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Front cover photograph: Syrian refugee Halime holds the ESSN card which is the only stable income of her family. Reyhanlı, Hatay.

WFP/DENIZ AKKUS
Definition of terms

Household head
Head of household is the reference person in the household who leads the household.

Registered
Individuals who have registered their identification documents with the Directorate General of Migration Management (DGMM), a national institution working under the Ministry of Interior. Registration grants individuals legal stay in Turkey and provides access to public services and assistance.

Unregistered
Individuals who are not currently registered with DGMM, as explained above. These may be people who have never registered with DGMM, or are pending registration (i.e. have submitted their paperwork and are awaiting feedback). This may also cover individuals or households who were registered in one location, but moved to a new location and have not re-registered.

Refugee
None of the registered individuals included in the CVME4 are afforded refugee status by the Government of Turkey. However, for simplicity within this paper, any individual who is under any of the legal status noted above, or planning to seek this status, is referred to as a refugee.

Non-applicant
Individuals who have not applied to the Emergency Social Safety Net programme.

Beneficiary
Individuals who have applied to the ESSN programme, and were determined to be eligible and are benefitting from ESSN assistance.

Ineligible applicant
Individuals who have applied to the ESSN programme, and were determined to be ineligible.

Pending beneficiary
Individuals who have applied to the ESSN programme, and were determined to be eligible but were awaiting their ESSN card.

Map 1.
CVME3 and CVME4 data collection locations
Executive summary

Turkey is a host to over 4 million registered refugees (3.7 million of them Syrian) making it the biggest refugee-hosting country in the world. In response, the Government of Turkey has granted temporary or international protection to refugees, depending on the nationality, and has provided them with free access to services such as education and health once they have registered with the Directorate General of Migration Management (DGMM).

To support the government’s efforts, the Emergency Social Safety Net (ESSN) programme was launched in November 2016 to help cover the basic needs of the most vulnerable refugees living outside camps and under temporary or international protection. It provides beneficiary refugee households with a debit card giving them access to a fixed amount of money each month with additional quarterly top-ups dependent on household size and disability. By June 2019 the programme was assisting over 1.64 million people.

The main objective of the CVME is to assess the socioeconomic vulnerability of the refugee population, estimate their needs and, where possible, analyse the trends over time. Like the May 2019 CVME, this study is representative of refugees across the country. Uniquely, this report also covers ‘pending beneficiaries’, refugees who have successfully applied to the ESSN, but not yet received their debit cards. Data collection was carried out from September to December 2018 in 1380 households, comprised of 8027 individuals, through face-to-face surveys.

Key findings

Who benefits from the ESSN?

More than half of the households in the sample (53 percent) benefit from the ESSN card while 28 percent have been deemed ineligible.

Just over 90 percent of refugees were registered with the DGMM and Nüfus (Department of Population and Citizenship Affairs), which is a pre-requisite for ESSN application. Of the 14 percent who had not applied to the ESSN, non-registration with DGMM and Nüfus was the main reason for not having applied. Concerningly, almost one in three non-applicants had not applied because they believed or were told they were ineligible for the card, and another 15 percent were told they would not fit the criteria.

A significant number of disabled people said they did not have the disability report that is required for ESSN application (2.5 percent of the individuals with disabled report versus 3.3 percent without disability report). Reasons given for not having the report included not knowing the process and not being able to afford it.

The most vulnerable groups

Female-headed households

Just 12 percent of refugee households are headed by women and almost half of them are single-parent families. The survey demonstrates the vulnerability of women-headed households across almost all indicators. Adult women are far less likely than men to speak Turkish or to have received any formal education. They are far more likely to have no working members in the household (42 percent of female-headed vs. 15 percent of male-headed households). There is a wide gap between male and female-headed households in terms of poverty: 4 percent of male-headed and some 10 percent of female-headed households are living in extreme poverty while multi-dimensional poverty rates are far higher for households headed by women (60 percent vs. 39 percent). They are also more likely to have unacceptable food consumption (9 percent versus 2 percent).

Pending beneficiaries

The survey reveals the vulnerability of pending beneficiaries – who meet the criteria to benefit from the ESSN but have yet to receive their card, and are mostly new arrivals. They are highly likely to be multi-dimensionally poor (85 percent). They face particularly high levels of deprivation in living conditions, education and food security. While around two in five refugees had to adopt some form of food-related coping strategy because they could not afford to buy enough food, the proportion rose to four in five among pending beneficiaries. Overall around 20 percent of households spent more than 65 percent of their total expenditure on food rising to some 69 percent among pending households. Half of the refugees who borrowed money in the last three months used that money to pay for food, rising to 67 percent of pending beneficiaries, showing their heightened vulnerability to food insecurity.

Afghan households

While the large majority of refugees in Turkey are Syrian (90 percent), Iraqis make up 4 percent and Afghans 5 percent according to the official registration data. The data illustrates that both Afghan and Iraqi men are less likely to be involved in the workforce. The data also demonstrates that Afghan refugees are more likely to have registration issues. Afghans are more likely to be multi-dimensionally poor (76 percent) than Iraqis (54 percent) and Syrians (38 percent). On average just 3 percent of refugees in Turkey have unacceptable food consumption but this rises to 18 percent among Afghans.
Recent arrivals
Arrival time also plays an important role in the vulnerability profile of the refugees. The longer refugees remain in Turkey, the more likely they are to live in dignity. The small number of refugees who arrived in the six months prior to the survey are the most vulnerable, with 95 percent considered multi-dimensionally poor.

The areas of greatest deprivation/vulnerability

Housing
The area of greatest deprivation for refugees, regardless of ESSN status, is housing quality. Only about 30 percent of refugees live in housing that meets the minimum humanitarian standards of privacy, natural light and ventilation, security and essential facilities. This rate decreases to 27 percent for beneficiaries and only 21 percent for pending beneficiaries. Tendency of ineligible applicants to live in a better-quality apartment is the highest among ESSN eligibility groups with 37 percent.

Food insecurity
This is the second area of greatest deprivation because most refugees have to employ consumption-related coping strategies. Although the food security by the food consumption score indicator seems satisfactory, a 3 percent prevalence of unacceptable food consumption among registered refugees translates into about 120,000 refugees who require assistance to meet this basic need.

Education
The CVME4 data shows that 28 percent of school-aged children (6-17 years) had not attended school for the past semester mainly because: their families needed them to work or because they were still awaiting registration; they could not afford the costs of text books, transport, stationery etc; or the children did not want to go to school (e.g. because they were bullied). The levels are higher in female-headed households and particularly worrying for ineligible and non-applicant households. Absenteeism from school is lowest among ESSN beneficiaries (18 percent), suggesting the cash assistance plays a major role in helping families keep their children in school.

Child Labour
The CVME4 data reveals that almost one in five refugee boys under 18 were working (17 percent which equals to 112,000 boys) in the month preceding the survey, rising to 35 percent of ineligible households and 27 percent of non-applicants. As boys in beneficiary households were far less likely to be working, this is perhaps an indicator of the ESSN’s positive impact on beneficiary households.

