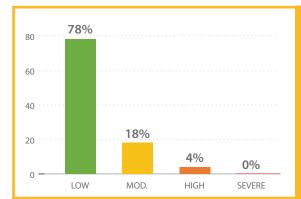
* Composite and atomic indicators are shown at case level

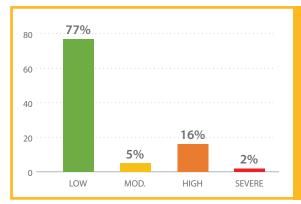


The Education model









VAF EDUCATION VULNERABILITY RATING

KEY INSIGHTS

- 97% of the school aged children are at high risk for non-attendance at school
- Only 2% were moderate vulnerable.
 - There are no individuals with low vulnerability in this sector.

SCHOOL AGED CHILDREN

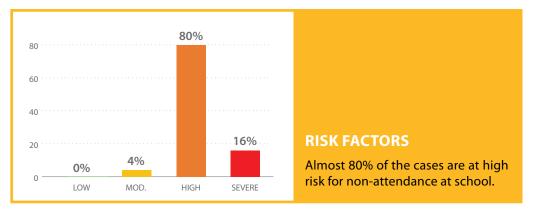
The percentage of school aged children are more or less equally divided across the vulnerability thresholds. The severely vulnerable cases have 3 or more school aged children.

EDUCATION ATTENDANCE

Three quarters of school aged children are attending school and there are no cases identified as severely vulnerable.

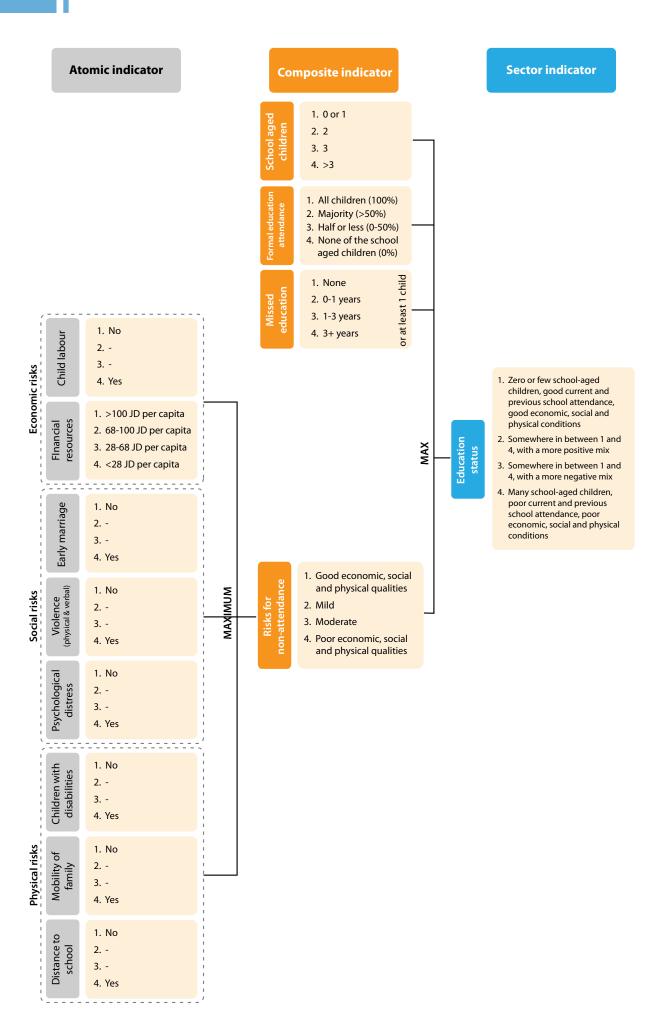
MISSED EDUCATION

Three quarterss of children have not missed any years of education.

