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CHANGING LIVES

FOOD SECURITY ASSESSEMENT FOR SAHRAWI REFUGEES

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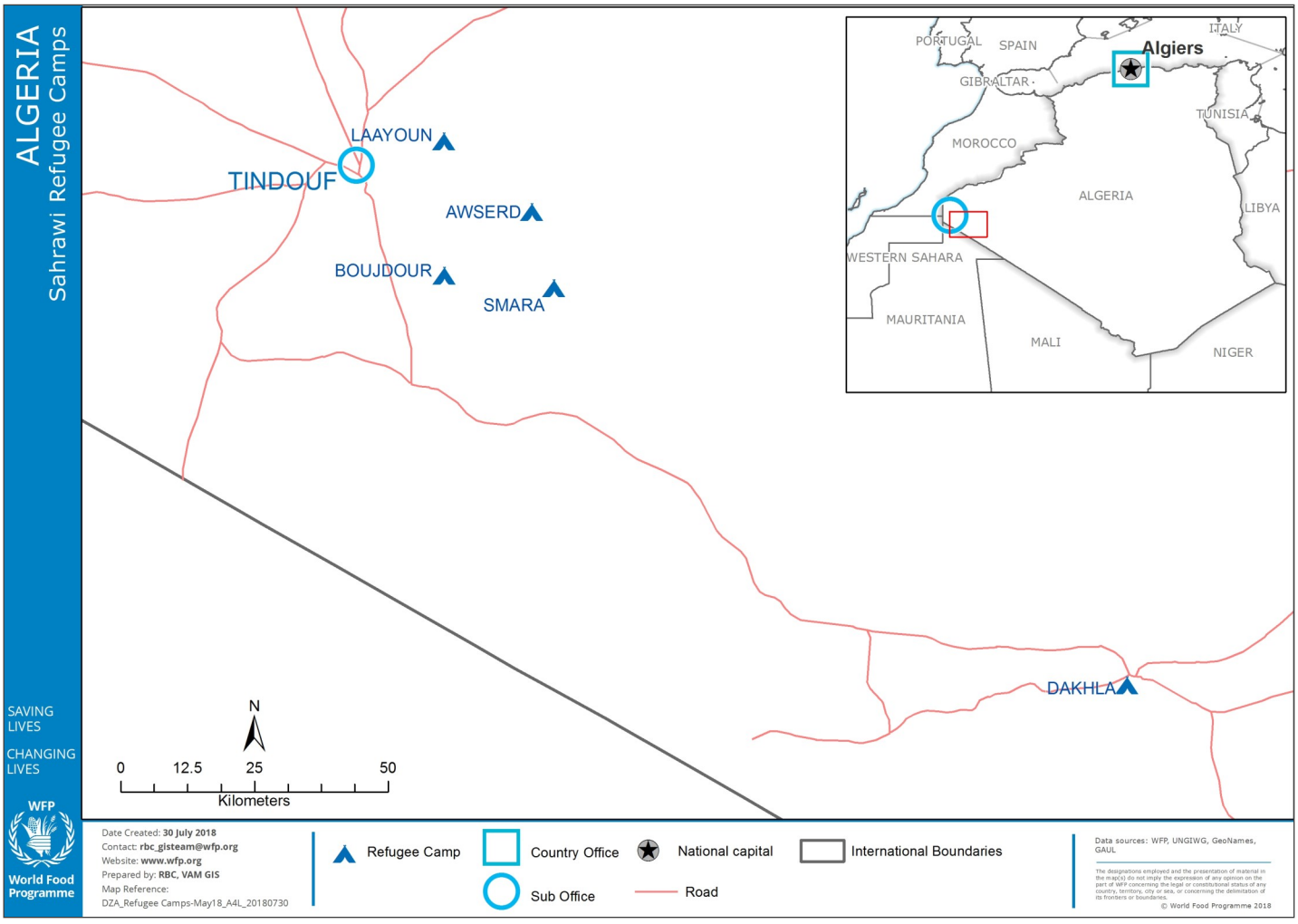


EXCECUTIVE SUMMARY

To enable humanitarian actors to more effectively plan their programmes and activities based on accurate and updated evidence of the food security situation in the camps this food security assessment informs the food security situation of the Sahrawi refugee population. To be able to confidently disaggregate the results at camp level between the five refugee camps Awserd, Boujdour, Dakhla, Laayoun and Smara, a total of 1935 households were interviewed in March and April 2018.

Using the standard WFP approach to determine the level of food security[1], the assessment found that 12 percent of the Sahrawi camp population is food secure (20,832 people), 58 percent is vulnerable to food insecurity (100,688 people) and 30 percent are food insecure (52,080 people)[2].

Figure 1 Food security situation, total

The 20,832 food secure households fell into this category due to their ability to meet essential needs for both food and non-food without having to adopt coping strategies while the 100,688 households were only just able to maintain adequate food consumption without having to adopt irreversible coping strategies but while being unable to afford some essential non-food expenditures. Finally, the 52,080 food insecure households had significant food consumption gaps, use of irreversible coping strategies and/or high food expenditures, affecting their ability to afford essential non-food expenditures. Especially high shares of total expenditures being spent on food was found to be the main driver of food insecurity in the camps, followed by high use of asset depleting coping strategies, both indicating trends of the longer-term resilience of the households.

The ***underlying drivers*** of food insecurity were disability in household members, poor diets and low consumption of protein foods (meat, dairy and pulses). Though the overall food intake in the camps was mainly found sufficient in the current context where 125,000 individuals receive food assistance, the quality was found concerning in terms of the lack of diversity in the diets and the low intake of nutrient rich foods. A less strong correlation was found between food insecurity and households where the head is unmarried (single, divorced, separated or widowed), without income from formal labour and high dependency on external assistance.

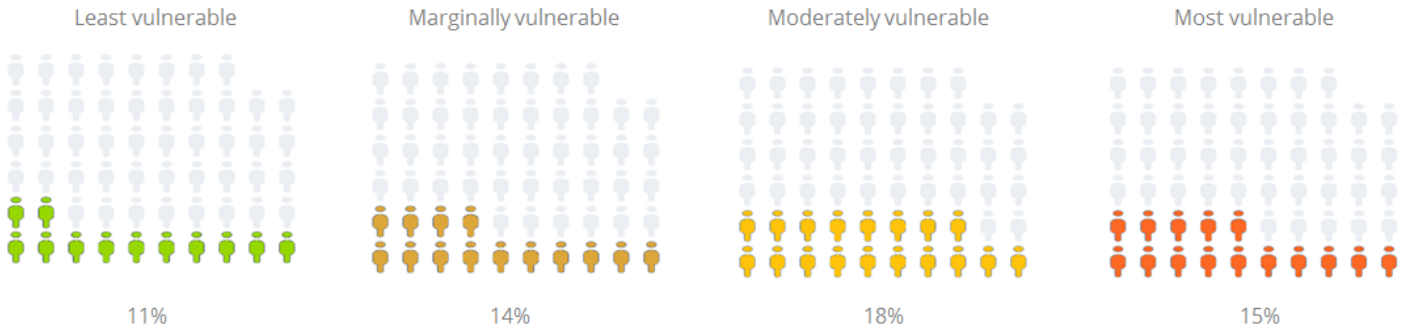
At ***camp level***, the food security situation is worst in Smara followed by Dakhla, while it is best in Awserd and Laayoun. In this regard, analysis showed that households in Smara are 3.5 times as likely to be food insecure as households in Laayoun while Dakhla had a high proportion of households being vulnerable to food insecurity (67 percent).

1 The CARI methodology is further explained in the methodology section and section 8: food security. A complete guide to CARI and guidance on the technical calculations can be found at www.vam.wfp.org

2 Using the updated population figure from the official UNCHR report from March 2018: 'Sahrawi refugees in Tindouf, Algeria: Total in-camp population'

To gain a better understanding of the large share of the population being ***vulnerable to food insecurity*** (58 percent), this group was further analysed according to how it is expected to be affected by shocks such as floods and changes in assistance. As a result, 11 percent were found to be 'least vulnerable', 14 percent 'marginally vulnerable', 18 percent 'moderately vulnerable', while 15 percent fell into the 'most vulnerable' group. The least vulnerable group is expected to stay vulnerable in case of shocks, while the moderately and most vulnerable groups are expected to fall into food insecurity. The marginally vulnerable group is expected stay vulnerable in case of smaller shocks and to move into the food insecure group in case of larger shocks.

Figure 3 Break-down of 'vulnerable to food insecurity' group (58 percent)



In relation to ***food access***, the assessment found that there is a very high reliance on external assistance to cover basic needs, making the households vulnerable to even smaller shocks. 94 percent of the households reported external assistance as their main income source and 99.9 percent of the household received food assistance during the month prior to the assessment, showing that the households are largely sharing the food rations provided by WFP. An average of 35 percent of households own livestock and 86 percent took on new debt or purchased food or non-food items on credit during the past six months.

A total of 52 percent of households spend more than 65 percent on food, which was highest in Dakhla (73 percent) and lowest in Laayoun (32 percent). High ***food expenditures*** were among others correlated with a high reliance on only one income source, external assistance, comprising more than 50 percent of total income, no income from business and livestock, no livestock ownership, disability in one or more household members, high use of consumption–based coping strategies, as well as better diets and lower debt-taking than the average household.

Interesting findings in relation to ***food consumption*** were a very frequent intake of fats, cereal and sugar which were on average consumed every day while the consumption of the more nutrient rich food items such as pulses, vegetables, meat and dairy were less frequent. Analysis showed that in order to improve the food consumption score a higher focus should be put on increasing the access and intake of these food items. The high reliance of external assistance was furthermore reflected in the reported main ***food sources*** which showed that a total of 79 percent of the main reported food sources came from either assistance (69 percent), borrowing (11 percent) or gifts (two percent), while only 16 percent of the food was purchased on the market. Analysis of the ***dietary diversity*** showed that a low proportion (17 percent) of the households ate all seven main food items at least once during the week of observation, 64 percent ate five or six food items and 19 percent of households were eating four or less food items. Especially Dakhla had a very high number of households with low dietary diversity (37 percent) while households in Awserd had the best overall dietary diversity.

In total, 63 percent of the households had an acceptable ***food consumption*** score, indicating that they had adequate nutrient intake during their diets in the past week, 33 percent had borderline food consumption indicating that the household may have had a nutrient gap, while four percent of the households definitely had gaps in nutrition according to their poor food consumption score. Significant correlation was found between inadequate food consumption and high reliance on external assistance, no income from formal labour, no livestock ownership, income from informal labour, less use of food-based coping strategies and unmarried household heads. At camp level, households in Awserd had the best food consumption score while households in Laayoun and Smara had the worst.

Additional analysis for the 17 percent ***pregnant and lactating women***, a group of particular vulnerability, showed that the majority (94 to 99 percent) ate cereal, fat and sugar the day prior to the survey while 84 percent had vegetables, 73 percent pulses, 69 percent meat, 63 percent dairy and 24 percent fruits. An individual Dietary Diversity Score based on this group only and with a 24-hour recall period was made, showing that overall 37 percent had all seven food items, 46 percent had between five and six food items and 17 percent had four food items or less.

For the overall refugee population, the use of ***food-based coping*** was generally low and the main strategies used

were relying on less expensive food, reducing portion sizes and reducing the number of meals which are found to be the least severe types of coping. At camp level, households in Dakhla showed to apply more coping strategies than households in the four other camps.

The most widely used ***asset depleting coping mechanisms*** were taking credit (62 percent), using savings (22 percent), selling the last female animal and reducing non-food expenditures (both 16 percent). Overall, 25 percent of households did not apply any coping strategies, 42 percent stress, 15 applied crisis and 17 percent emergency coping strategies. Awserd applied the least coping overall while Dakhla and Smara applied the most. The level of coping was found to be correlated with high reliance on external assistance, livestock-ownership, having better diets, households with members with disabilities, households where the head is above 60 years old and households applying more food-based coping mechanisms than the average household.

Based on the findings, it is ***recommended*** to continue providing food assistance in the camps for 52,080 food insecure individuals while the 100,688 marginally food insecure may need either food or other kind of assistance that supports their food security and nutrition; to expand the livelihood opportunities to improve resilience and ability to cope with future shocks based on qualitative discussions between community, local authorities and humanitarian partners; to improve nutrition by increasing the availability of animal protein in diets and conduct studies to better understand how the high intake of sugar and tea is affecting obesity and anaemia rates; to continue to closely monitor the food security situation including prices, availability and assistance levels.

1. BACKGROUND

Algeria, an upper-middle-income country in North Africa with a population of 40.6 million, has hosted refugees from Western Sahara since 1975. For the first decade of the Sahrawi refugees' settlement, Algeria was the sole provider of humanitarian assistance until the Algerian Government requested support from the international community. Since 1986, WFP has been assisting refugees from Western Sahara with basic food assistance. The population's refugee status, which ensures protection from refoulement and access to basic humanitarian assistance, and the Sahrawi refugees have been granted administration of the territory until they return to their area of origin.

The refugees are settled in five camps, Awserd, Boujdour, Dakhla, Laayoun and Smara, near the town of Tindouf, approximately 2,000 km southwest of the capital Algiers, in an isolated, arid region with periods of extreme heat. The agro-ecological environment is harsh, water sources are scarce and heavily mineralised, the camps hold only few employment opportunities, limited market activities, and there is no formal banking system. This leaves the refugees with very limited access to livelihood opportunities and high levels of aid dependency including need for food assistance.

Due to the long-standing absence of formal registration, a 2007 estimate of 90,000 most vulnerable Sahrawi refugees has been a long-standing planning figure for most agencies. In March 2018, the United Nations High Commissioner for Refugees (UNHCR) published an updated population figure of 173,600 refugees living across the five camps to be used by humanitarian agencies to allow for more accurate, evidence-based and transparent planning. One of the main challenges is the large decreases in funding levels which have been influenced by the protracted situation and other large-scale humanitarian crises.

The main humanitarian actors active in the Sahrawi refugee camps are three UN agencies UNHCR, United Nations Children's Fund (UNICEF) and WFP and 11 international NGOs: Asociación de Técnicos y Trabajadores sin Fronteras (ATTSF); Spanish Red Cross (CRE); Danish Refugee Council (DRC); Humanity & Inclusion; Médicos del Mundo Sahara; Mundubat Foundation (MF); Médicos International; Movimiento por la Paz; Oxfam-Solidarité; Solidaridad Internacional-Andalucía, and; Triangle Génération Humanitaire. The main areas of work include food, WASH, education, livelihoods and resilience, shelter and NFI, health, protection and nutrition. Other agencies and NGOs involved in food security and nutrition are DRC, CRE, UNHCR, Oxfam, MF and ATTSF and UNICEF[3]. WFP provides monthly distributions of dry food rations consisting of 2,100 kcal per person/day divided between cereals (mainly fortified wheat flour, rice and barley), pulses (lentils, beans, split-peas), oil, sugar and super cereal (corn-soya blend), while NGOs are providing other food items such as eggs, milk and vegetables, however, not on a regular basis. Cost reductions have led to a lower variety of dry-food items being distributed while the distribution of fresh food has decreased from three kilos to less than two kilos per person per month which is expected to worsen the levels of malnutrition and anaemia in the camps.