Recommendations

- Continue with efforts to streamline and/or expedite the registration and application process, including provision of accurate information to all refugees, to ensure all in need of assistance are able to apply for it.

- Conduct a holistic review of the ESSN assistance framework particularly in relation to beneficiary targeting and the value of assistance to ensure the most vulnerable are reached and that the assistance meets their basic needs.

- Strengthen synergies with other assistance programmes such as Conditional Cash Transfer for Education (CCTE) to ensure efficient and effective utilization of resources for greater impact.

- Continue to assess the vulnerability of refugees living in Turkey to be able to present an evidence-based approach of how to provide refugees with support to meet their basic needs.
1 Introduction

Since the conflict in Syria began in March 2011 an estimated 5.6 million Syrians have fled the country, the majority of them to Turkey. According to Government statistics, around 3.7 million Syrian refugees had been registered in Turkey as of 10 October 2019, in addition to 170 000 Afghans, 142 000 Iraqis, 39 000 Iranians, 5 700 Somalis, and 11 700 from other countries, a total of well over 4 million registered refugees. This makes Turkey the biggest refugee-hosting country in the world.

In response to the massive population influx, the Government of Turkey has provided all Syrian refugees with temporary protection and other nationalities with international protection, which has involved adapting existing national systems, such as identity and address registration. The refugees under temporary and/or international protection have also been provided with access to the same basic services as any other Turkish citizen, including education and health. A range of national NGOs, INGOs, UN agencies and other international organizations are working to support both the refugees living in Turkey and the Government in providing any other assistance needed by the refugee population.

One such assistance programme is the Emergency Social Safety Net (ESSN) programme, the biggest humanitarian project that the European Union has ever funded. It is designed to help cover the basic needs of the most vulnerable individuals living under temporary or international protection outside camps in Turkey. The ESSN provides beneficiary refugee households with a debit card giving them access to a fixed amount of money each month to spend on whatever they need, whether it be food, fuel, rent, medicine or bills. Every month, it is topped up with 120 Turkish Lira (TRY) (20 USD) for each member of the family. Families also receive quarterly top-ups; households with 14 family members receive 600 TRY per person, those with 5-8 members 300 TRY and households with 9+ members 100 TRY. Refugees with severe disability receive an additional monthly top-up payment of 600 TRY.

The programme rolled out across Turkey in November 2016 and is implemented by the Turkish Red Crescent (TRC), the Turkish Ministry of Family, Labour and Social Services (MoFLSS) and the World Food Programme (WFP), with funding from the European Civil Protection and Humanitarian Aid Operations (ECHO). By June 2019 the ESSN programme was supporting over 1.64 million people who met the eligibility criteria. Those with a work permit or who own registered assets in Turkey are not eligible to receive assistance.

Despite strong growth in the past 20 years, Turkey is facing an acute set of economic challenges that emerged in 2018. Triggered by a sharp depreciation of the Turkish Lira and a fall in investor confidence and domestic demand, by the end of 2018 Turkey had entered a recession, with inflation running at 20 percent. However, by August 2019 Turkey’s headline inflation rate had dropped to its lowest level since May 2018.

The Comprehensive Vulnerability Monitoring Exercise (CVME) has been crucial for the assessment and monitoring of the ESSN. While CVME1 and CVME2 were not representative of the refugee population living in Turkey, the CVME4 is the second vulnerability study representative of refugees across the country. Like the previous CVME3 released in May 2019, the main objective is to assess the socioeconomic vulnerability of the refugee population, estimate their needs and, where possible, compare the findings with those of the previous study. This report quantifies needs across many sectors. It also covers future beneficiaries who have successfully applied, but not yet received their cards for ESSN assistance.

Considering the scale of the refugee population in Turkey and the size of the ESSN, the CVME is a vital tool for programme accountability and performance, providing important evidence around refugee needs for use by ESSN stakeholders and many other humanitarian and development actors across Turkey.

Using data from previous CVME rounds in conjunction with other monitoring information, ESSN organizations have:

- Increased outreach to refugees aiming to benefit from the ESSN and assisted them to overcome the prerequisites to application (identity registration, address registration, etc.).
- Advocated for solutions enabling refugees living in informal housing and seasonal migrants to acquire formal address registration and consequently apply to the ESSN.
- Increased protection referrals, ensuring that households/individuals in need of services outside the ESSN (such as education, healthcare or legal services) are referred to the appropriate service providers.
- Increased top-ups for families depending on the household size.

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1 UNHCR, Government of Turkey https://data2.unhcr.org/en/situations/syria/location/113
3 For more information on the ESSN, please refer to: https://www.essncard.com/
4 https://docs.wfp.org/api/documents/WFP-0000104793/download?_ga=2.1778307347.1680049876.1571306422-860233316.1527790238
6 Turkish Statistical Institute: http://www.tuik.gov.tr/HbGetirHTML.do?id=30859
7 Previous CVME Reports: https://www.wfp.org/publications/turkey-comprehensive-vulnerability-monitoring-exercise
• Provided the Social Assistance and Solidarity Foundation (SASF), a discretionary allowance to allocate to families that do not meet the demographic criteria for the ESSN but are assessed as extremely poor. This recognizes that while the targeting approach has worked comparatively well, there is an exclusion error which means the ESSN has missed a share of the population in need.

Methods

The CVME4 data collection was carried out from September to December 2018 with 1,380 households, comprised of 8,027 individuals, through face-to-face surveys in their homes. The questionnaire was addressed at the household and individual level and included information on refugees’ demographics, their arrival in Turkey, living conditions, health, education, income, expenditure, debt, food security, coping strategies, gender, safety and security. All data was collected by trained WFP monitoring assistants on tablets and uploaded via Open Data Kit. During the data collection WFP staff were accompanied by Turkish Red Crescent staff.

In order to reach a representative sample, a two-staged approach was used: geographic and household. The first stage, relying on geospatial analysis, allowed the sample to be spatially representative, resulting in a selection of 55 geolocations. Map 1 displays the CVME3 and CVME4 data collection locations.

The second stage randomly identified at least 25 households within each district through the social network theory, using a methodology known as Respondent Driven Sampling, resulting in a minimum sample size of 1,375 households.

All households were either under International Protection/Temporary Protection (IP/TP) in the pre-registration phase or planning to seek IP/TP in the future.9 Sampling weights were constructed for both methodologies, resulting in a nationally-representative sample. Please refer to Annex 1 for a detailed description of the sampling methodology.

Throughout the report, data has been disaggregated to compare households by eligibility status, sex of household head and nationality. The breakdown of the population (weighted sample) by eligibility status and nationality of the household head is provided in figures 1 and 2. Although the CVME4 is statistically representative only at the national level, these indicative comparisons provide useful information on different needs among population groups, revealing varied levels of vulnerability.

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9 Within the scope of Turkish Law on Foreigners and International Protection, dated 4 April 2013, foreigners seeking refuge within Turkey are either granted International Protection, Temporary Protection or Humanitarian Residence status.
2 Demographics

Profile of households

Nearly 88 percent of refugee households are headed by men and 12 percent by women. The large majority (73 percent) are Syrian, followed by Iraqi (17 percent) and Afghan (7 percent). A very small minority (just 3 percent) are other nationalities (see figures 2 and 3).