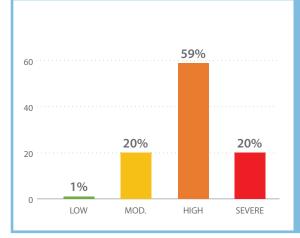


* Composite and atomic indicators are shown at case level

VAF Baseline Survey



The Food Security model

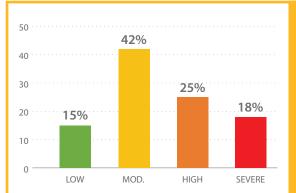


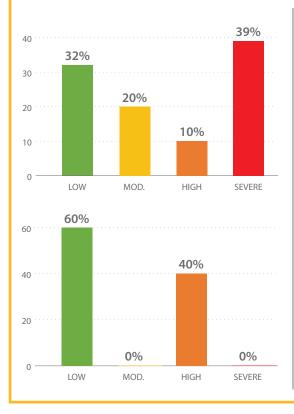
VAF FOOD VULNERABILITY RATING

KEY INSIGHTS

•

- The majority of the cases are identified as highly vulnerable in their food needs.
- 20% of the cases are severely vulnerable.
- The other 20% have moderate vulnerability.
 - There is only 1% of the cases that have low food vulnerability.





SOCIAL VULNERABILITY

More than half of the cases have low or moderate social vulnerability. One quarter of the cases is high vulnerable and 18% are severely vulnerable.

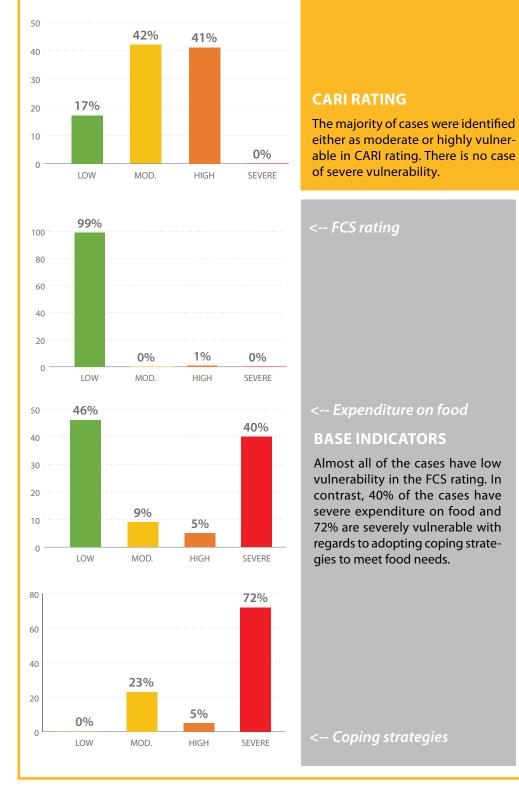
--- Dependency ratio

BASE INDICATORS

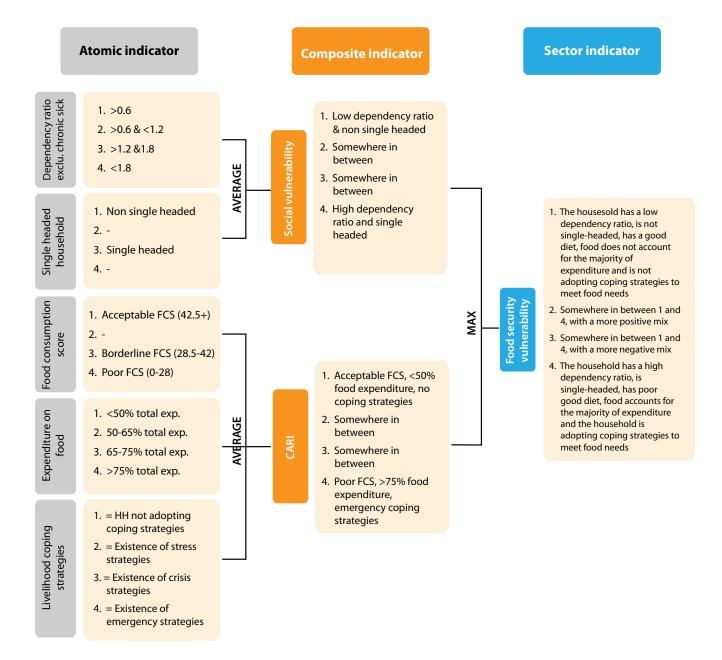
52% of the cases have low or moderate dependency ratio. The other half of the cases is identified as highly or severely vulnerable. Nevertheless, there is no severe vulnerability in terms of single headed household. 60% of the cases have low vulnerability.