Previous assessments related to food security include the Nutrition Survey from October 2016 which highlighted a reduction in Global Acute Malnutrition and stunting. However, the same survey also showed alarmingly high prevalence of anaemia and found increasing risks of chronic diseases among adults, due to increasing levels of overweight and obesity. The increase in anaemia levels was especially alarming compared to the previous Nutrition Survey from 2012 where anaemia rates had dropped from 52 percent to 29 percent from 2010 to 2012. The Nutrition Survey gave 16 recommendations for programming to improve the nutrition status in the camps,

3 More information can be found in the report 'Humanitarian Needs of Sahrawi Refugees in Algeria 2018-2019'

including improving the profile of the food basket/general food distribution to include more fresh food, increase the number of food commodities rich in animal protein and distribute canned fish on a monthly basis.

The WFP and UNHCR Joint Assessment Mission (JAM) from April 2016 confirmed that the majority of Sahrawi refugees remain dependent on humanitarian assistance. 91 percent of the camp population was found to have acceptable Food Consumption Score, while nine percent had borderline food consumption. Recommendations included providing general food distributions to all households but adjusting the rations for the refugees that are already food secure, supporting various livelihood projects, as well as ensuring that food assistance is properly targeted according to the households' needs through a community based targeting system. The previous Joint Assessment Mission in 2013 had indicated that some groups remained extremely vulnerable to food insecurity, as they were totally dependent on assistance and support from the community.

2. OBJECTIVE

The overall objective of the food security assessment is to document the current food security situation among the Sahrawi population living in the five refugee camps Awserd, Boujdour, Dakhla, Laayoun and Smara. This includes answering the following questions:

- How many are food insecure and vulnerable to food insecurity?
- Who are food insecure and vulnerable to food insecurity?
- Why are they food insecure and vulnerable to food insecurity?
- Where are the food insecure and vulnerable to food insecurity located?

Providing answers to these questions along with additional cross-cutting information at camp level allow for more accurate and evidence-based planning across the agencies working to improve the food security situation in the camps.

3. METHODOLOGY

The assessment methodology is based on the standard WFP approach to conducting food security assessments, which can be found in the Emergency Food Security Assessment (EFSA) Handbook as well as the Comprehensive Food Security and Vulnerability Analysis (CFSVA) Handbook[4]. Based on calculations[5], the sample size was set at 384 households per camp, adding up to 1,920, enabling representativeness at camp level despite of a lack of official, updated population data at the start of the data collection. Weights were calculated and applied for the analysis using the updated UNHCR population figures published in March 2018. The survey followed a two-stage cluster sampling with one stratum per camp, 35 clusters per stratum and 11 interviewed households per cluster.

To be able to inform on the total number of food insecure and vulnerable to food insecurity at a globally comparable level, the assessment used the corporate WFP indicator 'Consolidated Approach to Reporting Indicators of Food Security' (CARI), which uses three core indicators to calculate the overall Food Security Index[6]. The questionnaire was designed based on the previous Post-Distribution Monitoring (PDM) questionnaire for comparability but in order to also be able to inform on the food security situation, the PDM questionnaire was expanded to include the WFP core indicators Food Expenditure Share and Livelihood-based Coping Strategies. The indicators have been adapted to fit the local context. All information was collected at household level and does not reflect the situation at an individual level.

Considering the stable situation in the camps, the secondary data source for the sampling frame is the WFP Nutrition Survey 2016. Following the UNHCR publication of the updated population figures by camp, the proportionality of camps sizes was compared to the ones used and only very small differences were found (max 1 percentage point difference between the figures used and the updated figures). At camp level, each district was divided into four equally sized barrios (quarters). At barrio level, the Nutrition Survey's allocation was used, where clusters were randomly allocated using proportionality of population size to ensure that each household had an equal probability of selection independent of the size of the barrio.

4 Both handbooks are publicly available at www.vam.wfp.org

5 95% confidence interval, 5% precision, 50% assumed prevalence, 0% non-response rate, 1 design effect due to the heterogeneous camp population

6 A step-by-step guide to calculate the Food Consumption Score, Food Expenditure Share, Livelihood-Coping Strategies Indicator and Food Security Index is available in the CARI technical guidelines at www.vam.wfp.org

The second stage of the sampling followed random sampling. Four assessment teams were established, consisting of a team leader from WFP or the United Nations High Commissioner for Refugees (UNHCR) and enumerators from Comitato Internazionale per lo Sviluppo dei Popoli (CISP), and the data was collected on tablets using Open Data Kit (ODK). The team started in the centre of the barrio by tossing a pen and walking to the end of the barrio in the direction showed. When reaching the end, the pen was again tossed until pointing towards the body of the barrio. When walking along the line, the team would count all households on the immediate left and right of the path. The first household to be visited was then selected by drawing a random number between one and the total counted households. The next household chosen was the first to the right when standing with the back against the main door of the household. This procedure would continue until reaching the total 11 households in the cluster. If the end of the barrios was reached before reaching 11 interviews, the procedure was repeated from the beginning. The team leaders were responsible for following the sampling methodology, assigning the households to the enumerators as well as guiding and providing feedback for the enumerators.

All team leaders and the majority of the enumerators already had extensive experience in collecting household data prior to the data collection. Since the questionnaire included some new and extended modules that were not in previous assessments and to ensure reliable high-quality data, a five-day training was organised from 28th February to 6th March, followed by one day of field testing where the final enumerators were selected. The technical training, field testing, selection of enumerators and start of data collection were facilitated and supervised by a WFP assessment team from the Regional Bureau Cairo (RBC), while the data collection, lasting from 8th March to 19th April, was closely monitored by the WFP Sub Office in Tindouf.

Data quality control and feedback was provided by WFP's technical unit Vulnerability Analysis and Mapping (VAM) from the RBC on a weekly basis by camp and enumerator and the final analysis was conducted by the VAM and M&E units in the RBC using SPSS. The results have been triangulated with other sources of information including previous assessments in the camp, but keeping in mind the lower sample size of e.g. previous JAM assessments. Regression analysis was conducted to further analyse the correlation between core CARI indicators, household characteristics and other relevant indicators. For each regression analysis, individual logistic regression analysis was first done for a list of indicators that were found to have a logic, potential influence on the core indicator. Finally, a backward step logistic regression analysis was conducted, containing only the indicators with a significant correlation. When a numeric variable was available, the logistic regression analysis was supplemented with a linear regression to triangulate the results.

3.1 LIMITATIONS

Though most of the team of enumerators have extensive experience in collecting data, the assessment team identified some limitations.

Despite of being closely monitored and corrected during the data collection, the data from the expenditure module showed some flaws. The assessment team accepts this due to the context with refugees living in camps for an extended period with a high reliance on bartering and sharing, less familiarity with a regular market economy, as well as this module being new to both enumerators and respondents. While the data quality has been evaluated as being suitable for calculating the Food Expenditure Share, it will not be analysed and disaggregated beyond camp level.

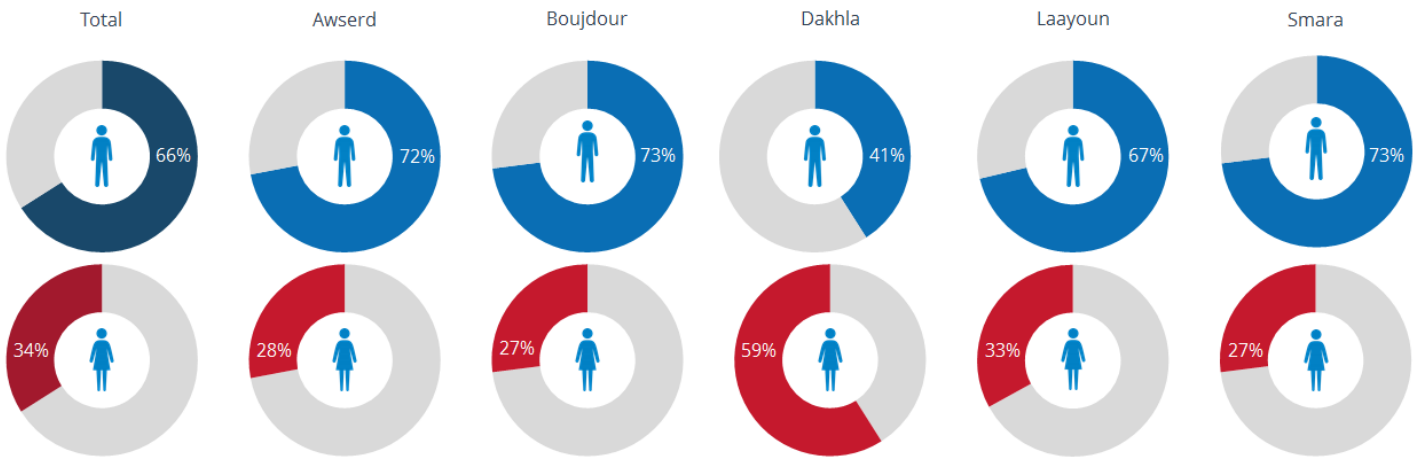
An extended version of the Food Consumption module (Food Consumption Score, Nutrition), including information at food sub-group level for vitamin A, protein and haem iron rich foods, was included in the questionnaire due to the nutrition focus of the WFP operation and to collect baseline information for this new outcome indicator. However, the understanding of the food consumption sub-groups was missed and the information was not possible to analyse with confidence. Though a dietary diversity score was calculated for pregnant and lactating women to give an indication of the quality of diets of this particularly vulnerable group, it should be highlighted that this calculation was conducted based on a regular food consumption module with limited food items and is therefore not comparable with the methodology used in a proper nutrition survey.

Due to the expansion of the PDM questionnaire to include new modules, the capacity of the enumerators to collect data of satisfactory quality also within the new modules was weighed very high. Also, after 32 years of WFP presence in the camps both respondents and enumerators are familiar with the questions and, though unavoidable, it should be acknowledged that this can lead to bias. To limit potential bias in relation to this, the RBC assessment team increased the number of training days, did rigorous data quality checks, each camp and enumerator team had an experienced team leader, some enumerators were dropped from the field work and field plans were adjusted when needed including delaying the data collection in Boujdour due to initial lack of capacity.

4. DEMOGRAPHICS

The majority of Sahrawi households are male-headed (66 percent), which is highest in Boujdour and Smara (73 percent). Dakhla is the only camp where the majority of the households are headed by women (59 percent), compared to an average of 34 percent women-headed households (figure 4).

Figure 4 Sex of head of household, by camp



The average age of household heads is 52 years which is lowest in Dakhla at 48 years. The majority (73 percent) of heads of households are married, while 13 percent are widowed, 13 percent divorced/separated and 0.5 percent are single.

Table 1 shows the household composition divided into age groups by camp. The table shows that the average household is composed by six household members of which three-four are adults and two-three are children. Dakhla has the largest households (more than seven household members), while Boujdour has the smallest (five-six household members).

Table 1 Household composition, by camp and age group

	Total	Awserd	Boujdour	Dakhla	Laayoun	Smara
Below 5 years	0.6	0.6	0.5	0.9	0.6	0.6
5-17 years	1.8	1.9	1.7	2.3	1.8	1.3
18-59 years	3.3	3.2	3.0	3.6	3.1	3.5
60+ years	0.4	0.3	0.3	0.3	0.4	0.5
Total	6.0	5.9	5.5	7.1	5.8	5.9

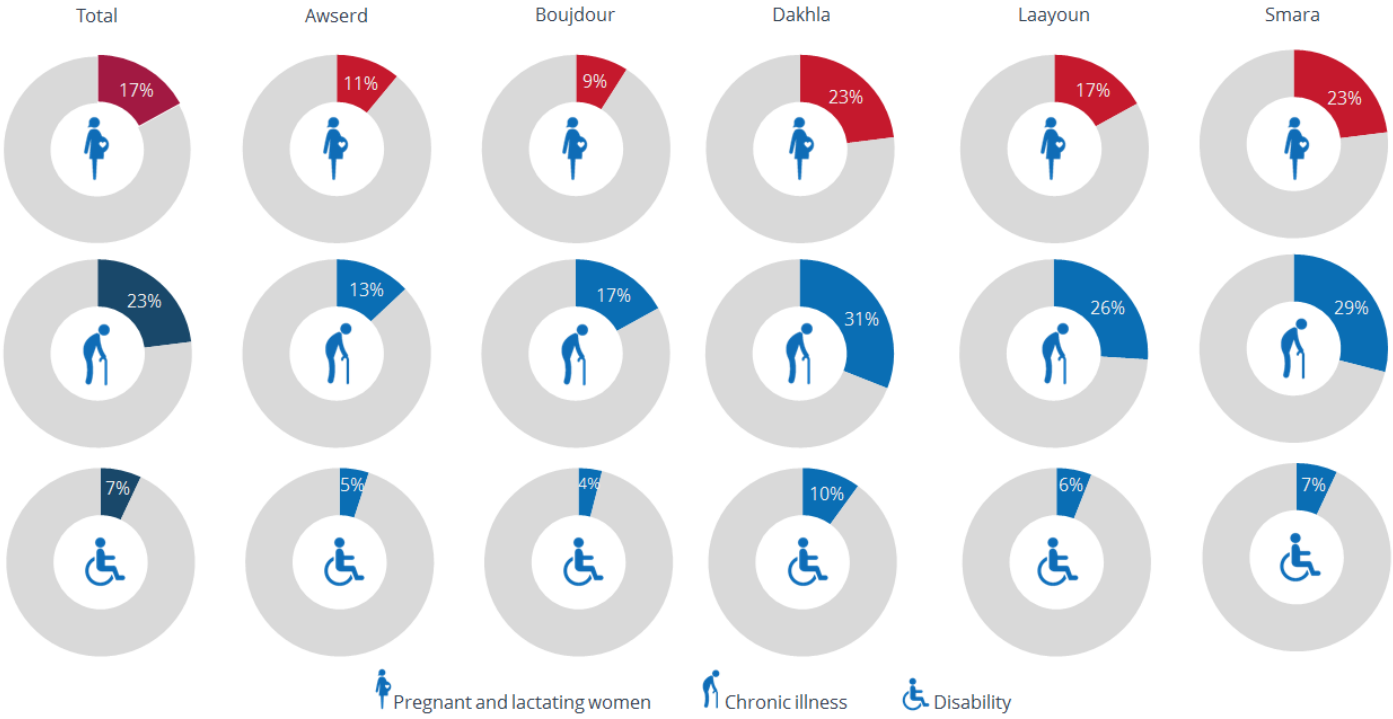
Almost half (45 percent) of the Sahrawi households have children below five years. The highest prevalence is in Dakhla (54 percent) and the lowest is in Awserd (41 percent). The average number of school aged children (5-17 years) is just below two per households, which is slightly higher in Dakhla. The majority of households in all camps consist of 18-59-year olds, which accounts for an average of more than three household members. Finally, less than half of the households have members that are 60 years or above, which is at similar levels between camps

though slightly higher in Smara.