Almost 60 percent of families consist of two parents with children. It appears that very few are cohabiting with non-relatives. Just 3.2 percent are single parent families with children under 18. There are no significant differences by nationality. Almost half of the female-headed households are single parent families.10

As figure 4 demonstrates, more than half the households in the sample (53 percent) benefit from the ESSN card while 28 percent have been deemed ineligible. A small percentage have not applied (14 percent) and an even smaller share have applied, been accepted and are awaiting their cards (5 percent).

Profile of the refugee population

The refugee population in Turkey is very young as shown in the population pyramid: 67 percent of refugees — representing almost 2.7 million people — are under the age of 25. There are around 1.2 million school-age refugee children. The mean age for male-headed households is 39, while the mean age for female-headed households is 43.

Figure 3.
Sex of the household head

12% Female-headed
88% Male-headed

Figure 4.
ESSN status of refugees in Turkey

28% Ineligible applicants
14% Non-applicants
5% Pending beneficiaries
53% Beneficiaries

Figure 5.
CVME4 age pyramid

10 Please refer to Annex 2 for the family composition of the refugee population.
3 Registration and arrivals

To apply to the ESSN, all household members should be registered with the Directorate General of Migration Management (DGMM), have an ID number starting with 99 and be registered under the same family number. Additionally, the address and all household members have to be registered at Nüfus (Department of Population and Citizenship Affairs) in the district in which they resided by the end of 2018. Figure 6 shows that overall 91 percent of the refugees were registered with the DGMM, up marginally from 90 percent in the CVME3. There was a corresponding decrease in the number of non-registered people from 4 percent to 1 percent since the last round of the CVME. This shows the overall completion and success of household verification visits, which were carried out by UNHCR and DGMM from 2016 until 2018.11

Figure 7 shows that the percentage of refugees registered with Nüfus increased from 75 percent in the CVME3 to 90 percent in the CVME4. A small minority (4.5 percent) were not registered at all and an equally small minority were registered with Nüfus but at another address.

All beneficiaries and 96 percent of ineligible applicants were registered with DGMM (the remaining 4 percent were pending registration). Non-applicants had much lower rates of DGMM registration (36 percent) though most of these were pending registration, having arrived in Turkey in the last six months. Additionally, only 61 percent of non-applicants were registered with Nüfus compared to 98 percent of beneficiaries and 93 percent of ineligibles.

When disaggregated by nationality the data demonstrates that the bulk of those pending registration or unregistered were Afghans: 5 percent were pending and 9 percent were not registered. For Iraqis, 4 percent were not registered, and 2 percent were pending registration. Among Syrians, on the other hand, 91 percent were registered.

According to the survey, 14 percent of refugees (representing 500,000 registered refugees) had not applied for an ESSN card (down from 24 percent previously). Around 76 percent of unregistered refugees did not apply for the ESSN, which again shows that lack of DGMM and Nüfus registration was the main barrier for not applying for the ESSN. Figure 8 demonstrates the main reasons for households not applying as reported during CVME4 data collection versus CVME3. Non-registration with DGMM was the primary barrier to ESSN application for around 42 percent of non-applicants. It is concerning that 29 percent of non-applicants believed or were told they were ineligible, and an additional 15 percent said that the SASF had informed them they would not fit the criteria. Just 1 percent of non-applicants cited not having registered with the Nüfus department as the main reason for not applying for the ESSN, which contrasts with one in three from CVME3.

Although only 5 percent of non-applicants reported not knowing about the ESSN and 2 percent reported not understanding how to apply, ESSN stakeholders still need to continue efforts to provide accurate information on eligibility criteria and how to submit ESSN applications.

Having a disability is one of the eligibility criteria for the ESSN, but many households did not or could not obtain the necessary disability report for their member(s) to make them eligible. The number of households with a disabled person without a report was much higher for non-applicants and pending beneficiaries. When asked why they did not have a disability report, the main reasons given were that the family did not want to get one, that they did not know the process, or could not afford it.

**Access to non-ESSN assistance and other services**

Just 4 percent of refugees received any food assistance. Barely any (less than 1 percent of beneficiaries) had received multi-purpose cash other than the ESSN. When disaggregated by ESSN status, non applicants were even less likely to report receiving any assistance from NGOs (just 3 percent). The proportion was slightly higher for beneficiaries and pending beneficiary households (around 7 percent).

Around 14 percent of all households said they were unable to access certain services that they needed, such as child daycare, women’s health services or mental health services, mainly because they could not afford them, they were not available or they did not have proper documentation.

**Arrivals in Turkey and plans to move on**

The majority (almost 65 percent) of refugees arrived from 3 to 6 years ago. However, 5 percent arrived in the six months prior to the survey, which is the same rate as the CVME3, showing that a small number of refugees were still arriving in Turkey at the time of data collection (see figure 9). Recent arrivals comprised only 4-5 percent of Syrian and Iraqi refugees, but 21 percent of Afghans.

In the majority of instances (84 percent) all household members arrived in Turkey at the same time, but 16 percent arrived separately. Ineligible applicants were more likely to have arrived separately (29 percent), which may partly explain why they did not meet the demographic criteria of the ESSN.12

Even though more people were registered with Nüfus and DGMM, there was a rise in the percentage of households with at least one family member planning to leave Turkey if conflict continued in their

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12 When family members arrive at different times, they may be registered on different official identity documents and therefore cannot be assessed as one family on their ESSN application.
home country. From 10 percent in CVME3 this went up to 14.5 percent in CVME4. There were some significant differences between ESSN groups; the rate was lowest for pending beneficiaries who had applied and were waiting for their cards (7.3 percent) and was highest for non-applicants – 22 percent of them had at least one member who planned to leave.

The longer refugees had established themselves in Turkey, the less likely they were to plan to leave. Only 8 percent of households that had arrived 3-6 years ago planned to leave, rising to 15 percent of those that arrived 1-3 years ago and 68 percent of those that arrived in the previous six months.

Syrians were the least likely to plan to leave (10 percent), whereas Afghans and Iraqis were far more likely to do so (40 percent and 39 percent respectively). When those with plans to move were asked where to, 28 percent said Europe, 26 percent back home, and 11 percent replied Canada/USA. More than one in three (35 percent) said that they would apply or had already applied to UNHCR/IOM for resettlement. Although they were the least likely to plan to leave, Syrians were the most likely to plan to go home. Around 45 percent said they would go back to Syria, though 47 percent said they were aiming for Europe. Very few Iraqi or Afghan households planned to go back home (1 percent).

The data also indicated that the refugees who were planning to go to Europe and had already applied to UNHCR/IOM for resettlement in western countries tend to be multidimensionally poorer and more vulnerable than the ones who are planning to go back home.

Only 4 percent of refugees mentioned that they had plans to move on to another province (up from 2 percent since CVME3). The main reason for planning to move was to have better work conditions (66 percent) followed by hostility from the refugee/host community in the current place of residence (12 percent).