-- Single headed family

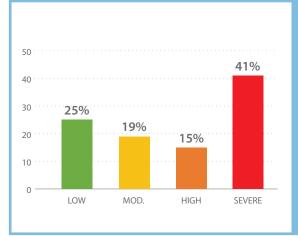
88



* Composite and atomic indicators are shown at case level



The Health model



VAF HEALTH VULNERABILITY RATING

KEY INSIGHTS

- 41% of individuals are living in cases with severe health vulnerability.
- 5% of individuals are living in cases with high vulnerability.
- 25% of individuals are living in cases with low vulnerability.
- 19% of individuals are living in cases with moderate vulnerability.



ACCESS AND AVAILABILITY

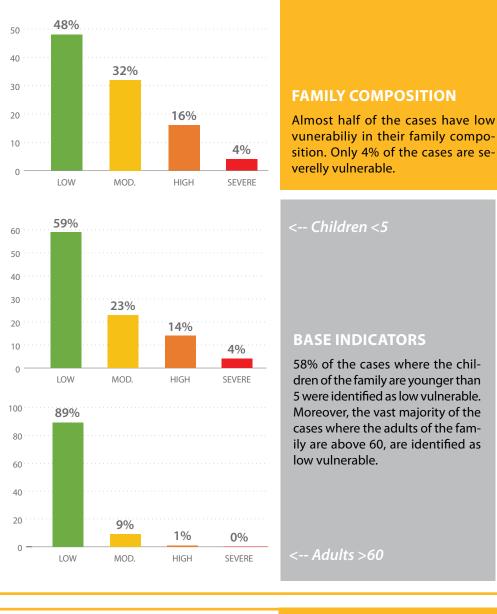
Three quarters of the cases have low vulnerability with regards to access and availability of health services.

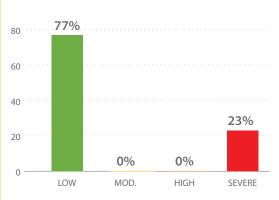
-- Registration status

BASE INDICATORS

The majority of the cases have low vulnerability in their registration status and when they have needed to access medical services most have had not had problems