Figure 5 shows that 17 percent of households have one or more pregnant or lactating women. This number is lowest in Boujdour and Awserd (nine and 11 percent respectively), while almost one in four women in Dakhla and Smara are either pregnant or lactating.

Households with members with chronic illness is 23 percent on average and highest in Dakhla (31 percent) and lowest in Awserd (13 percent). On average, seven percent of households have members with disability, which among camps vary from four percent in Boujdour to ten percent in Dakhla.

Figure 5 Households with pregnant and lactating women, chronic illness and disability



Finally, more than one in five households have working age dependents (18-59 years) which is highest in Dakhla where one in three 18-59 year-olds are dependents.

5. FOOD ACCESS

5.1 ASSISTANCE RECEIVED

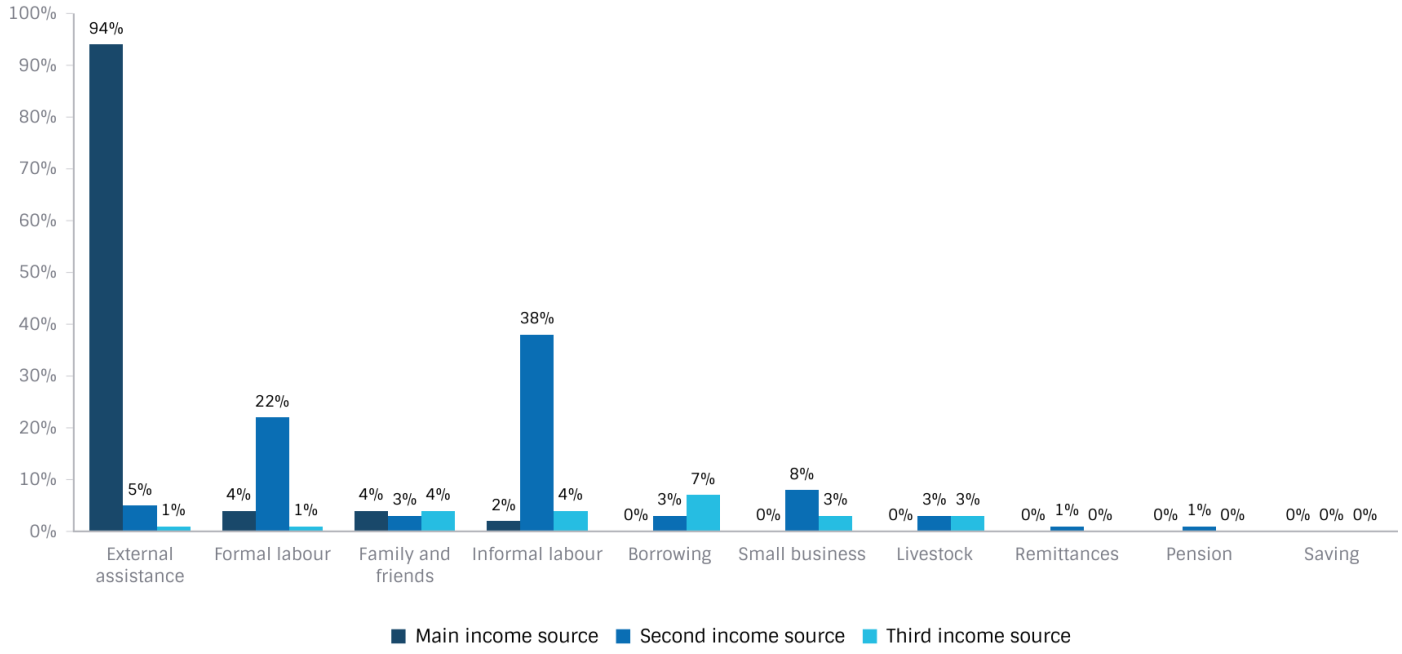
Nearly all (99.9 percent) of the households reported that they have received food assistance from WFP within the past four weeks, leaving only two of 1935 surveyed households non-WFP beneficiaries. Since the camp population (173,600) is higher than the 125,000 of monthly food rations being distributed, this indicates that the refugee population is largely sharing the food rations which is confirmed by the Sahrawi Red Crescent.

This report is focused on the food security analysis while a special report on the PDM information including more elaborate information on assistance will be also produced.

5.2 INCOME SOURCES

During the assessment, the households were asked about their income sources as well as the individual income source's relative contribution to the total income. Income is used as a proxy indicator for food access at household level since it is an important component to sustain a decent living and provides an indication of the resilience of the household. Having fewer income sources as well as high reliance on external assistance (including gifts, remittances and borrowing) leaves households more vulnerable to shocks, e.g. climate-related, price changes or changes in assistance.

Figure 6 Income sources: main, second and third



As can be seen from figure 6, the Sahrawi households' income is highly dependent on external assistance which 94 percent reported as their main source of income. Furthermore, four percent reported formal labour and two percent informal labour while only 15 households in total had pension, livestock, small business, borrowing or kinship/gifts and none reported remittances as their main income source.

Of the 61 percent households who reported having two income sources, the majority of the income came from informal labour (38 percent), followed by formal labour (22 percent) and small businesses (eight percent).

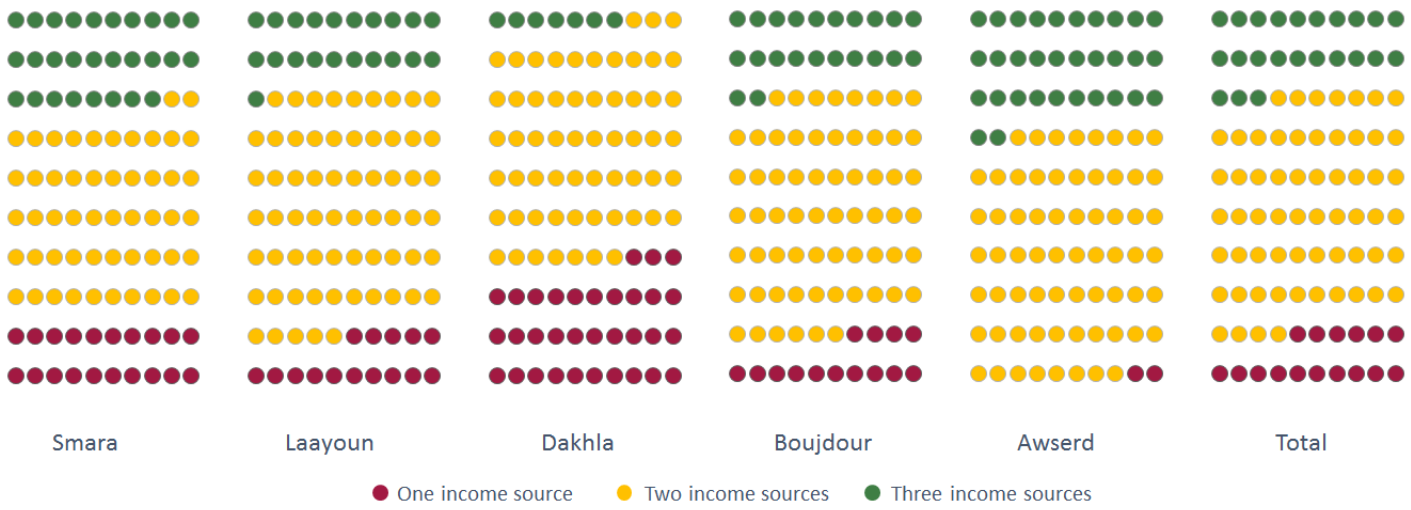
About one quarter of the households reported to have three income sources of which seven percent was from borrowing, four percent from friends and family, four percent from informal labour and three percent from livestock.

To summarise, figure 7 shows that 16 percent of households reported one income source, while the majority (61 percent) have two income sources and 24 percent has three income sources. Worth noting is that all those households relying on only one income source has external assistance as their main income source, making them

100 percent dependent of external assistance.

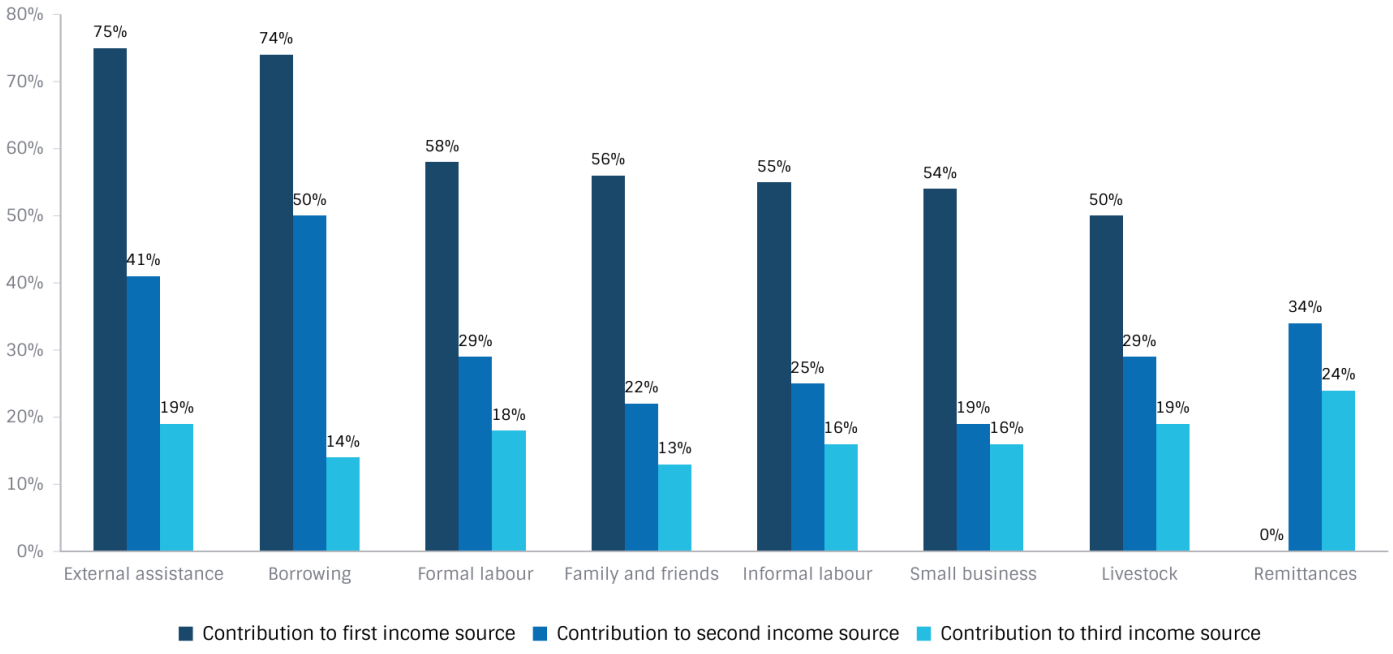
It can also be derived that Dakhla is most vulnerable in relation to income since one in three households rely on one income source only. This indicates that there are fewer income opportunities in Dakhla. Opposite, 98 percent of households in Awserd have two-three income sources.

Figure 7 Number of income sources, by camp



On average, the main income source contributed to 75 percent, the second 22 percent and third 3 percent of the total household income. Figure 8 combines Figure 6 and Figure 7 by showing each income source's average contribution to the income sources. Savings and pension have been excluded since very few households reported those.

Figure 8 Income sources' average contribution as 1st, 2nd and 3rd income, in percent



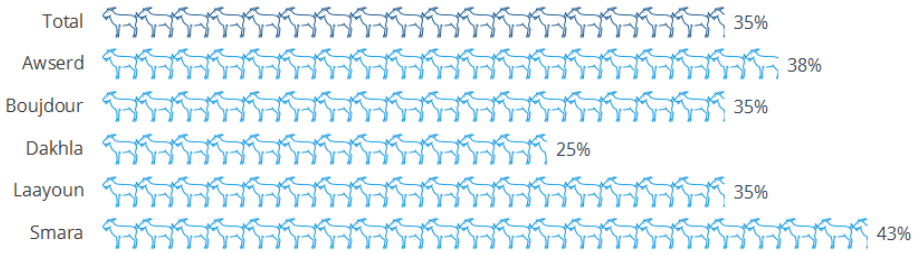
The figure shows that external assistance and borrowing contributed an average of around 75 percent for the households who have registered this as their main income source, 41-50 percent as secondary and 14-19 percent as third income.

Formal labour, informal labour, small business, livestock and relying on family and friends all have similar decreasing trends, where the contrition to the first income source is an average of 50-58 percent, falling to 19-29 percent for the contribution to secondary income source and 16-19 percent for the contribution to third income source. While no households reported remittances as their main income source, it contributes to an average of 34 percent of the income for the ten households who reported it as their secondary income, and 24 percent of the income for the three households reporting it as their third income.

5.3 LIVESTOCK

More than one in three Sahrawi households own livestock. This number is lower than the results from the JAM survey from 2016 which reported 50 percent livestock ownership in the camps. While this might reflect a real change since 2016 it is, however, worth noting that the JAM methodology did not allow for general assumptions at a population level since it was based on only 75 purposively selected household interviews. Hence, the difference may also simply be due to the lower sample size.

Figure 9 Households owning livestock



At camp level, Dakhla has the lowest level of livestock ownership (25 percent) while 43 percent of the households in Smara owns livestock. Slightly more than half (56 percent) of livestock owners have goats while 47 percent have sheep. Ownership of chicken, camel and cows was only reported for ten, two and one households respectively. Only 5 percent reported that they own more than one type of livestock.

Regression analysis shows that households with livestock are typically large (8 or more members). Furthermore, there was a strong positive correlation with income from small business and livestock, indicating that the livestock is contributing positively to the households' income which would be relevant to research further in relation to potential livelihoods projects.