13 There are certain differences between the CVME3 and CVME4 reports in the question on ‘where do you plan to move on to?’ as the option of UNCHR/IOM resettlement was added in the CVME3.
4 Living conditions

Everyone has the right to adequate housing. This right is recognized in international legal instruments and includes the right to live in security, peace and dignity, and with security of tenure. Key aspects of the right to housing include the availability of services, facilities, materials and infrastructure; affordability; habitability; accessibility; location; and cultural appropriateness. The right to housing also extends to safe drinking water; energy for cooking, heating and lighting; sanitation and washing facilities; means of food storage; refuse disposal; site drainage; and emergency services. People should have adequate space and protection from cold, damp, heat, rain, wind or other threats to health, structural hazards and disease vectors. ¹⁴

Nearly all refugees (92 percent) rented unfurnished apartments, while five percent rented furnished apartments and three percent were hosted for free. Barely any (0.3 percent) owned a home. Only about 30 percent of refugees lived in housing that met the minimum humanitarian standards of privacy, natural light and ventilation, security and essential facilities. ¹⁵ As the socioeconomic section of this report shows, this is the area of greatest overall deprivation for refugees in Turkey, regardless of ESSN status. As figure 10 shows, the percentage of beneficiary households living in good quality apartments fell since the previous CVME3 assessment. This is likely because, despite high inflation, the transfer value of ESSN had remained unchanged at the time when CVME4 data collection was conducted. There has been no significant change in the conditions of ineligible applicants.

The proportion of households sharing their home to save on rental costs rose by 7 percent since CVME3, to nearly 23 percent. Female-headed households were more likely to share than those households headed by a man (see figure 11). While beneficiaries and non-applicants were more likely to share than ineligible applicants, pending beneficiaries very rarely shared, perhaps because they had only recently arrived.

Pending beneficiaries and ESSN beneficiaries tended to live in more crowded conditions (2.9 and 2.5 people per sleeping room respectively) than ineligible applicants and non-applicants (around two people per sleeping room). Around 1 in 10 households slept with four or more people per room. This was only 6 percent among ineligible applicants but increased to over 12 percent for ESSN beneficiaries and pending beneficiaries. This statistic is partially a reflection of household size as beneficiaries and pending beneficiaries have larger households.

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¹⁴ Adequate shelter definition: http://www.ifrc.org/PageFiles/95884/0.01.02.a%20SHELTER%20and%20NFIs_%20English.pdf

¹⁵ According to IFRC, an accommodation is considered to have minimum standards when the following criteria are met: Privacy: The covered area should allow for safe separation and privacy between sexes, different age groups and between separate families within a given household. Facilities: Within the accommodation the household should have access to a toilet, running water, place to bathe and space to cook. Natural light and ventilation: The accommodation should have some natural light and ventilation. Secure and safe space: The household should be able to secure the accommodation, and the space should be considered safe. http://www.ifrc.org/
Access to basic needs at home

For most refugee households, the toilet was inside the house (85 percent), leaving 15 percent with an outside toilet. The prevalence was much lower in the western region (2.1 percent) and higher in the south-eastern (18 percent) and Mediterranean (26 percent) regions, where outside toilets are part of the culture and architecture. Around one in five households shared the toilet with another household – although most of these also shared the apartment.

Having access to basic cooking and cleaning facilities is crucial for refugee households. Nearly all households had a separate kitchen in their apartment and access to electricity. Figure 12 demonstrates that most had sufficient fuel for cooking (mainly propane cylinder or mains gas), water for cooking and cleaning, as well as cleaning products. However, Afghan households appeared to have far lower access to cooking fuel, hygiene products and water for cooking and cleaning than Syrian and Iraqi households. Ineligible households fared better than average in terms of access to the essentials needed for safe food preparation.

Most households had basic assets such as a mattress (93 percent) and blankets (87 percent). It should be noted that non-applicants, who are mostly new arrivals, had lower access to several essential assets including mattresses, blankets and sufficient winter clothes.

Access to mobiles and data connectivity

As well as being essential for keeping in touch with loved ones, many refugees view access to a mobile phone and the internet as being as critical to their safety and security as food, water and shelter. For many refugees a connected device is a lifeline and a crucial tool for self-empowerment. Without access to up-to-date information, refugees cannot access basic services such as health and education or make informed decisions on how to start improving their lives. A lack of connectivity constrains the capacity of refugee communities to organize and empower themselves, cutting off the path to self-reliance. The research found that 76 percent of refugees in Turkey had access to a smart phone (see figure 13). Just 35 percent had mobile data – although it should be noted that they may be connecting to the internet via wifi.

Pending beneficiaries were seemingly the least well connected: they were more likely to have a basic mobile phone (71 percent) and far less likely to have a smart phone (30 percent). Beneficiaries, male-headed households and ineligible households were more likely to have smartphones with data. Female-headed households were less connected and therefore more disadvantaged in terms of access to information and self-empowerment.
Refugees in Turkey have good access to health services, largely thanks to the Government of Turkey establishing a social system that allows all refugees to benefit from free health services in public hospitals throughout the country.

Around 13 percent of adults and 16 percent of children under 5 years reported as having been sick in the 30 days preceding the survey. They mainly reported problems related to acute respiratory distress syndrome.

Some 15 percent of women were pregnant or lactating, with 10 percent needing health care because of pregnancy. Around 10 percent of women also mentioned that they had some problems related to women’s health.

Afghan children were considerably more likely to be sick (44 percent) as were children in non-applicant households (27 percent).

Care-seeking rates for both adult and child illness were high. Some 90 percent of sick people sought treatment mainly at state hospitals (82 percent), state health centres (8.5 percent) or pharmacies. Those in male-headed households were slightly more likely to seek treatment when a family member was sick than those households headed by a woman (93 versus 88 percent).

According to a 2019 study on multi-purpose assistance and health funded by WFP Turkey and prepared by the John Hopkins Center for Humanitarian Health,17 around half of the refugee households in Turkey reported that they had no recent health expenditures. Average monthly household spending on health among refugee households was approximately 40-80 Lira (USD 7-15) by comparison with an average of 138 USD in Jordan and 157 USD in Lebanon.18

17 Multipurpose Cash Assistance and Health: https://reliefweb.int/report/turkey/multi-purpose-cash-assistance-and-health
6 Child education

The Temporary Protection Regulation (22 October 2014) makes provisions for a wide range of educational services to be delivered to those under temporary protection, including early childhood education, schooling (Grades 1-12), higher education and non-formal education programmes. The Ministry of National Education (MoNE) is responsible for ensuring and managing refugees’ access to early childhood education, schools (and Temporary Education Centres) and non-formal education programmes (including Turkish language classes and skills development courses offered by Public Education Centres).

However, many families were forced to withdraw their children from school and send them to work (25 percent). Other families were not able to send their children to school because they were still awaiting registration (20 percent), they could not afford the costs of text books, transport, stationery etc (14 percent) or the children did not want to go/they were bullied (13 percent).