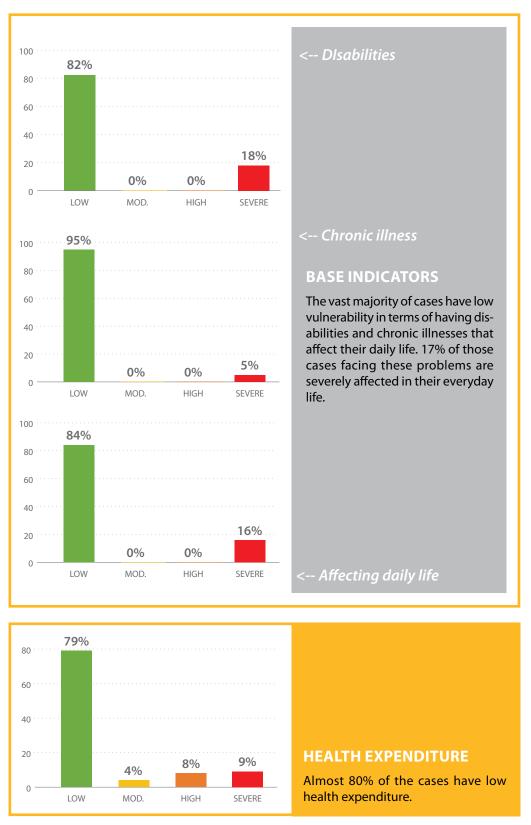
<-- Medical access



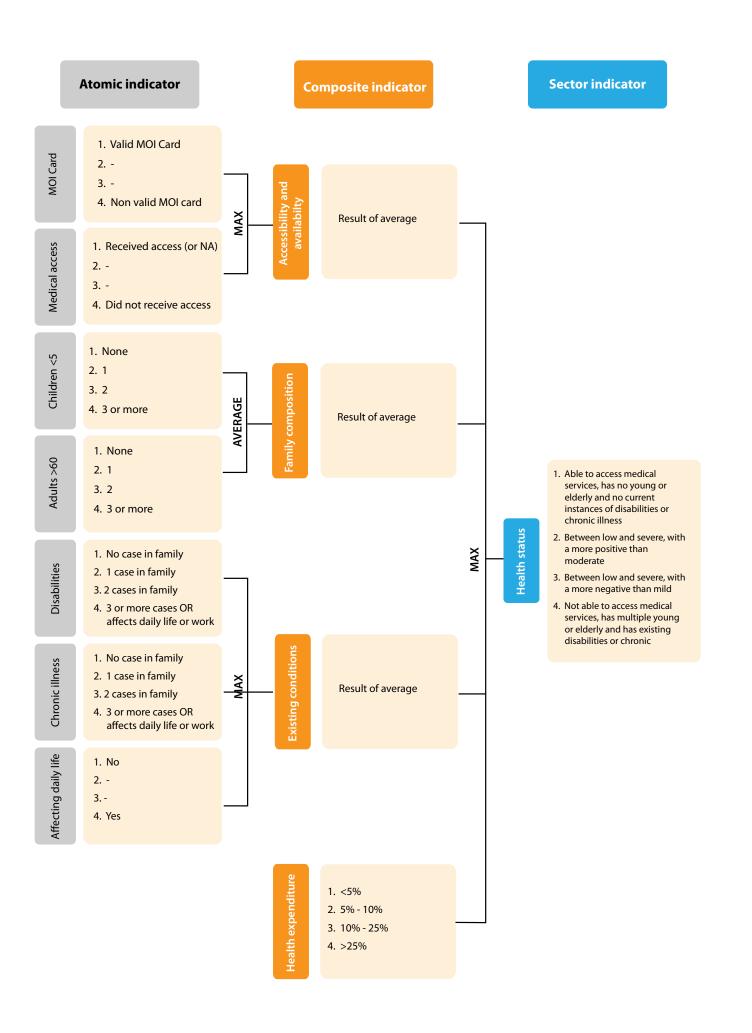


EXISTING CONDITIONS

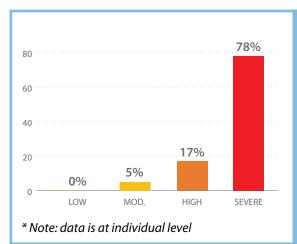
Three quarters of cases have low vulnerability regarding existing conditions that affect their life, one quarter face severe vulnerability. 92

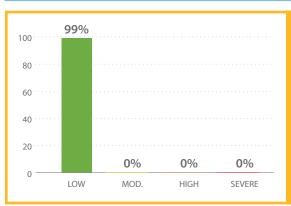


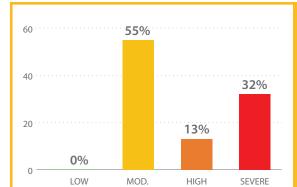
* Composite and atomic indicators are shown at case level

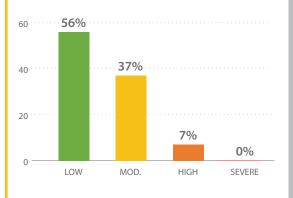


The Shelter model









VAF SHELTER VULNERABILITY RATING

KEY INSIGHTS

- The vast majority of the cases are severely vulnerable in Shelter.
- 17% are highly vulnerable.
- Only 5% of the cases have moderate vulnerability.
- There is no case of low vulnerability

TYPE OF ACCOMODATION

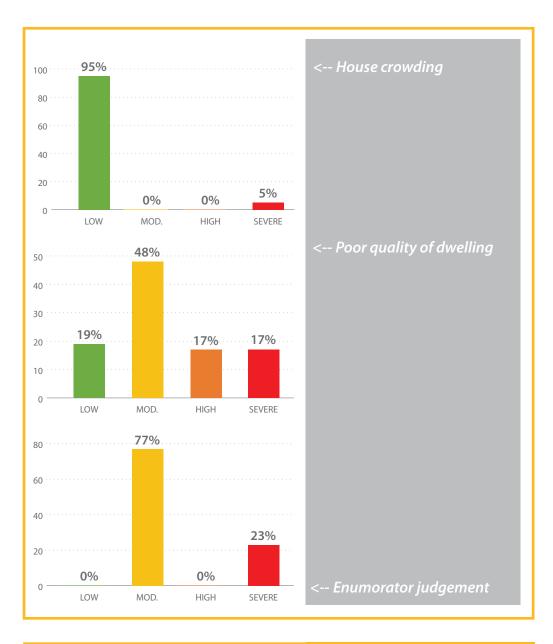
Almost all cases have low vulnerability regarding type of accomodation.