5.4 EXPENDITURES

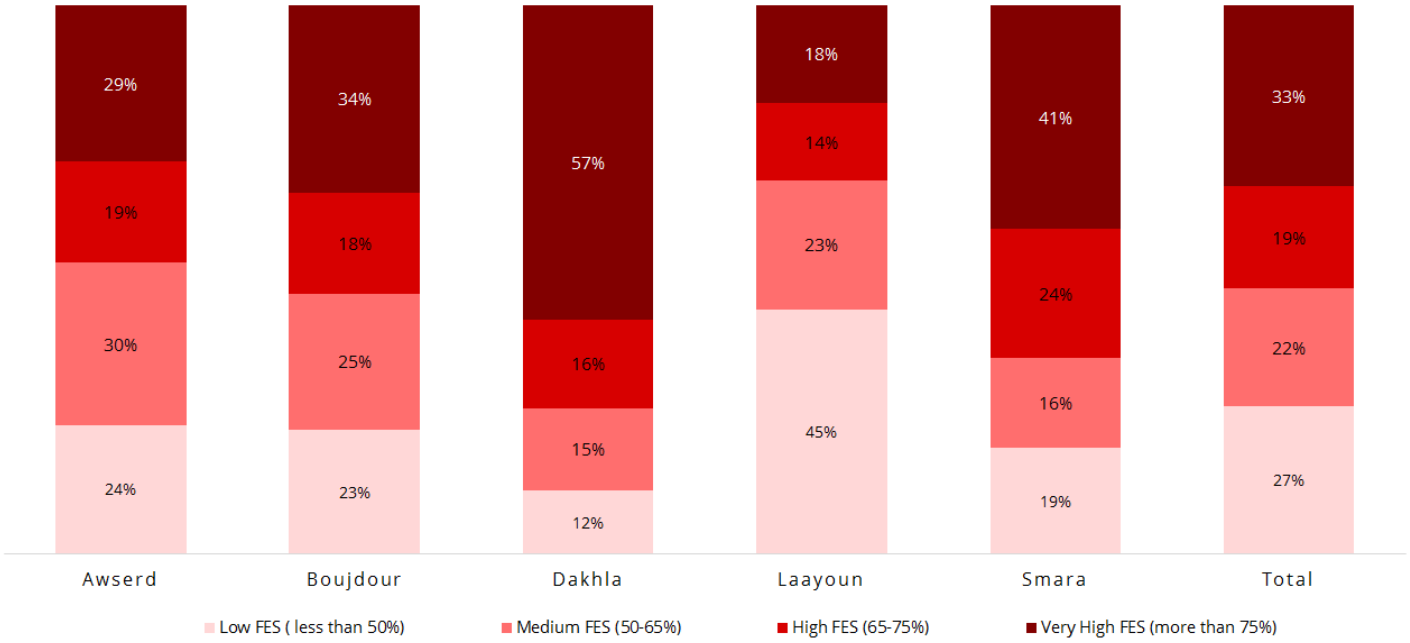
Food Expenditure Share is a WFP core indicator that measures households' economic vulnerability based on how large a share of their income they have spent on food during the 30 days prior to the survey. The hypothesis is that the more of the total household budget is spent on food relative to non-food expenditures, the more economically vulnerable the household is. Together with the Livelihood Coping Capacity Indicator, this indicator is used to measure the households' overall resilience against potential shocks. The survey included a comprehensive and exhaustive expenditure module, collecting expenditures for ten food groups and 18 non-food groups.

Figure 10 shows that overall the Sahrawi households spend on average 65 percent of their monthly income on food, which is just between a Medium and High Food Expenditure Share . The average Food Expenditure Share by camp is highest in Dakhla (75 percent) followed by Smara (68 percent) and lowest in Laayoun at 54 percent.

Over half of the Sahrawi households have a high (19 percent) or very high (33 percent) Food Expenditure Share while the other half is divided between medium (22 percent) and low (27 percent) food expenditure shares. A disaggregation by camp shows that the Food Expenditure Share was better in Laayoun, where the households in general spent less money on food in relation to non-food expenditures, while it was worst in Dakhla with more than half of the households having a very high Food Expenditure Share.

Further analysis shows that on average 30 percent of total household expenditures was spent on tea and sugar which is considered very high.

Figure 10 Food Expenditure Share, by camp[7]



Logistic regression analysis was conducted to further assess the households with high and very high food expenditure shares and establish possible explanations why they spend such high shares on food.

This analysis showed very strong correlation between high food expenditure shares and:

- Households with only one income source (p= .000)*[8];
- Main income source accounting for more than 50 percent of total income (p= .000)*;
- No income from small business and livestock (p= .001)*;
- Households not owning livestock (p= .009)*;
- Households that have taken less debt and credit than the average household (p= .000)*;
- Households using more food-based coping strategies than the average household (p= .006)*.

This means that households relying on only one income source, which is solely external assistance and a main income source accounting for more than 50 percent of total income, indicating higher reliance on only one income source, were found to spend higher shares on food. The correlation to less debt-taking can indicate that the debt taken by households is mainly used to cover food needs. This is confirmed by the majority of respondents (91 percent) stating that they used the debt taken to buy food. Furthermore, households that are applying more food-based coping mechanisms, mainly reducing portion sizes (average two-three for group), relying on less expensive or less preferred food (two days) and reducing the number of meals eaten per day (two days), were found to spend higher shares on food.

Further significant correlations were found towards:

- Household where the head is below 59 years (p= .011)*;
- Households that do not have school aged children (5-17 years) (p= .018)*;
- Households with members with disability (p= .039)*;
- Households eating more diverse diets (Medium and High Dietary Diversity Scores) (p= .034)*;
- Households eating more protein (animal and pulses) that the average household (p= .016)*.

7 Due to difficulties in getting data of sufficient quality for the value of assistance and own production, these are not included in the total expenditures. Instead the total expenditures reflect the value of cash and credit expenditures

8 The * indicates that the finding was confirmed and found significant during linear regression analysis (ANOVA test)

At camp level, Laayoun had the lowest food expenditure shares and all the other camps had significantly higher shares (p= .000 - .003)*.

5.5 DEBT

In total, 86 percent of the Sahrawi households took new debt or bought something on credit during the past six months. At camp level, almost everyone took credit in Laayoun and Awserd (99 and 95 percent respectively) while Smara has the lowest number of households taking credit (68 percent).

Figure 11 Households that took new debt during past 6 months, by camp

The fact that taking new debt is so widely used but only 68 percent of the households have reported it as a livelihood coping strategy, which only applies if the household does not have enough food or money to buy food, gives an indication that taking debts is a normal practice in the Sahrawi population and is not only a last resort. This is confirmed by the findings of the Market Assessment which found that: "*Credit is very common in camps, with all retailers providing some sort of credit to their customers. The customer base is stable and clients known by the owner of the shop can obtain the purchased goods on credit. On average 37% of the sale of the shops in camps is given on credit. Credit is usually repaid within few weeks*".

The vast majority of the debt is granted by shopkeepers. When asked about the main reason for taking debt, 91 percent of the respondents answered that it was to buy food.

5.6 MARKET

Additional data was collected based on key informant interviews from market actors and relevant stakeholders at the markets in the camps and Tindouf to gain deeper knowledge about the economic vulnerability and purchasing power of the households. It was found that the Sahrawis have a low purchasing power with an almost barter-based economy in the camps which was identified as one of the main risks to food security. Furthermore, the highest food prices were found in Awserd while Laayoun had the lowest prices. Vegetables and rice were found to be more expensive in the camps than in Tindouf while the prices of wheat flour, pulses and sugar were lower.

In conclusion, the markets in the camps as well as in Tindouf were found weak and highly sensitive to shocks. The food available was found to be of relatively poor quality and the availability was subject to irregularity which is negatively impacting the food access. The road infrastructure was found challenging and the almost full import dependency contributed to a high vulnerability of local markets' towards external shocks.

Finally, lower income from oil and gas export has negatively affected the current account deficit, which led the Algerian Ministry of Trade to introduce a temporary import ban in January 2018. 851 items including 576 food items were banned which is expected to negatively affect both food prices and availability.

6. FOOD CONSUMPTION

6.1 FOOD ITEMS

Food consumption information was obtained using a corporate WFP module where each household was asked how often they consumed eight core food groups during the week prior to the assessment.

Figure 12 Number of days food groups were consumed last week

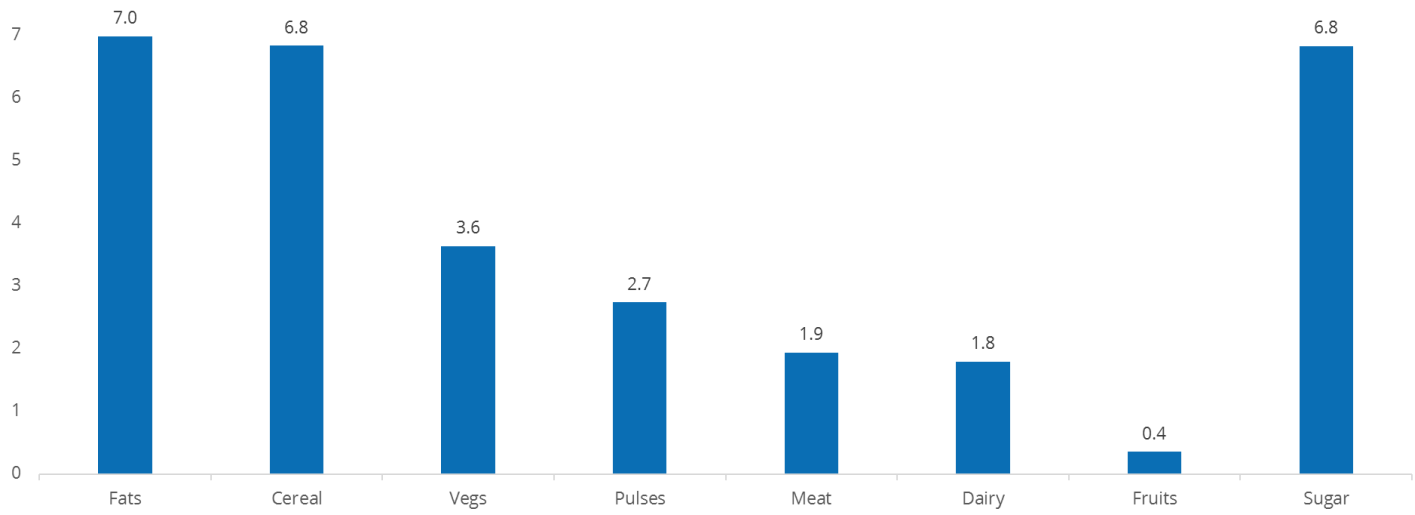
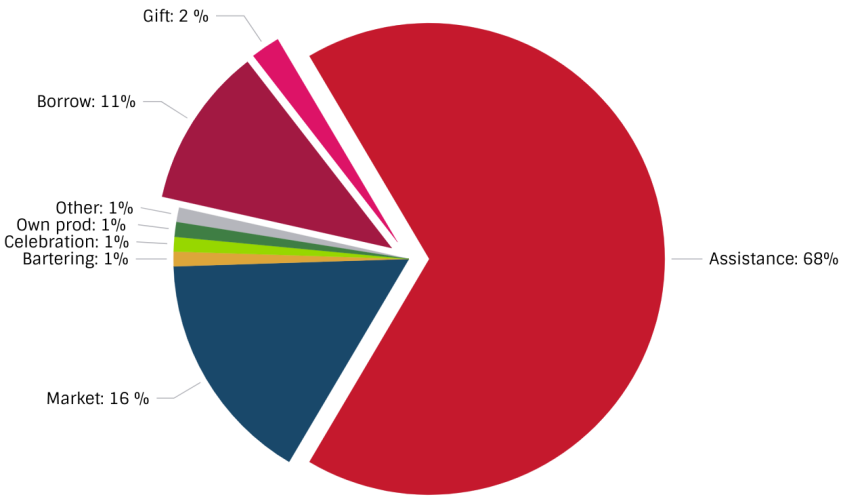


Figure 12 shows that the average Sahrawi households ate cereal, oil and sugar every day which is also where the vast majority of the WFP food items distributed fall into. Vegetables were eaten every second day while pulses were eaten almost every second day, meat[9] and dairy almost twice per week and fruits less than one day every second week.

6.2 FOOD SOURCES

Information on how each food group was acquired by the household provides a valuable insight into the households' situation and level of dependency. After being asked about the frequency of consumption of each food group, a follow-up question was asked about what the main source for the individual food group was.

Figure 13 Main food sources



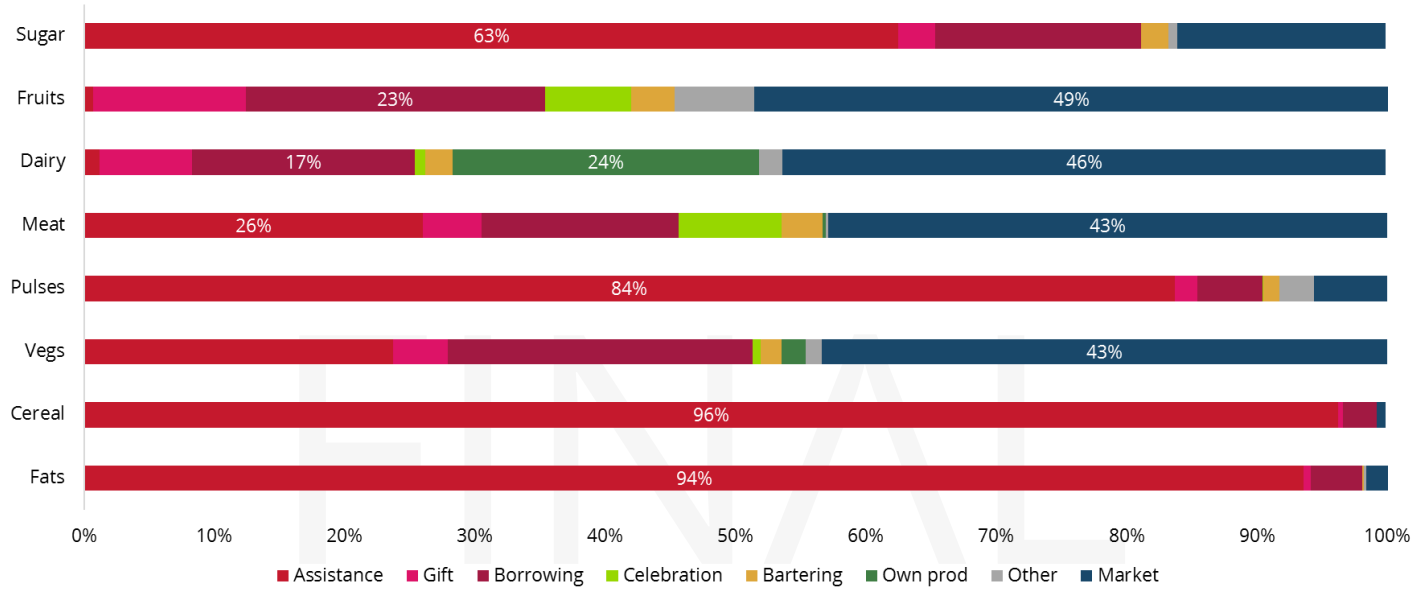
9 Meat covers organ and flesh meat including camel, beef, chicken, lamb and goat, eggs and fish including canned fish such as tuna and mackerel

When calculating the food source indicator, each food source is weighed according to the frequency of consumption. Hence, this indicator is not comparable with the income sources since it solely provides an overview based on how the individual food items were acquired by the households whereas the income sources provides an overview of the total main income source of the household.