The CVME4 data shows that 28 percent of school-aged children (6-17 years) were ‘absent from school’, defined as not attending school for the past semester (based on self-reported school attendance). The CVME4 data indicated that in total 30 percent of boys and 26 percent of girls were absent from school.

According to the latest official data from the Ministry of Education, of the 1.05 million school-age refugee children living in Turkey 643,058 were studying in school and temporary education centres, leaving 404,478 out of education.

Unsurprisingly, the data shows that older children were most likely to be absent with 59 percent of 13 to 17-year-old boys and girls not attending school, mainly so that they could support their family financially or carry out housework. The absence from school was higher in female than male-headed households (32 percent versus 27 percent).

When overall school absence is disaggregated by eligibility status, the rates of absence were particularly worrying for the non-applicant and ineligible refugee children as shown in figure 15. More than half (52 percent) of children from non-applicant households and 45 percent from ineligible households were missing out on an education. School absence rates were lowest for beneficiaries (18 percent), showing the ESSN programme’s contribution to helping families keep their children in school.

The primary reason for school absence was that families needed their children to work – especially in female-headed households. Some 84 percent of women heads of household cited this as the main reason for school absence.

Figure 14. Percentage of children absent from school for the past semester by age group and gender

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total absent</td>
<td>26%</td>
</tr>
<tr>
<td>Secondary school (13 – 17)</td>
<td>59%</td>
</tr>
<tr>
<td>Primary school (10 – 13)</td>
<td>20%</td>
</tr>
<tr>
<td>Primary school (6 – 9)</td>
<td>13%</td>
</tr>
</tbody>
</table>

Figure 15. School absenteeism by ESSN status, nationality and sex of household head

By ESSN status

| Beneficiaries | Girls | 15% | Boys | 18% |
| Ineligible applicants | Girls | 42% | Boys | 48% |
| Non-applicants | Girls | 43% | Boys | 60% |
| Pending beneficiaries | Girls | 34% | Boys | 41% |

By nationality

| Afghan | Girls | 27% | Boys | 22% |
| Iraqi | Girls | 27% | Boys | 36% |
| Syrian | Girls | 27% | Boys | 28% |

By sex of household head

| Male-headed | Girls | 26% | Boys | 28% |
| Female-headed | Girls | 32% | Boys | 32% |

reason for withdrawing their boys from secondary school compared to 57 percent of male heads of household. Regarding girls, 37 percent of female heads who withdrew their daughters from school said it was to work compared to 3 percent of male heads. The next major reason for female-headed households not sending secondary school-age children to school was that they could not afford to pay for costs such as stationery and transport (15 percent compared to 10 percent for male-headed households).

The lack of DGMM or Nüfus registration was a much more significant barrier to school attendance for 6-9 year old children (45 percent) and for Afghan nationals (61 percent). Around 17-18 percent of Syrians and Iraqis were also struggling with DGMM/Nüfus issues that were preventing them from sending their children to school.
This chapter describes the economic vulnerability of refugee households in Turkey. For the purpose of this analysis, several dimensions are taken into account: skills, employment, income, expenditures, debt and the multi-dimensional poverty index.

### Language skills

An ability to speak Turkish would decrease vulnerability, enhance the prospects of integration (accessing public services, DGMM registration and Nüfus registration) and increase the chances of finding work.

Only 7.5 percent of working age refugees could speak Turkish proficiently. Around 30 percent spoke basic Turkish. Young people were more likely to have basic, medium or proficient levels of the language. There were not such marked differences between boys and girls in terms of language abilities as there were between the adult sexes. Some 64 percent of women and 33 percent of men aged 18–59 years spoke no Turkish at all. It was extremely rare for older people (aged 60 years +) to speak any Turkish.

### Education level and technical courses

Having higher education levels also makes it easier for refugees to find better job opportunities.

Figure 17 shows that adult women had far lower education levels than adult men. While around 20 percent of male heads of household had received no formal education and were illiterate, the rate goes up to almost 40 percent for female heads of household. The percentage of high school and tertiary education graduates was considerably higher for male heads of household.

Only a small fraction of refugees had attended a Turkish language course or technical/vocational course since their arrival in Turkey (less than 5 percent). When all adults were asked what kind of technical training or support they had since their arrival in Turkey, 3 percent said they had attended a Turkish language course, with the rate slightly higher for females than males. Technical/vocational courses, while rare, were more common for men (4 percent) than women (1 percent).

The education level for males was higher in ineligible households. There was at least one male member with a high school degree in 18 percent of these households compared with 9 percent of beneficiary households.

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20 This analysis does not include the ones who speak as their mother tongue which is 1.4% of overall refugee population.
Employment

The proportion of men working since their arrival in Turkey fell from 79 percent in the CVME3 survey to 75 percent in CVME4, perhaps as a result of Turkey’s economic recession and the depreciation of the Turkish Lira. Afghan and Iraqi men were less likely to be in work than Syrian men. As figure 18 shows, in 19 percent of households there was no working member. This rose steeply to 42.5 percent for female-headed households. Non-applicants were more likely than average to have no working member, probably because they were mostly new arrivals. Women were less likely to work in Turkey than they were in their country of origin (8 percent versus 5 percent since their arrival in Turkey).

While Syrian men had roughly the same chance of working in Turkey as they did in the Syrian Arab Republic, Afghan men were less likely to do so (67 percent after versus 79 percent before) and Iraqi men far less likely to do so (49 percent after and 70 percent before).

Income sources

ESSN assistance was the primary source of income during the 30 days preceding the survey for households headed by women (65 percent) and the secondary source for those headed by men, for whom unskilled work was the main source. Around one in five female-headed households had no income source other than ESSN/humanitarian assistance.

Unsurprisingly, while beneficiaries overwhelmingly derived most of their income from the ESSN, the other three status groups were mainly reliant on unskilled labour. Semi-skilled labour was an important income source for pending beneficiaries and ineligible applicants. A handful of ineligible applicants, non-applicants and pending beneficiaries also relied on the ESSN for income, which implies that some families likely shared their assistance, especially if they were living under the same roof. Interestingly 17 percent of non-applicants had no other income source and were fully reliant on the ESSN.

The data shows that refugees have had to adapt to lower skilled, informal types of work since arriving in Turkey. Of the refugees in work (i.e. excluding income from ESSN or other humanitarian assistance) the percentage deriving their income from unskilled labour rose from 57.5 percent in their country of origin to 87 percent in Turkey (see figure 20).

The same figure shows that while around 17 percent of the refugee population derived their income from management/highly skilled or skilled jobs in their country of origin, this rate lowered to less than 2 percent since their arrival. Semi-skilled work was also harder to come by with around 12 percent working in semi-skilled jobs compared with 26 percent in their country of origin.
Child labour

Poverty forces refugee children into work, especially when adults are unable to earn enough money to meet the family’s basic needs.

The data in figure 21 shows that almost one in five refugee boys under 18 were working (17 percent which equals to 112,000 boys) in the month preceding the survey, rising to 35 percent among ineligible households and 27 percent of non-applicants. As boys in beneficiary households were far less likely to be working, this is perhaps an indicator of the ESSN’s positive impact on beneficiary households.