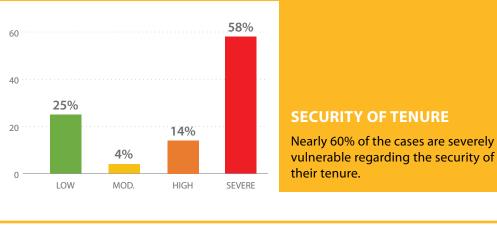
HOUSING CONDITIONS

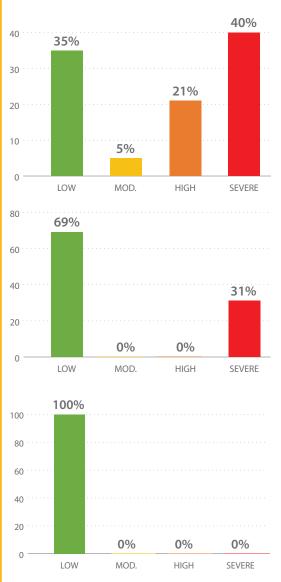
More than half of the cases have moderate vulnerability for their housing conditions. 32% of the cases ae identified as severely vulnerable.

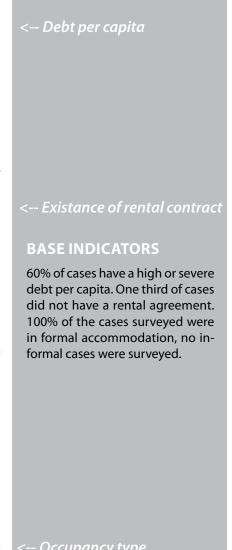
<-- Lack of basic house assets BASE INDICATORS

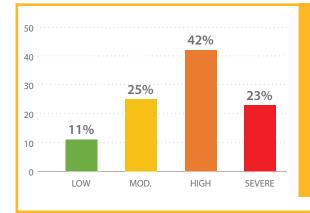
Half of all cases have all the standard basic house assets. 95% of cases are not suffering from overcrowding in their houses. Half of the cases' properties are showing one sign of poor quality, with 34% showing 2 or more. 23% of cases properties were judged to be unsatisfactory by the enumerator.