Figure 13 shows that overall, 79 percent of food is sourced from assistance, gifts, and borrowing, leaving the Sahrawi camp population's food consumption highly dependent on external support.

Disaggregating this trend by food item allows for further analysis of the food sources' distribution for the individual food items, which is illustrated in Figure 14. The three red colours show that the main source for oil and cereal for close to 100 percent of the households is assistance, gifts and borrowing. Also, assistance, gifts and borrowing account for more than 90 percent for pulses and more than 80 percent for sugar. At the same time, market purchases comprise an important source for vegetables, meat, dairy, fruits and sugar.

Figure 14 Main food sources, by food group



Another important finding is that 20 percent households get dairy from their own production, indicating a link between livestock and dairy consumption which would be relevant to further analyse.

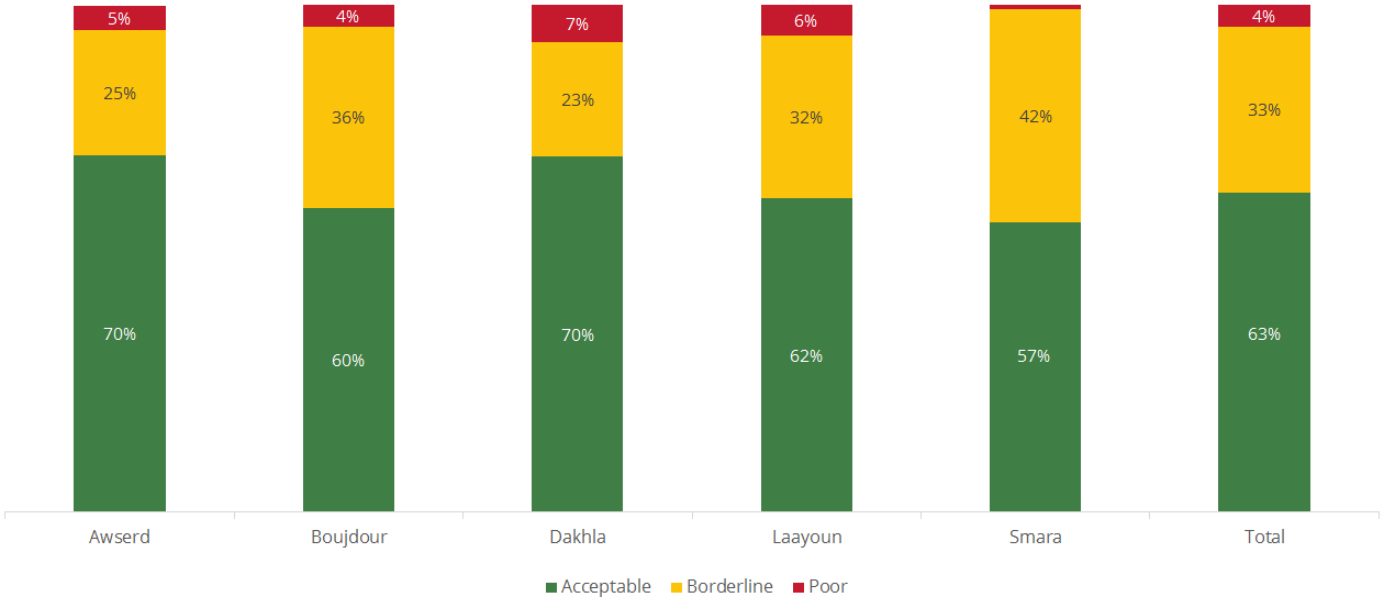
6.3 FOOD CONSUMPTION SCORE

The Food Consumption Score is a WFP core indicator that serves as a proxy of households' food security by reflecting the frequency, diversity and relative nutritional importance of the food items consumed by the households. It is based on the same module as section 6.1 but adding weights to the food items according to their nutritional values. In this way, the Food Consumption Score informs the adequacy of households' food consumption during the week prior to being surveyed. The thresholds for the three groups used in this context is <28 for poor, 28.5-42 for borderline and >42 for acceptable food consumption, which is the threshold recommended for populations with frequent consumption of sugar and fat.

An acceptable food consumption score increases the probability that the household had an adequate nutrient intake during the past week, borderline food consumption shows that there may have been a nutrient gap, whereas for poor food consumption there are definitely gaps in the nutrition of the household. Though the food consumption score does not reflect the details of the nutrition gap, it is likely to be within macronutrients such as protein or micronutrients such as vitamin A or C, iron or calcium.

The food consumption score shows that two of three Sahrawi household have acceptable food consumption, 33 percent borderline and 4 percent poor consumption (figure 15). Awserd and Dakhla have the highest level of acceptable food consumption while Dakhla also has the highest number of households with poor food consumption. Smara has the lowest level of acceptable food consumption which is mainly driven by a high level of borderline food consumption.

Figure 15 Food Consumption Score, by camp



Merging figure 12: Number of days food items were consumed last week, and figure 15 allows a deeper analysis of the causes of poor food consumption and where the differences between the households with poor, borderline and acceptable food consumption scores can be found.

Figure 16 Number of days food groups were consumed, by Food Consumption Group

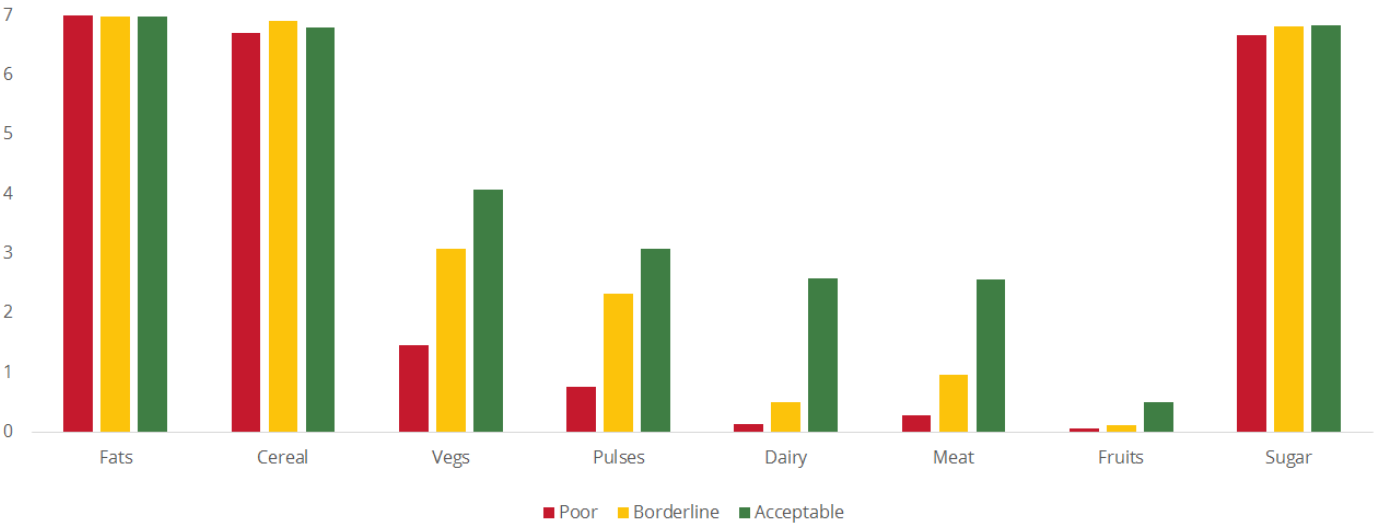


Figure 16 shows that the households from all food consumption groups were eating cereal, oil and sugar the same number of days. The difference is found in the consumption of protein rich foods (pulses, dairy and meat) as well as vegetables and fruits where the consumption was more than three times as high for the households with acceptable food consumption score as the households with a poor score. Hence, to improve the food consumption and nutrition in the camps it is recommended to focus on promoting the intake of animal protein, pulses, vegetables and fruits.

Further analysis was conducted of households with inadequate food consumption (poor and borderline) as well as possible explanations for why these households' food consumption are worse off. Regression analysis shows a strong correlation between inadequate food consumption and:

- Households where the head is not married (single, divorced, separated or widowed) (p= .000)*[10];
- Households with a high reliance on one single income source (accounting for 50 percent or more to total income) (p= .000)*;
- Households not owning livestock* (p= .000);
- Households adopting less food-based coping strategies than the average household* (p= .000).

The main food-related coping strategies adopted by households with poor and borderline food consumption were relying on less preferred, less expensive food (on average two days per week), reducing portion sizes (two days/ week), borrowing food or relying on help from friends and relatives (one day/week) and reduce the number of meals eaten per day (one day/week). None of the households had to rely on reducing adult consumption to let children eat. The fact that less food coping strategies were adopted by the households with inadequate food consumption could indicate that the issue with the households' diets is not related to quantity but instead quality and diversification.

Further correlation was found towards households with no income from formal labour* (p= .020), but instead income from informal labour* (p= .047). At camp level, Awserd has the best food consumption, and Laayoun* and Smara* were found to be significantly worse off.

6.4 DIETARY DIVERSITY SCORE

The Dietary Diversity Score is intended to complement the Food Consumption Score indicator by providing an estimation of the quality of the households' diets. Seven groups are included; cereal, pulses, dairy, meat, vegetables, fruits and fat/oil. Sugar is not included since it does not contain any valuable nutrients.

To get a high dietary diversity score, the household must have consumed each food group at least one day the past week. The dietary diversity score does not take into account how many food groups are consumed each day or how many days per week each group is consumed.

Figure 17 Dietary Diversity Score, by camp

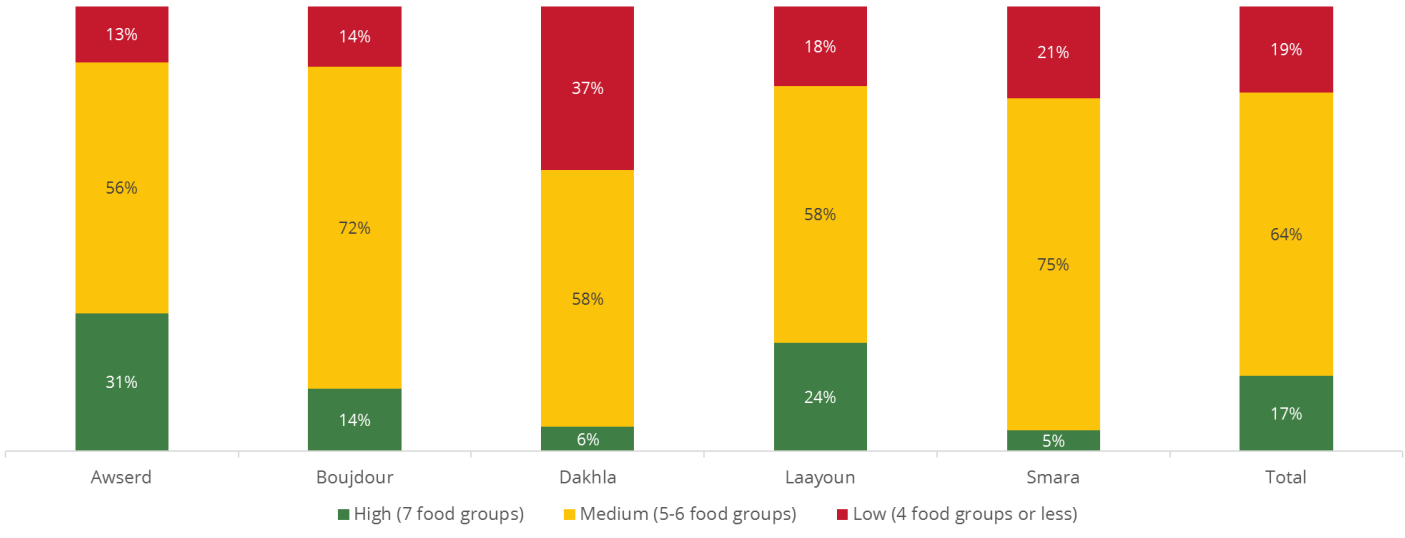


Figure 17 shows that almost one in five of the camp population have a high dietary diversity score, which means that they were eating all seven food groups the past week, 64 percent had a medium dietary diversity score, meaning that they ate five to six food groups, and 19 percent had a low score, eating four or less different food groups during the past week. At camp level, the dietary diversity highest in Awserd and Laayoun and it was lowest in Dakhla and Smara.

10 The * indicates that the finding was confirmed and found significant during linear regression analysis (ANOVA test)

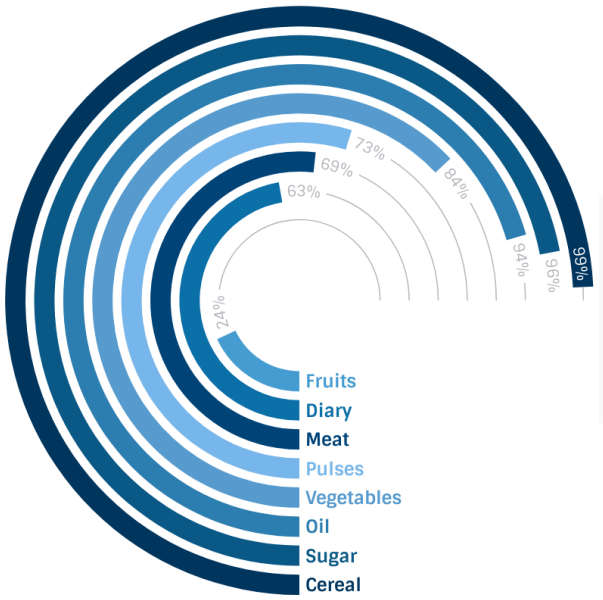
6.5 PREGANANT AND LACTATING WOMEN

Since pregnant and lactating women is a group that is often referred to as particularly vulnerable in the Sahrawi nutritional context, further analysis was conducted of the diets of this group using the same food consumption module as at household level but at an individual level based on a 24-hour recall period. In total, 17 percent of the households comprised one or more pregnant or lactating women.