A total of 4 percent of girls under 18 were working, rising to 15 percent in ineligible households, suggesting that many ineligible households needed extra income.

Monthly per capita expenditure

Monthly income is a very difficult question to ask in a refugee context; many households under-report income and income often fluctuates throughout the year. Therefore monthly expenditure is used as a proxy measure, as it is a more stable indicator.

Refugee households spent an average of 2,103 TRY a month (359 USD). This equates to 647 TRY (110 USD) per adult. Figure 22 shows that for households headed by women and by pending beneficiaries the total spend was far lower, reaching only 585 TRY per adult in women-headed households and 527 TRY per adult in pending beneficiary households. It was considerably higher for households headed by men (709 TRY) and non-applicants (984 TRY).

Poverty measured by expenditure

In order to understand the economic poverty of refugees, households’ per capita expenses are compared to the World Bank poverty lines. The poverty line represents the minimum monthly cost of the goods and services (food, housing, utilities, health, hygiene, education, transportation, and other non-food items) required to live a dignified life in Turkey.

World Bank poverty lines are calculated for middle and high-income countries at 3.20 USD and 5.50 USD per person per day respectively. For 2018 the poverty line was set at 372 TRY per month per person in Turkey and the extreme poverty line at 207 TRY per month.

Almost half (49 percent) of all registered refugees in Turkey, representing around 2 million people, were below the poverty line. This marks a slight increase since the previous monitoring when 46 percent of all refugees were considered poor. As figure 23 shows, a far higher proportion of pending beneficiaries were living in poverty (86 percent), indicating the need to expedite card issuance.
Overall 7 percent of refugees were below the extreme poverty line, a slight fall since the CVME3 (10 percent). There was a wide gap between male and female-headed households: 4 percent of male-headed and some 10 percent of female-headed households were living in extreme poverty.

Beneficiaries were likely to be poorer than average by this expenditure measure with 58 percent below the poverty line. There are several explanations for this. Firstly they have a relatively higher dependence on assistance and absence of alternative income sources. It is also worth noting that they have, on average, more household members and higher dependency ratio, so their per capita monthly expenditure is lower. Some 86 percent of pending beneficiaries were below the poverty line.

**Household expenditure composition**

An additional measure of vulnerability looks at expenditure composition. The data shows that on average 49 percent of expenditure was dedicated to food and about 17 percent to rent. When food, rent and utilities were accounted for, refugee households were left with just 26 percent of their total monthly budget for all other needs including health, hygiene, clothing, transport, education etc.

For all groups, regardless of gender of household head or ESSN status (including ineligible applicants and beneficiaries), any food price increases would affect their ability to meet their basic needs. Female-headed households and pending beneficiaries were particularly vulnerable.
Debt

Overall, nearly half (49 percent) of refugees said they had to borrow money in the last three months, which is slightly lower than the CVME3 (58 percent). Beneficiaries were the least likely group to borrow money, showing the positive impact of the ESSN, while pending beneficiaries were very likely to be in debt (77 percent).

In spite of their high economic vulnerability, female-headed households were far less likely to borrow money than those headed by men (32 percent vs 51 percent). This might be because they do not have the social capital or their social environment does not give them opportunity to borrow money, although an analysis of social network size (from the CVME4 data) showed that women heads of house had an average network of 24 individuals while men had just a few more at 28.

In total, having to buy food and pay for rent accounted for 70 percent of all borrowing needs (see figure 26). Half of the refugees who borrowed money in the last three months used that money to pay for food, rising to 56 percent of beneficiaries and 67 percent of pending beneficiaries, showing their heightened vulnerability to food insecurity. The percentage borrowing money to pay for food had increased since the last monitoring round of the CVME3 (44 percent). Another 21 percent borrowed to pay for rent, peaking at 27 percent for ineligible applicants but dropping to 15 percent for beneficiaries.

The third main reason for borrowing money was to leave and return to Turkey. Around 11 percent borrowed money for this purpose. This might be high due to the period of data collection, during the Eid holiday, when some families went back to Syria for Bayram. Female-headed households were considerably more likely to borrow money for this purpose (24 percent).

Since the last data collection period, median debt increased from 1 000 TRY per household to 1 271 TRY, likely due to economic recession and high levels of inflation. As in the CVME3, female-headed households had the lowest debt. Those awaiting ESSN approval had the highest debt, three times that of beneficiaries (3 000 TRY versus 1 000 TRY). When asked from whom they borrowed money, the majority (82 percent) said it was from relatives / friends in Turkey or from a shopkeeper (14 percent).
Multi-dimensional Poverty Index

The multi-dimensional poverty headcount provides a more holistic indicator of poverty, beyond the economic measure presented above. The Alkire-Foster method is used to construct the measure, using 18 indicators of deprivation that a household faces in five different dimensions: education, health, food security, living conditions and income resources for the refugee population living in Turkey.

The data demonstrates that overall, the proportion of households classified as multi-dimensionally poor was 41 percent – down from 50 percent in the previous CVME.

As figure 28 shows, multi-dimensional poverty rates were far higher among female-headed households (60 percent) than male-headed (39 percent). Female-headed households fared worse than male-headed for 11 out of the 18 indicators. The gap was particularly marked in terms of income resources: 43 percent of female-headed households had no member who worked within the last 30 days compared with 15 percent of male-headed households. 21 percent of female-headed households had no income other than the ESSN/no other form of assistance or no income at all compared with only 10 percent of male-headed.

The same figure 28 shows that pending beneficiaries had very high levels of multi-dimensional poverty (85 percent) while ineligible applicants and beneficiaries were the least vulnerable, showing the success of targeting and the positive impact of the ESSN on beneficiaries.

When disaggregated by nationality, Afghans were the most vulnerable (76 percent) followed by Iraqis (54 percent) and Syrians (38 percent) (figure 28). In the previous CVME3, 86 percent of Afghans were considered multi-dimensionally poor and 46 percent of Syrians and Iraqis.

Arrival time also plays an important role in the vulnerability profile of the refugees; the longer refugees remain in Turkey, the more likely they are to live in dignity. The small number of refugees who arrived in the six months prior to the survey were the most vulnerable, with 95 percent considered multi-dimensionally poor (figure 28).
Deprivations

The MPI also reveals the proportion of refugees considered poor and deprived within each dimension, allowing further insight into which dimensions or sectors are driving the MPI results. Deprivations are calculated based on being deprived for at least one indicator in each of the five dimensions.

Living standards was clearly the indicator in which refugees were most deprived (85 percent) due to the majority living in bad quality apartments (figure 29). This was followed by food security, with 48 percent of refugees considered deprived in this dimension because most had to employ consumption-related coping strategies. Health was the indicator with least deprivation followed by income resources. A tiny fraction (3.3 percent) faced no deprivations at all.

When disaggregated by ESSN status (figure 30), it shows that pending beneficiaries faced particularly high levels of deprivation in living conditions, education and food security but the lowest levels of deprivation of all groups in health and income resources. Beneficiaries and non-applicants faced higher levels of deprivation in income resources. Ineligible applicants were the least likely to face deprivations, which again shows the efficacy of the ESSN targeting criteria.