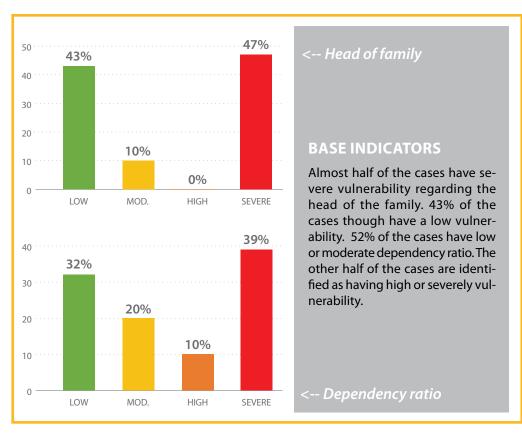






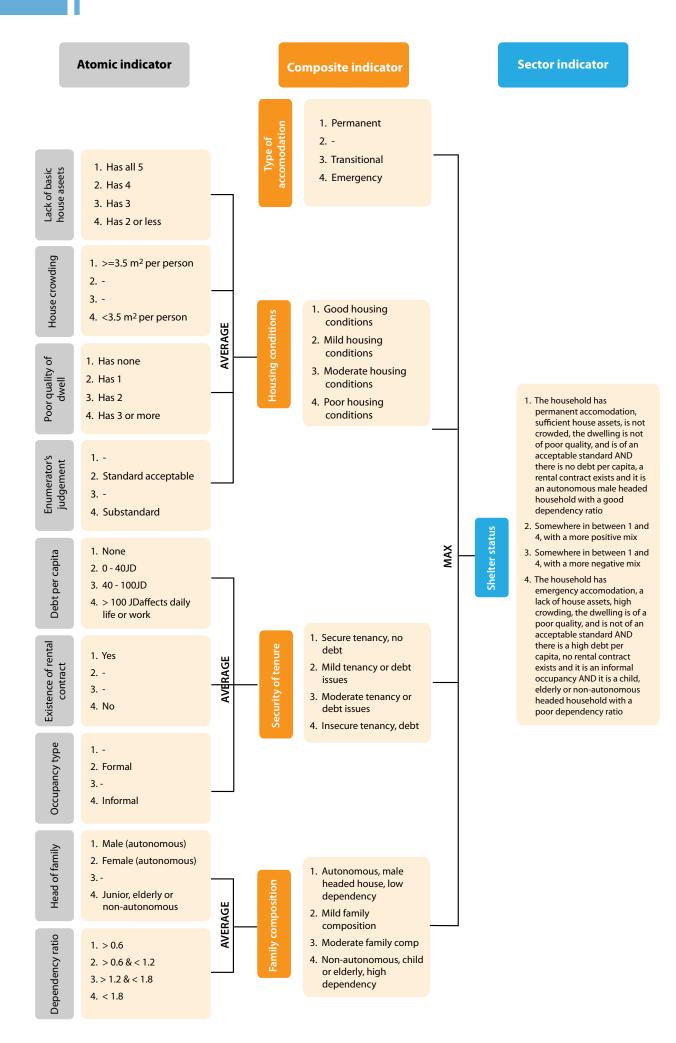
FAMILY COMPOSITION

More than half of the cases are identfied as highly or severely vulnerable in their family composition.One quarter of the cases has moderate vulnerability and only 11% have low vulnerability.

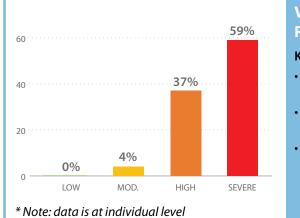


* Composite and atomic indicators are shown at case level

VAF Baseline Survey



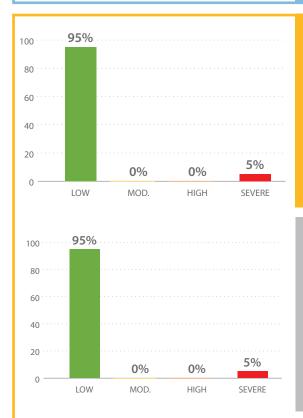
The WASH model



VAF WASH VULNERABILITY RATING

KEY INSIGHTS

- The vast majority of the individuals are severely vulnerable in WASH.
- There are no individuals with low vulnerability.
- This is predominantly caused by solid waste management.



60 54% 40 30% 20 17% 0 LOW MOD. HIGH SEVERE

WASH RELATED HEALTH

95% of the cases have low WASH related health vulnerability.

-- Diarrhea

BASE INDICATORS

Only 5% of the cases were identified with severe diarrhea.

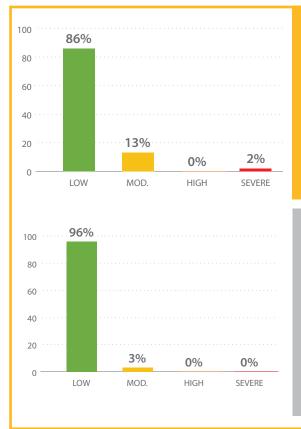
ACCESS TO FACILITIES

More than half of the cases have secure access to bathing facilities.17% are identified as severe vulnerable.

VAF Baseline Survey







ACCESS TO SAFE WATER

There is are no high or severe vulnerabilities regarding the safe access to water. The majority of cases are low vulnerabe.

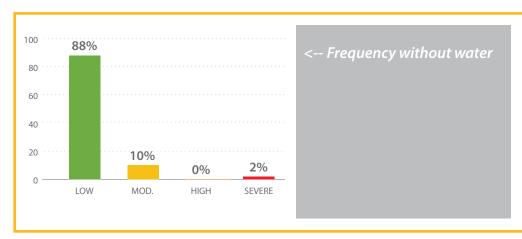
<-- Source of water

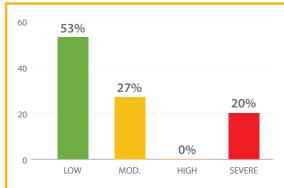
BASE INDICATORS

Nearly all cases surveyed have their water supplied through the municipality and 88% have never had had issues with water supply.