As household consumption is based on a week's consumption while the consumption for pregnant and lactating women is based on one-day recall, the results from the two types of analysis should not be directly compared. Moreover, this analysis does not tell about the household consumption but only at an individual level for the pregnant or lactating woman.

It should be noted that the list of food groups used in this assessment is intended for households and is hence much shorter and limited compared to the list used in a proper nutrition survey meant for analysis at an individual level. Consequently, the information on the diets of pregnant and lactating women by food item should be used mainly as baseline information to support the coming 2019 WFP Nutrition Survey and other qualitative nutrition studies.

Figure 18 Percentage of pregnant and lactating women who consumed food group, 24-hour recall period



Similar to the results for households, almost all pregnant and lactating women consumed cereal (99 percent), sugar (96 percent) and fat (94 percent) the day prior to the survey. The consumption of vegetables (84 percent), pulses (73 percent), meat (69 percent) and dairy (63 percent) is still considered high, while fruit was eaten by one in four.

To gain a better understanding of the quality of the diets of pregnant and lactating women a dietary diversity score was calculated for this group.

Figure 19 Dietary Diversity Score for pregnant and lactating women, by camp

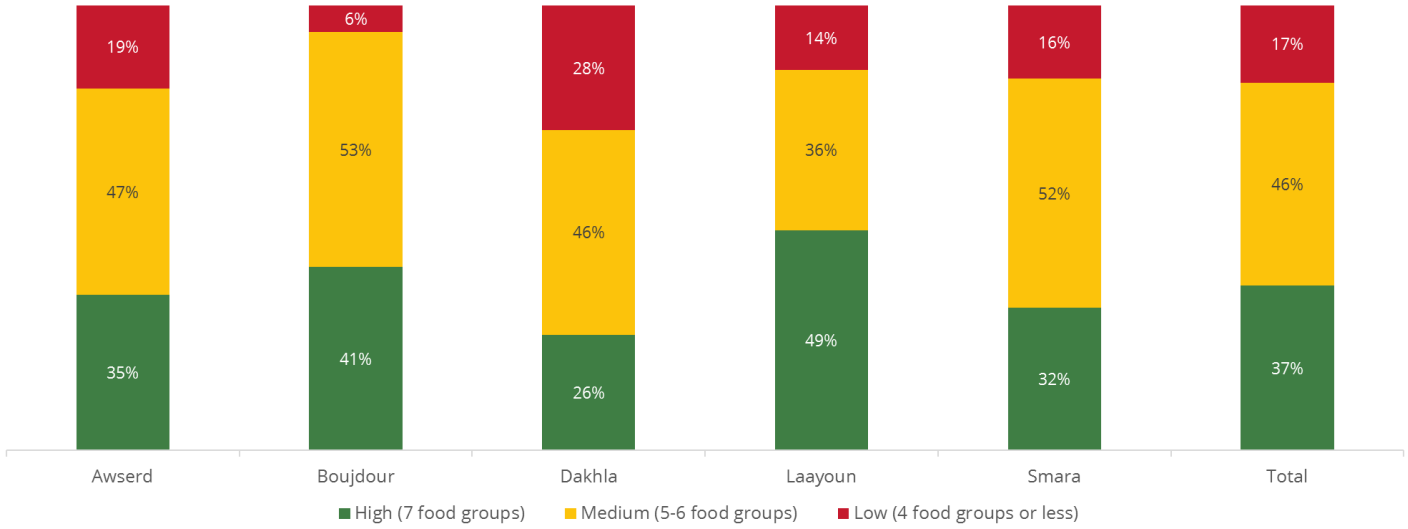


Figure 19 shows that 37 percent of pregnant and lactating women have a high dietary diversity score, 46 percent medium and 17 percent low. At camp level, pregnant and lactating women in Laayoun and Boujdour had the best dietary diversity while the worst were in Dakhla.

7. COPING STRATEGIES

7.1 FOOD-BASED COPING STRATEGIES

The Food-Based Coping Strategies indicator consist of five coping mechanisms related to food consumption that a household can apply in situations when they do not have enough food or money to buy food. The strategies are weighted according to severity and the recall period is seven days. Besides reflecting the frequency of days the strategies were adopted, it can also be used to calculate the Reduced Coping Strategy Index (rCSI). A higher rCSI score indicates that more frequent and/or extreme coping mechanisms are adopted.

Figure 20 Food-Based Coping Strategies adopted by household, seven day recall period, by type

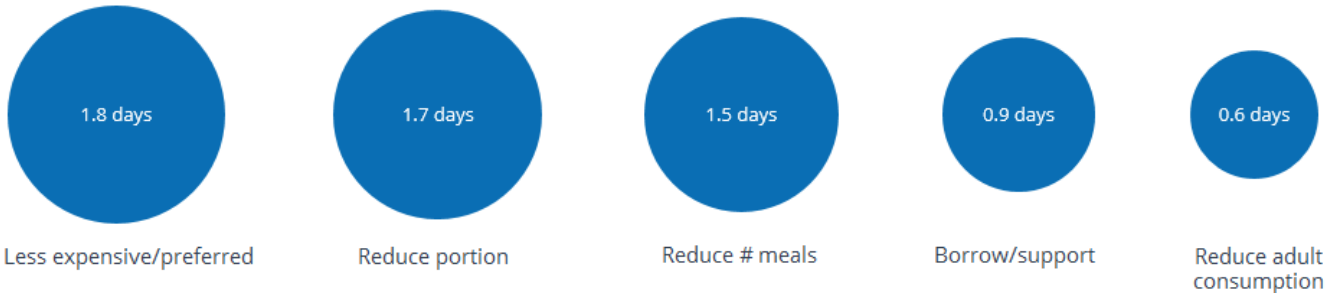
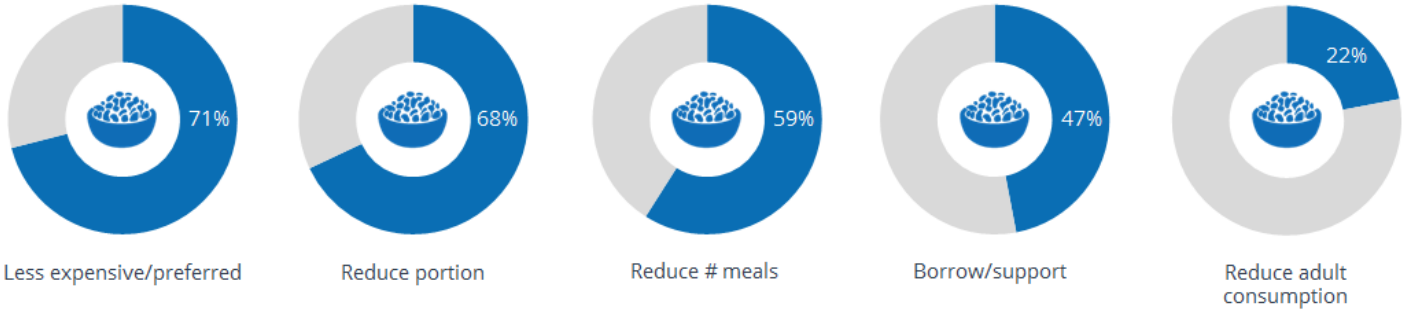


Figure 20 shows that the number of days the Sahrawi refugees had to apply food-based coping strategies to meet their food needs during the past seven days was limited to less than two days for all coping strategies. The most commonly adopted strategy was to rely on less expensive or less preferred food followed by reducing portion sizes and reducing the number of meals. Having to rely on borrowing food or to reduce adult consumption, which are considered as the two most severe strategies, were applied less than one day per week on average.

The rCSI shows that the food-related coping was highest in Dakhla followed by Smara while Awserd, Boujdour and Laayoun have similar low levels.

Figure 21 Most used Food-Based Coping Strategies



Further analysis of how many household adopted coping strategies at least once during the week prior to the survey shows that some 70 percent relied on less expensive or preferred food and reducing portion sized one or more days, some half on reducing portion sizes and the number of meals eaten per day, while every fifth reduced quantities consumed by adults for children to eat.

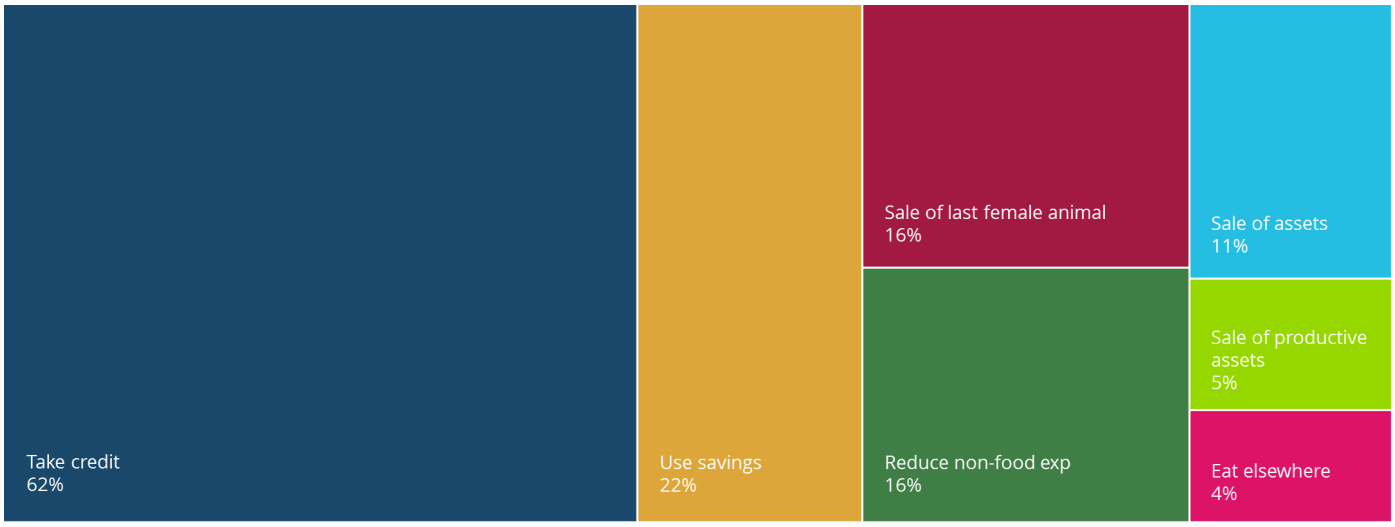
7.2 LIVELIHOOD-BASED COPING STRATEGIES

The livelihood-Based Coping Strategies indicator enhances the understanding of the longer-term household resilience and coping capacity. Households were asked if they used context-specific asset depleting strategies to cope in situations where they did not have enough food or money to buy food within the past 30 days. Together with the Food Expenditure Share, this is used to measure the coping capacity in order to evaluate households' resilience to potential shocks by providing insights into how households have coped with recent crises, the hardship they face and their risk of meeting challenges in the future. The indicator considers both households that deployed coping strategies but also households that were unable to deploy strategies because they already

exhausted these in the past.

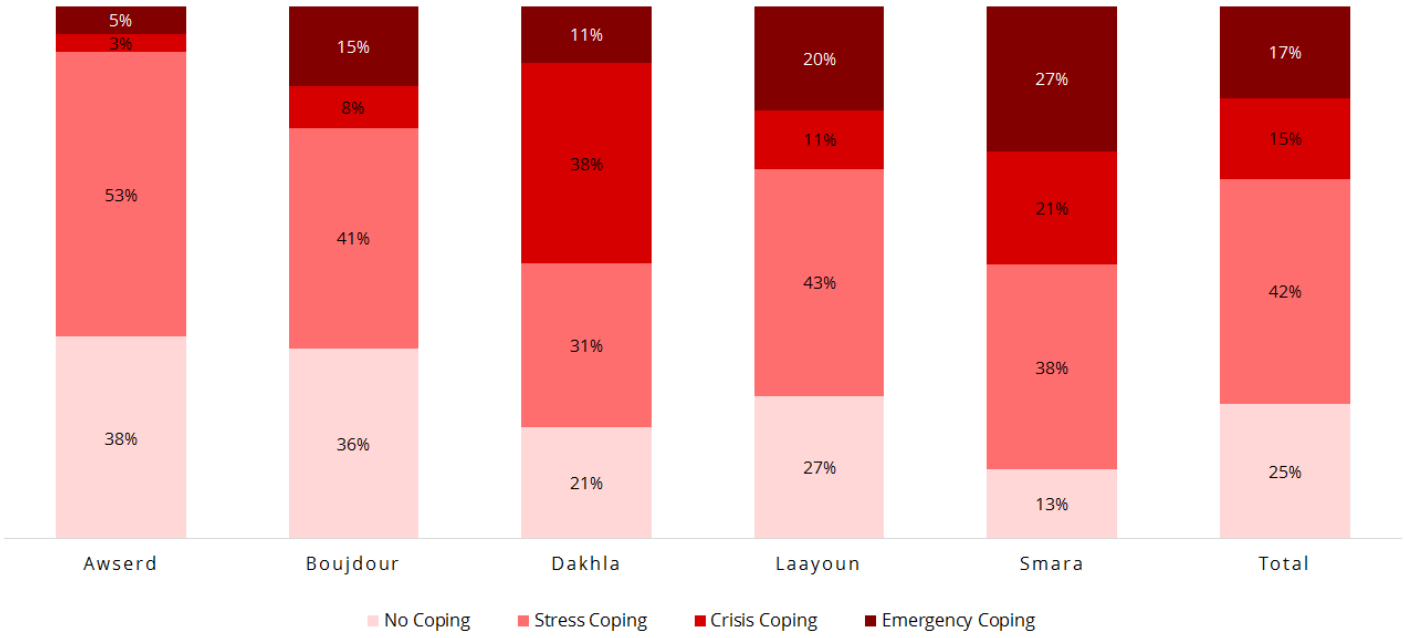
Figure 22 shows that 62 percent of the households took credit, 22 percent used savings and 16 percent sold their last female animal or reduced non-food expenditures in cover food needs. Sale of assets was applied by 11 percent of households, while five percent had to sell productive assets such as sewing machine or car and four percent had to eat elsewhere.

Figure 22 Livelihood-Based Coping Strategies adopted by household, by type



The various coping strategies are grouped and weighted according to severity into stress, crisis and emergency coping to reach the Livelihood Coping Strategy Categories. This indicator shows that 17 percent of the Sahrawi refugees applied emergency coping strategies during the 30 days prior to the survey, 15 percent crisis coping, 42 percent stress coping while 25 percent did not apply any coping strategies.

Figure 23 Livelihood-Based Coping Strategy Categories, by camp



At camp level, Smara has the highest use of emergency coping (27 percent) followed by Laayoun. While Boujdour has 15 percent of households applying emergency coping strategies it also, together with Awserd, has the highest number of households that did not apply any coping strategies.