Female-headed households faced higher levels of deprivation than male-headed households in every dimension with the exception of food security for which they faced the same levels (figure 31).
8 Food security

The indicators in this section capture the dimensions related to food consumption, which are the basis for classifying households according to their food security status.

Number of meals consumed

On average children consumed 3.1 meals each day and adults 2.6. For adults there was no significant difference between beneficiary groups or between men and women. However, children in households headed by women consumed fewer meals than those in households headed by men (2.5 vs 3.2). Overall one in five children ate fewer than three meals a day.

Dietary diversity

Overall refugee households in Turkey enjoy a diverse diet consuming vegetables, meat, fish and eggs around five times a week and dairy six times, as well as cereals, sugar and fats every day. Again, households headed by women consumed nutritionally-dense food groups (vegetables, meat, fish and eggs) less regularly than those headed by men.

Food consumption score (FCS)

The FCS is calculated by assessing how often households consume food items from the different food groups during a seven-day reference period, with the food groups weighted according to their relative nutritional value. For instance, food groups containing nutritionally-dense foods, such as animal products, are given greater weight than those containing less nutritionally-dense foods, such as cereals. Based on this score, a household’s food consumption is classified into one of three categories: poor, borderline or acceptable.

Overall 97 percent of households had acceptable food consumption with no significant difference between the eligibility groups (see figure 32). However, households headed by women were more likely to have unacceptable food consumption than those headed by men (9 percent versus 2 percent) while 18 percent of Afghan households had unacceptable FCS compared with just 2 percent of Syrian and Iraqi.

Although the food security prevalence seems satisfactory, a 3 percent prevalence of unacceptable food consumption among registered refugees translates into about 120,000 refugees requiring assistance to meet this basic need.
Food expenditure share

The share of total household expenditure (as a proxy of income) spent on food is an indicator of household food security because it is widely documented that the poorer and more vulnerable a household, the larger the share of household income spent on food. The indicator is especially helpful to understand the impact of food price fluctuations on both the quality and quantity of household food consumption.

While no internationally-agreed thresholds exist, households spending over 75 percent of their income on food are considered very vulnerable and consequently food insecure, those spending 65-75 percent are considered to have high food insecurity; those spending 50-65 percent have medium food insecurity; and those that spend less than 50 percent are considered to have lower levels of food insecurity.

Overall around one in five (21 percent) of households spent more than 65 percent of their total expenditure on food. However, as figure 33 shows, there was a great gap between those headed by men and those headed by women (13 percent of male-headed and 29 percent of female-headed). Again, the pending beneficiaries were extremely vulnerable according to this indicator, with 69 percent spending more than 65 percent of their total expenditure on food.

Consumption coping strategies

This section looks at the range of strategies households adopt to cope with a lack of food and/or the means to buy it. Food coping strategies capture the frequency of adoption and severity of food-related coping behaviours, such as eating less-preferred or less-expensive foods, borrowing food or relying on help from friends and relatives, limiting portion sizes at meal times, limiting adult intake so that children can eat and reducing the number of meals per day.

More than two in five refugees (44 percent of the total registered refugee population living in Turkey or 1.8 million people) had to adopt some form of food-related coping strategy because they could not afford to buy enough food. Beneficiaries and ineligible applicants fared somewhat better, but the proportion rose to half of non-applicants and four in five pending beneficiaries.

The most commonly used consumption-related strategy was to rely on less preferred, less expensive food with refugee households on average having to do this five days a week, rising to six times for Afghan households and pending beneficiaries. These are easily reversible strategies that do not jeopardize longer-term prospects. Reducing adults’ consumption so that young children can eat is a more serious strategy that was employed on average twice a week, rising to three times for pending beneficiaries and four times for Afghans.

The reduced coping strategy index (rCSI) is commonly used as a proxy indicator for access to food and is based on the frequency of use of the five above-mentioned behavioural changes weighted by the perceived
severity of that behaviour. The higher the score, the more food insecure the household. An rCSI value of 18 equates to using every consumption coping strategy at least three times per week.

While the average rCSI score was below 18 the research found that the value was significantly higher for female-headed households, Afghans and pending beneficiaries than for male-headed households, Iraqis, Syrians and other ESSN status groups, which were all below 17 (see figure 34).

### Livelihood coping strategies

When households are unable to afford to buy food, they may be forced to adopt certain behaviours that weaken their capacity to procure it and/or earn a sustainable income in the medium to long term. These are known as livelihood coping strategies and are classified into three groups (stress, crisis and emergency) according to their severity.

Overall 43 percent (1.7 million refugees) undertook stress strategies including buying food on credit, borrowing money, spending savings or selling household assets (see figure 35). Around 15 percent undertook crisis strategies including reducing non-food expenditure, withdrawing children from school, sending children out to work and selling productive assets. Just 1.2 percent, 48,000 people, undertook emergency strategies including moving back home, undertaking risky work, marrying off children or begging.

Pending beneficiaries were more likely than other groups to sell household assets, buy food on credit, borrow money and send their children out to work. Withdrawing children from school (14.5 percent of households on average) was also far more commonly employed by pending beneficiaries (48 percent) and ineligible applicants (20 percent).

Female-headed households were more likely to employ all strategies with the exception of reducing non-food spending. In particular, they were far more likely than men to sell productive assets and send children out to work. Although refugees rarely resorted to marrying off their children (1.2 percent), women-headed households were significantly more likely to have recourse to this strategy (5.7 percent). While ineligible households and pending beneficiaries were more likely than average to send their children out to work, just 6 percent of beneficiaries resorted to doing this, which demonstrates the positive impact of the ESSN scheme.

Some 18 percent of respondents who had sold off household assets and 21 percent who had spent savings said they had now exhausted that strategy even though they still lacked enough money to buy the food they needed.
Annex 1 Sampling

Two-staged sampling was used for this round of the CVME – geospatial and random sampling – in order to reach a representative sample.

First Stage: Simple Spatial Survey Method (S3M)

The first stage of the sampling is geospatial. This first stage is required to decrease potential bias derived from the second stage, Respondent Driven Sampling. The geospatial sampling decreases potential spatial autocorrelation, i.e. it reduces correlation between clusters so that the overall sample will be representative of all of Turkey, rather focusing only on certain regions. Mark Myatt (Brixton Health) and Ernest Guevarra (Valid International) used a variable density sampling approach to develop the Simple Spatial Survey Method (S3M).

S3M is used to achieve a sample that draws a minimum number of sampling points from administrative areas, so that the survey can provide estimates for each administrative area with useful precision. Administrative areas tend to have roughly similar population sizes. This means that a sample with a minimum number of sampling points per administrative area will also tend to match population density. This method is designed to provide a general survey method which can be used to survey and map the coverage of universal or selective entry programs in survey areas up to ten times larger than Centric Systematic Area Sampling method commonly used to measure indicators related to nutrition and WASH.