100

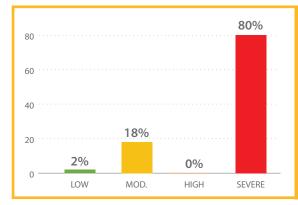






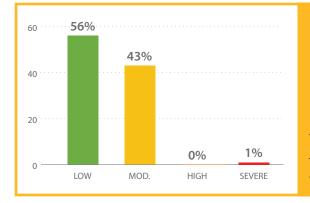
WASTE WATER MANAGEMENT

More than half of the cases are low vulnerable in terms of waste water management while 20% have experience overflows more than once in the last year.



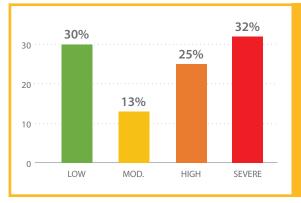


There is 80% of cases have experienced solid waste management issues more than twice in the last year.



HYGIENE

Just over 50% of the cases do not face problems accessing hygiene facilities. The remaining half have shared access to facilities.



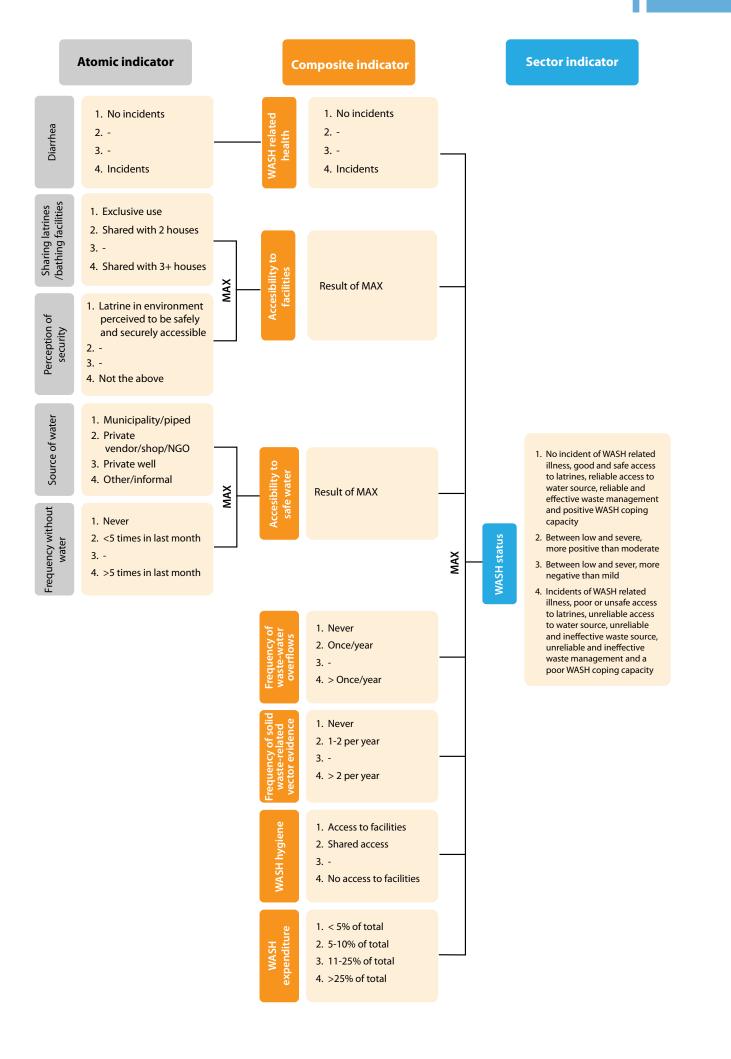
WASH EXPENDITURE

The WASH expenditure rate varies significantly among the cases. 32% of the cases are severely vulnerable spending over 25% of their expenditure on WASH items.

* Composite and atomic indicators are shown at case level

May 2015

103



The VAF Steering Committee is composed of:























May 2015 Produced by UNHCR Jordan

UNHCR The UN Refugee Agency مفوضية الأمم المتحدة لشؤون اللاجئين