To further analyse the use of livelihood-based coping strategies in the camps, regression analysis was conducted for the households that had adopted the most servere coping mechanisms (crisis or emergency). Since no numeric variable can be calculated based on this data only logistic regression analysis was conducted. The analysis found strong correlation between severe coping and:

- Households with high reliance on only one income source (p=.000);
- Households with livestock (p=.000);
- Households with better diets (eating vegetables and more protein than the average household) (p=.000 for both);
- Households with a rCSI above average (p=.000).

The result shows a logic correlation between asset depleting and food-related coping mechanisms adopted in the camps as well as a vulnerable income situation which can force households into selling assets, spending savings, taking credit etc. in order to cover their needs. In this concern, the fact that there is a correlation between better diets and high coping can indicate that the households take the credit to buy more nutritious food items. This hypothesis is supported by the findings in figure 14 showing that meat, dairy and vegetables are primarily purchased on the market.

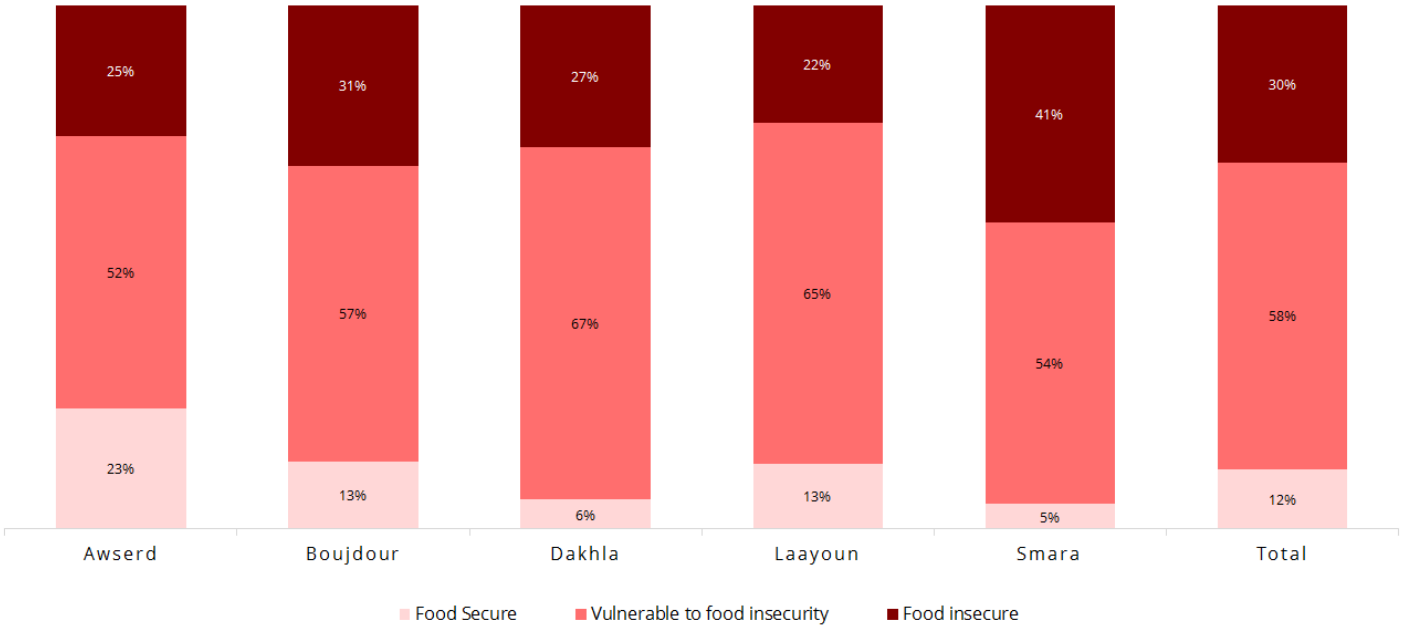
Furthermore, households where the head is above 60 years and households with members with disability proved to have a significant correlation with households adopting crisis or emergency coping mechanisms while at camp level, Awserd applied the lowest number of livelihood mechanisms and the four other camps all applied significantly more severe coping strategies, especially Dakhla and Smara.

8. FOOD SECURITY

8.1 FOOD SECURITY INDEX

The Food Security Index is WFPs corporate indicator to inform the food security situation. Each surveyed household is assigned a group, food secure, vulnerable to food insecurity or food insecure, based on their current status and coping capacity. The current status is calculated from a simple average of the Food Consumption Score while the coping capacity is calculated from a simple average of the Food Expenditure Share score, measuring the economic vulnerability, and the Livelihood Coping Strategy score, measuring the asset depletion.

Figure 23 Food Security Index, by camp



The figure shows that a total of 12 percent of the Sahrawi households are food secure, 58 percent are vulnerable to food insecurity and 30 percent are food insecure. Using the updated population figures of 173,600, this means that 52,080 people are food insecure, 100,688 are vulnerable to food insecurity and 20,832 are food secure. It should be kept in mind that this result is based on a context where 125,000 refugees are getting assistance.

The ***food secure*** group is defined as being able to meet essential food and non-food needs without engaging in atypical coping strategies. The group that is found ***vulnerable to food insecurity*** is defined as having minimally adequate food consumption without engaging in irreversible coping strategies and unable to afford some essential non-food expenditures. The ***food insecure*** groups are defined as having significant or extreme food consumption gaps or being able to meet the minimum food needs only by adopting irreversible coping strategies[11]. While the vulnerable group is considered at risk of falling into food insecurity in case of shocks such as floods, price increases and changes in assistance it is worth noting that due to the high dependency rate these shocks can also apply to the food secure group which can move to the vulnerable group.

As seen in figure 23, Awserd has the highest number of food secure households while the situation was worst in Smara and Dakhla. Smara had the highest level of food insecurity while Boujdour was also above average. Dakhla and Laayoun has some ten percentage points higher levels of vulnerable compared to the other three camps.

Worth noting is that even though Laayoun camp is overall better off than the other camps, the levels of both food insecurity and vulnerability to food insecurity should be seen as high in relation to the context where the 99.9 percent has received food rations within the survey period and given the stable, protracted situation. In this light, the initial hypothesis was that the number of food insecure would have been lower.

11 A step-by-step guide to calculate the Food Consumption Score, Food Expenditure Share, Livelihood-Coping Strategies Indicator and Food Security Index is available in the CARI technical guidelines at www.vam.wfp.org, where the definitions have also been derived from

8.2 WHO ARE THE FOOD INSECURE AND WHY ARE THEY FOOD INSECURE?

Regression analysis showed a strong correlation between food insecurity and:

- Households with members with disability (p=.001);
- Households with poorer diets (low and medium Dietary Diversity Scores) (p=.000);
- Households eating less protein (meat, dairy and pulses) than the average household (p=.000).

Regression analysis confirms a significant correlation between the five camps and food insecurity, and that Awserd, Boujdour, Dakhla and Smara have significantly more food insecure households than Laayoun. The analysis showed that households in Smara are 3.5 times as likely to be food insecure than households in Laayoun. While the percentage of food insecure in Dakhla is lower than Smara and Boujdour, it is worth noting that Dakhla has the highest number of households that are vulnerable to food insecurity and thereby a low number of food secure households (six percent).

Moreover, the regression analysis showed correlation at 90 percent confidence level between food insecurity and:

- Households where the head is not married (single, divorced, separated or widowed) (p= .076);
- Households without income from formal labour (p= .057);
- Households with only one income source (p= .080);
- Households where the main income source is accounting for more than 50 percent of the total income (p= .066).

Further analysis of whether the current status or the coping capacity drive food insecurity shows that Sahrawi households are mainly food insecure due to spending higher shares of their income on food followed by having to apply asset depleting coping strategies. Hence the Food Expenditure Share indicator is the main driver of food insecurity followed by the Livelihood Coping Strategies indicator.

The majority of food insecure households have a very high food expenditure share, applies emergency coping strategies and have borderline food consumption. For the group that is vulnerable to food insecurity, the majority have a very high food expenditure share and either a combination of borderline food consumption with less severe livelihood coping, or acceptable food consumption and emergency coping.

8.3 VULNERABLE TO FOOD INSECURITY

Considering the high proportion of the Sahrawi population being classified as 'vulnerable to food insecurity' (58 percent), it is found relevant to further break down this group by analysing and mapping the level of vulnerability to enhance the understanding of the dynamics and to forecast the effects of changes and shocks. In case of negative shocks such as floods, changes in assistance etc., parts of the group are expected to move to the food insecure group and the break-down will help understand the magnitude.

In Table 2, the 48 possible combinations of the indicators used to calculate the Food Security Index have been broken down into a population distribution table to provide a detailed view of how the households are distributed. The table shows the Food Consumption Groups horizontally with acceptable food consumption to the left of the table, borderline in the middle and poor to the right. Below is the Livelihood Coping Strategies divided into its four groups; no coping, stress, crisis and emergency coping for each food consumption group. Vertically, the Food Expenditure Share indicator divides the table into low, medium, high and very high food expenditure shares. This provides a visual overview of all possible combinations of the three indicators as well as the percentages of Sahrawi households with the individual combinations.

The dark green area shows the aggregated number of food secure (12 percent) and the dark red area shows the aggregated number of food insecure (30 percent). The area of particular interest is the yellow area, which contains the 58 percent who are vulnerable to food insecurity. Hence, the analysis will only focus on the yellow area and the individual distribution has been removed from the food secure (green) and food insecure (red) areas to provide a clearer visual overview.

Table 2 Food security indicators, population distribution model

		Food Consumption Groups											
		Acceptable				Borderline				Poor			
		Livelihood Coping Strategies				Livelihood Coping Strategies				Livelihood Coping Strategies			
		None	Stress	Crisis	Emergency	None	Stress	Crisis	Emergency	None	Stress	Crisis	Emergency
Food Expenditure Share	Low			1.6%	3.3%	4.5%	3.7%						
	Medium		7.9%	1.8%	2.1%	2.6%							
	High	2.0%	6.0%	2.4%	2.4%								
	Very high	2.8%	9.5%	5.8%									

Food secure (12%) Vulnerable to food insecurity (58%) Food insecure (30%)

Table 2 shows that though the 58 percent are all classified as one group, vulnerable to food insecurity, their individual characteristics vary between 15 different combinations of the three food security indicators, illustrated by the 15 yellow fields that all contain the proportion of Sahrawi households with the specific combination of the indicators. While the majority of the group has acceptable food consumption, their level of asset depleting coping mechanisms adopted and shares of their expenditures spent on food varies. E.g. in the third column, the group found in the top row (Group 1) contains 1.6 percent of the total Sahrawi households which all have acceptable food consumption, apply crisis coping strategies and have a low expenditure share. In the bottom row of the same column, 5.8 percent of the Sahrawi households (Group 2) have acceptable food consumption, applies crisis coping and has very high food expenditure share. Hence, both groups of households have the same level of food consumption and livelihood coping while only the level of food expenditure share differs. In this case, it can be argued that Group 2 is more vulnerable than Group 1, considering the large difference in their expenditure shares.

To further analyse the vulnerability within the group, it is divided into four groups according to the likelihood of falling into either food security or food insecurity in case of shocks. The division is made for the specific context of the Sahrawis, taking into account that the Food Expenditure Share and the Livelihood Coping Strategy Groups are the two main drivers of food insecurity in this context. Hence, the groups are divided according to how small changes in the two indicators it takes for them to change into either food security or food insecurity.

Adding up the percentages of households within each of the four groups, the 58 percent belonging to the vulnerable to food insecurity group can be split up into 11 percent 'least vulnerable', 14 percent 'marginally vulnerable', 18 percent 'moderately vulnerable' and 15 percent 'most vulnerable'.

Table 3 Food security indicators, break-down of vulnerable group

		Food Consumption Groups											
		Acceptable				Borderline				Poor			
		Livelihood Coping Strategies				Livelihood Coping Strategies				Livelihood Coping Strategies			
		None	Stress	Crisis	Emergency	None	Stress	Crisis	Emergency	None	Stress	Crisis	Emergency
Food Expenditure Share	Low			1.6%	3.3%	4.5%	3.7%						
	Medium		7.9%	1.8%	2.1%	2.6%							
	High	2.0%	6.0%	2.4%	2.4%								
	Very high	2.8%	9.5%	5.8%									

Food secure (12%) Least vulnerable (11%) Marginally vulnerable (14%) Moderately vulnerable (18%) Most vulnerable (15%) Food insecure (30%)

The light green area contains the households that are found to be least vulnerable. This group contains 11 percent of the households which have acceptable food consumption, lower food expenditure and lower use of asset depleting coping mechanisms. Considering its proximity to the food secure group, this group is likely to move into the food secure group in case of positive changes and stay in the vulnerable group in case of negative shocks.

The brown area illustrates the marginally vulnerable group which adds up to 14 percent of the total households. The group is classified by having acceptable food consumption, medium food expenditure share and medium asset deletion coping. Depending on the magnitude of a negative shock, this group can either stay vulnerable or move into food insecurity. However, considering the very high dependency on external assistance in the Sahrawi

context, this group is likely to move into food insecurity in case assistance is removed entirely.

The yellow area contains the 18 percent of the households classified as moderately vulnerable. The characteristics of this group are acceptable food consumption, higher food expenditure share and higher use of asset depleting coping mechanisms while one of the four sub-groups has borderline food consumption, low food expenditure share and no adoption of asset depleting coping mechanisms. In case of negative shocks, this group is expected to become food insecure.

Finally, the orange area contains the households that are found most vulnerable and thereby most likely to move into the food insecure group in case of shocks. The group contains 15 percent of the Sahrawi households and the group has either acceptable food consumption, high food expenditure share and high use of asset depleting coping mechanisms, or it has borderline food consumption, lower food expenditure share and lower asset depleting coping mechanisms. Considering its proximity to the food insecure group, this group can easily change into food insecurity in case of only minor negative shocks.

In case of a shock that has a high impact on mainly one of the three indicators, e.g. high inflation impacting the food expenditure share, the dynamics may be different but the same model can be used to estimate the effects.

9. CONCLUSION & RECOMMENDATONS

The assessment finds that 12 percent of Sahrawi households (20,832 individuals) are food secure, 58 percent (100,688 individuals) are vulnerable to food insecurity and 30 percent (52,080 individuals) are food insecure in the current context where 125,000 refugees are receiving food assistance. Overall, food insecurity is mainly driven by high shares of households' monthly expenditures being spent on food followed by a high use of asset depleting coping mechanisms adopted by the households, highlighting a low ability to cope in case of future shocks.