S3M produces a sample that is spatially representative, as the sample is distributed evenly across the sample area. In the Turkey case, WFP excluded districts with less than 300 applicants as it would be operationally very challenging for field staff to find refugees in such a sparsely populated area. WFP also excluded an additional 39 districts on the southeastern border as UN security restrictions prohibited access. There was no split in the sample into two strata – urban and rural – as in the CVME3.

In order to reach the spatially representative sample, a hexagonal grid was laid over the survey area, and settlements were chosen that are closest to the centroids. For each stratum, one settlement in each district was chosen based on the S3M, implemented through the spatial-sampler function in R.

The sampling resulted in a sample size of 55 districts. With geospatial sampling the sampling size can vary slightly around the aspired size (in this case was minimum 55) to guarantee a proper geographical spread. For each of the selected districts, a list of all settlements (admin 3 level) was available. The RDS (stage 2 of the sample design) started from GPS points randomly selected from admin 3 level settlements for each district, which was required to narrow down the area for the starting point of the data collection.

The following figures illustrate the selected geolocations on the map of Turkey and by the spatial-sampler function in R.
Second Stage: Respondent-Driven Sampling

The second stage of sampling is at the household level – the identification of the households within each geolocation who respond to the survey. This stage relies on Respondent-Driven Sampling (RDS), which is a chain referral sampling methodology (probability sampling method). RDS is a sampling method that uses social network theory to identify households. RDS helps to reach a probability-based sampling for “hidden” subpopulations, for which no sampling frame exists – as in the case of refugees in Turkey.

RDS combines snowball-sampling based on social networks with a mathematical model to calculate the probability of each respondent to be sampled. To do so, RDS starts with certain “seeds”, who, in a chain-referral system, identify further respondents from their social network. With information on the size of the personal network of respondents, it is possible to calculate selection probabilities for each respondent.

In the second stage of the sampling, seeds were selected, starting from the GPS coordinates of the selected settlement. If the monitoring assistants could not identify any refugees close to the GPS coordinate, they moved to the closest town to identify the seeds. Based on the network of the seed, in each district 25 households were interviewed, resulting in a sample size of 1380 households.

The first step for RDS was to identify 2-3 households who have strong social networks, are enthusiastic to participate in the CVME, and are different in terms of age, gender, ESSN eligibility and socioeconomic status at the given GPS coordinates. After completing the CVME with the seeds, monitoring assistants ask those households to refer them to 2-3 of their friends/family who are also under International Protection/Temporary Protection (IP/TP), in pre-registration phase or planning to seek IP/TP in future. The recruits of the seeds produce wave 1; the recruits of wave 1 produce wave 2; and so on. This process continues until the sample size for the cluster is reached, which is 25.

In essence, respondents recruit their peers, as in network-based samples, and researchers keep track of who recruited whom and their numbers of social contacts. A mathematical model of the recruitment process then weights the sample to compensate for non-random recruitment patterns. At the beginning of the CVME4 as in the CVME3, the social network size, participant number and recruiter number was systematically asked and recorded in order to track the creation of waves. RDS individual weights were calculated with RDSAT 7.1.46 for each of 55 clusters.

CVME3 RDS wave creation, İnegöl-Bursa district

Actual example of RDS wave creation from the CVME selected from İnegöl-Bursa district produced by using NetDraw
Annex 2 Family composition

The table below shows that around 60 percent of the households consist of two parents and children under 18. Around 3 percent of the households are single parent households with no other adult above 18 in the household – this rate goes up to 25 percent for female-headed households. Around 50 percent of female-headed households consisted of one parent with children under 18.

The overall refugee population household composition analysis

<table>
<thead>
<tr>
<th>Other household members</th>
<th>Nuclear family</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Two parents with</td>
<td>One parent with</td>
<td>Only parents,</td>
<td>Other individuals</td>
</tr>
<tr>
<td></td>
<td>children (under 18)</td>
<td>children (under 18)</td>
<td>no children</td>
<td>cohabiting</td>
</tr>
<tr>
<td>At least one other member in the household (child over 18, other relative etc)</td>
<td>17.8%</td>
<td>4.2%</td>
<td>2.5%</td>
<td>1.6%</td>
</tr>
<tr>
<td>At least one non-member family member of the household</td>
<td>2.8%</td>
<td>.5%</td>
<td>.4%</td>
<td>.4%</td>
</tr>
<tr>
<td>No other household members</td>
<td>58.8%</td>
<td>3.2%</td>
<td>6.8%</td>
<td>.9%</td>
</tr>
</tbody>
</table>

Female headed households only household composition analysis

<table>
<thead>
<tr>
<th>Other household members</th>
<th>Nuclear family</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Two parents with</td>
<td>One parent with</td>
<td>Only parents,</td>
<td>Other individuals</td>
</tr>
<tr>
<td></td>
<td>children (under 18)</td>
<td>children (under 18)</td>
<td>no children</td>
<td>cohabiting</td>
</tr>
<tr>
<td>At least one other member in the household (child over 18, other relative etc)</td>
<td>7.7%</td>
<td>25.0%</td>
<td>2.2%</td>
<td>12.4%</td>
</tr>
<tr>
<td>At least one non-member family member of the household</td>
<td>4.6%</td>
<td>2.5%</td>
<td>0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>No other household members</td>
<td>12.1%</td>
<td>25.8%</td>
<td>0.3%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>
## Annex 3 Multidimensional Poverty Index Indicators

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicators</th>
<th>Sex of the household head</th>
<th>ESSN status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Beneficiary</td>
</tr>
<tr>
<td>Education</td>
<td>Absence from school because children need to work and/or assist family</td>
<td>12%</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>Absence because family cannot afford</td>
<td>2%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Absence from school more than a semester</td>
<td>26%</td>
<td>34%</td>
<td>21%</td>
</tr>
<tr>
<td>Health</td>
<td>More than half of the household reported sick</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Any member not treated when sick</td>
<td>8%</td>
<td>11%</td>
<td>3%</td>
</tr>
<tr>
<td>Food consumption</td>
<td>Household with unacceptable food consumption</td>
<td>2%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>Household with CSI&gt;18</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td>DDS &lt;6</td>
<td>15%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>Income</td>
<td>No income source other than ESSN/other assistance or no income at all</td>
<td>10%</td>
<td>21%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>Begged</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Accepted high risk, illegal, socially degrading or exploitative temporary</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>job</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No household member worked within last 30 days</td>
<td>15%</td>
<td>43%</td>
<td>20%</td>
</tr>
<tr>
<td>Living conditions</td>
<td>Crowding above 3</td>
<td>17%</td>
<td>11%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>No kitchen in the house</td>
<td>9%</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>No toilet in the house</td>
<td>15%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>Bad quality apartment</td>
<td>70%</td>
<td>83%</td>
<td>71%</td>
</tr>
<tr>
<td></td>
<td>No sufficient winter clothes</td>
<td>37%</td>
<td>41%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Insufficient access to any of the items below; water, hygiene items, cooking</td>
<td>10%</td>
<td>20%</td>
<td>12%</td>
</tr>
</tbody>
</table>