Figure 24 Food Security Index, break-down by indicator

Domain		Indicator	Food secure	Marginally food secure	Moderately food insecure	Severely food insecure
Current status	Food consumption	Food Consumption Score	*Acceptable* 63%	/	*Borderline* 32%	*Poor* 4%
Coping capacity	Economic vulnerability	Food Expenditure Share	*<50%* 27%	*50-65%* 22%	*65-75%* 19%	*>75%* 33%
	Asset depletion	Livelihood Coping Strategy	*No coping* 25%	*Stress* 42%	*Crisis* 15%	*Emergency* 17%
Food Security Index			12%	58%	28%	2%
			20,832	100,688	52,080	

Differences were found across the camps with Smara being worst off followed by Dakhla, while the food security situation was best in Laayoun. Dakhla proved different from the other camps throughout the analysis, from having very different demographic household composition to having very high food expenditure shares and the highest level of households with poor food consumption.

Analysis showed very high dependency on external assistance and local support networks, the latter among others shown by the high use of debt taking from especially shop keepers and the vast majority of food (79 percent) being sourced from assistance, gifts, and borrowing. This shows that the situation is chronic and vulnerable to external shocks and especially the large middle group (58 percent) who is vulnerable to food insecurity can both improve and deteriorate the food security situation. Consequently, it is important to regularly monitor changes in factors that can potentially influence the food security situation.

The assessment found a low level of livelihood and income opportunities which is negatively contributing to the coping capacity towards shocks. Consequently, enhanced livelihood opportunities are needed to improve the food security situation. Relevant to consider in this regard is that the 35 percent of households owning livestock were found to have lower food expenditure shares, higher dietary diversity including higher intake of dairy products, and income coming from small business and livestock.

Overall, diets showed a low intake of animal protein, vegetables and fruits which should be improved and ideally be taken into consideration when designing livelihood projects.

Based on the assessment findings, the following actions are recommended:

CONTINUE PROVIDING FOOD ASSISTANCE

- It is recommended to provide food assistance to the 52,080 food insecure while the 100,688 marginally food insecure may need either food or other kind of assistance that supports their food security and nutrition;

EXPAND LIVELIHOOD OPPORTUNITIES

- Seek to expand the programme portfolio by offering resilience activity opportunities complementary to food assistance for the population. It is recommended to organise qualitative discussions between community, local authorities and humanitarian partners to identify which opportunities are of interest to the Sahrawis and how these could be feasible;

- Possible areas could be expanding or diversifying small livestock projects as the assessment found that this contributes to not only improved diets but also for other aspects of food security;
- Consider if there is more room for small business opportunities.

IMPROVE NUTRITION

- It is recommended to look into potential longer-term solutions to increase the availability of animal protein foods in households' diets, possibly in combination with improving the livelihood opportunities;
- The low intake of vegetables and fruits should be improved through food basket composition and diversification, including looking to stabilise fresh food availability and access as well as iron and protein-rich foods and nutrition sensitization. At the same time longer-term solutions should be assessed jointly by all partners working on nutrition;
- The assessment findings on food consumption should be followed up by thematic qualitative nutrition studies, taking into consideration the recommendations from the 2016 WFP Nutrition Survey and the 2018 WFP Decentralized Evaluation of the nutrition activity;
- Effort should be put on finding alternative comfort foods for the households to replace some of the very frequent consumption of sugar and tea, as these items are contributing negatively to the high rates of obesity while making up high shares of total expenditures (30 percent). In this regard, a study could be conducted to better understand how meal and tea consumption are correlated as this may explain the high anaemia rates.

MONITOR THE FOOD SECURITY SITUATION

- Considering the vulnerable situation, factors that could influence the food security situation should be closely monitored;
- It is recommended to continue collecting and monitoring market prices across the camps and in Tindouf on a monthly basis;
- The availability of food in shops should be observed to follow the food access which the assessment found to negatively influence the food security situation;
- Humanitarian partners and local governments should closely monitor the assistance levels across sectors since bottlenecks in one sector can negatively impact others.

10. ANNEXES

10.1 TERMS OF REFERENCE

FOOD SECURITY ASSESSMENT 2018
Sahrawi Refugee Camps, Tindouf, Algeria
Terms of Reference

Background
In January 2017, following a mission from WFP HQ regarding the food security situation in the camps and the need for evidence based food security information. WFP (CO, RBC, HQ) in consultation with the Algerian and Sahrawi Red Crescents agreed to conduct a food security assessment among the Sahrawi refugees in Tindouf to determine the level of food assistance needs.

Since a comprehensive nutrition survey was released shortly thereafter which included food security information at camp level. In line with its Transitional Interim Country Strategic Plan (TICSP), WFP do need to collect additional data to determine the proportion of the refugees who are food insecure. This proportion can be transferred to number of people in need by using the expected Refugee population figure that is currently under validation by UNHCR.

In addition to analysing the numbers of food insecure people, WFP Algeria Office needs to establish baselines for the new Interim Country Strategic Plan's indicators by March 2018 (CSP is expected to commence in 2019). Such baselines are normally done through outcome PDM surveys and until recently, the outcome PDM data has been collected monthly with data analysed on a quarterly basis.

To align WFP Algeria operation with the new WFP's Corporate Results Framework (CRF) and the revised corporate monitoring requirements, the following changes and adjustments are needed:

- Integration of nutrition-sensitive components in the Food Consumption Module
- Inclusion of new household purchasing power's indicators which involves collection of food and non-food expenditure data from a representative sample of households and market analysis to calculate the minimum expenditure basket (MEB)
- Inclusion of livelihood coping section enables the calculation of food security categories.
- Updating WFP's corporate indicators related to accountability to affected populations, gender, and security
- Changing outcome PDM data collection to bi-annual (collection cycles: March, September/October)
- A new corporate technology platform (MDCA) for data collection.

To combine the food security assessment that is required for understanding the food assistance needs, and PDM survey that is needed for establishing the baseline, WFP Algeria is suggesting to move forward and merge these two exercises by using the PDM tool to inform extensively the Food Security Assessment. For the sake of consistency, the March 2018 exercise will be called as 'Food Security Assessment' instead of PDM survey due to the exceptionally high sampling requirement.

Methods
Aim
- To establish a baseline for WFP operational outcomes; and
- To analyse what is the food security situation among the Sahrawi refugees by camp.
- The results will be used to guide WFP programming for the currently developed Country Strategic Plan from 2019 onwards.

Population to be assessed
- Sahrawi Refugee Households in each of the five camps

Objectives
- Determine food security levels of the Sahrawi refugees.
- Determine the Food Consumption Score and consumption of Vitamin A, Protein, and Haem Iron rich foods of households.
- Determine household purchasing power and market dynamics.
- Determine the extent to which negative coping strategies are used in households.
- Assess WFP corporate monitoring indicators related to accountability to affected populations, gender, and security.

Sample size calculation and sampling of households at camps

- The assessment follows WFP's sampling guidelines.
- The sample is representative at 95% confidence interval, 5% precision and the assumed prevalence is 50% (as there is no baseline for some of the new indicators). As the population is expected to be homogenic, no design effect was assumed. This leads to sample size of 384 households.
- As data is needed to be representative at camp level, total of 384 household interviews will be conducted in each camp, leading to total assessment sample of 1,920 households.
- After the training of assessment staff and field testing of the questionnaire, the total number of households will be divided in 30 or 35 clusters with a range of 15 to 10 households per cluster, as done for the 2016 Nutrition Survey.
- In addition to the household visits, the assessment team will collect data from markets in each of the camps.

Assessment Schedule

The assessment is programmed to take place in March 2018. Before start of the field work, all enumerators will be trained 3 days at class room, followed by a practical day: morning to field test the questionnaire in refugee camps followed by afternoon of feedback from the field testing.

Data will be collected simultaneously from each camp by 30-40 CISP enumerators, divided between camps, and the expected duration for data collection is 3 weeks. Preliminary findings are expected to be available within two weeks after the data collection followed by preliminary report within one month after data collection.

From WFP side, the assessment technical planning and supervision is done by the Cairo Regional Bureau who are responsible for the enumerator training, data quality check, analysis, and writing of the assessment report in close collaboration with WFP Algeria team. Cairo team will also be responsible for presenting the assessment results. There will be also introduction and end meeting with local authorities and other stakeholders in the camps and Algiers.

Outputs and Documents

- **Food security assessment - Terms of reference (TOR):** The food security assessment TOR will be produced in English.
- **Food security assessment questionnaires:** The assessment questionnaires will be produced first in English to facilitate discussion of what information will be included. The final versions will then be translated into Arabic that is known by all the enumerators. The questionnaires will be further refined and finalised during the training of the assessment enumerators, to ensure completeness of the translations that leads to collection of high quality data.
- **Data management:** Data will be collected using tablets and paper copies serve as a back-up option. Data entry format is developed and maintained by WFP Algeria team. Data quality and consistency will be checked on daily basis during the first week and thereafter at the end of each week.
- **Training of the assessment enumerators:** A 3+1-day long training will be delivered to the food security assessment enumerators to ensure complete understanding of roles and responsibilities, the assessment design; as well as the correct understanding of the assessment questionnaires.
- **Technical oversight and supervision for the assessment implementation:** WFP Algeria team will provide technical oversight and supervision of the assessment teams during the assessment field work. WFP Cairo Regional Bureau team will be on site during training and first days of data collection to properly hand over the supervision to the Country Office team, while continuing to be on stand-by for support.
- **Assessment datasets:** Following final reception of the digital capture of all the completed questionnaires at the end of the assessment, the data will be transported to SPSS for cleaning and analysis. Datasets will be labelled in English.
- **Assessment preliminary results:** No later than two weeks after receipt of the database at the end of the assessment, preliminary results of the key food security indicators will be available in PowerPoint format in English.
- **Assessment preliminary report:** One month after the receipt of the database at the end of the assessment, a report will be delivered written in English containing the assessment preliminary results. The results will include all standard food security indicators, analysed and reported as per WFP's guidelines.
- **Presentation of the assessment results:** WFP Cairo Regional Bureau technical staff will make a presentation of the assessment results for the Sahrawi authorities ideally around the same time as the preliminary report is presented. Such presentations can be made in the camps and Algiers. Interpretation of the results as well as additional analysis topics can be discussed.
- **Assessment final report:** The final version of the full report will be produced in English to facilitate discussion. The final approved and cleared version will then be translated into Spanish to be presented to the Saharawi authorities. Only after the translation of the assessment report is finalised, will dissemination of the assessment results be carried out.

10.2 SAMPLE FRAME

Awserd

Daira	Barrio	Population	Cluster
Zug	Barrio 1	981	1, 2
	Barrio 2	981	3
	Barrio 3	981	4, 5
	Barrio 4	982	6
Miyek	Barrio 1	1,113	7, 8
	Barrio 2	1,113	9, 10
	Barrio 3	1,113	-
	Barrio 4	1,114	11, 12
Biz-genduz	Barrio 1	1,078	13, 14
	Barrio 2	1,078	15
	Barrio 3	1,078	16, 17
	Barrio 4	1,078	18
Aguenit	Barrio 1	965	19
	Barrio 2	965	20
	Barrio 3	965	21
	Barrio 4	964	22
Tichla	Barrio 1	1,016	23, 24
	Barrio 2	1,017	25
	Barrio 3	1,017	26, 27
	Barrio 4	1,017	28
La Gouera	Barrio 1	1,263	29
	Barrio 2	1,263	30, 31
	Barrio 3	1,263	32, 33
	Barrio 4	1,263	34, 35
Total	**24**	**25,668**	**35**

Boujdour

Daira	Barrio	Population	Cluster
27 Febrero	Barrio 1	4,609	1, 2, 3, 4, 5
	Barrio 2		6, 7
	Barrio 3		8, 9, 10
	Barrio 4		11, 12, 13, 14
Lemsid	Barrio 1	4,611	15
	Barrio 2		16, 17, 18, 19, 20
	Barrio 3		21, 22, 23, 24, 25
	Barrio 4		24, 25
Agti	Barrio 1	3,904	26, 27, 28, 29, 30
	Barrio 2		31, 32, 33, 34
	Barrio 3		35
	Barrio 4		-
Total	**24**	**13,124**	**35**

Dakhla

Daira	Barrio	Population	Cluster
Ain-el beida	Barrio 1	476	1
	Barrio 2	476	2
	Barrio 3	476	3
	Barrio 4	477	4
Bir-Enzaran	Barrio 1	550	5, 6
	Barrio 2	551	7
	Barrio 3	551	8, 9
	Barrio 4	551	-
Glaibat el F	Barrio 1	552	10
	Barrio 2	552	11, 12
	Barrio 3	552	13
	Barrio 4	553	14, 15
Tiniguir	Barrio 1	538	16
	Barrio 2	538	17
	Barrio 3	538	18
	Barrio 4	538	19
J-Raifia	Barrio 1	601	20, 21
	Barrio 2	601	22
	Barrio 3	601	23
	Barrio 4	602	24
El-Argub	Barrio 1	501	25
	Barrio 2	501	26, 27
	Barrio 3	502	28
	Barrio 4	502	-
Um-Edraiga	Barrio 1	618	29, 30
	Barrio 2	619	31
	Barrio 3	619	32, 33
	Barrio 4	619	34, 35
Total	**28**	**15,355**	**35**

Laayoun

Daira	Barrio	Population	Cluster
Amgala	Barrio 1	1,478	1, 2
	Barrio 2	1,478	3
	Barrio 3	1,478	4, 5
	Barrio 4	1,478	6
Dchera	Barrio 1	1,326	7, 8
	Barrio 2	1,326	9
	Barrio 3	1,326	10, 11
	Barrio 4	1,326	12, 13
Daoura	Barrio 1	1,502	14
	Barrio 2	1,502	15, 16
	Barrio 3	1,502	17, 18
	Barrio 4	1,501	19

Hagouina	Barrio 1	1,414	20, 21
	Barrio 2	1,413	22
	Barrio 3	1,414	23
	Barrio 4	1,413	24, 25
Bucraa	Barrio 1	1,516	-
	Barrio 2	1,516	26, 27
	Barrio 3	1,516	28
	Barrio 4	1,516	29
Guelta	Barrio 1	1,514	30, 31
	Barrio 2	1,513	32, 33
	Barrio 3	1,514	34
	Barrio 4	1,513	35
Total	**24**	**34,995**	**35**

Smara

Daira	Barrio	Population	Cluster
Edjeira	Barrio 1	1,377	1, 2
	Barrio 2	1,378	-
	Barrio 3	1,378	3
	Barrio 4	1,378	4
Farsia	Barrio 1	1,453	5, 6
	Barrio 2	1,453	7, 8
	Barrio 3	1,453	9
	Barrio 4	1,453	10, 11
Mahbes	Barrio 1	1,114	12
	Barrio 2	1,114	-
	Barrio 3	1,115	13
	Barrio 4	1,115	14, 15
B-Lehlu	Barrio 1	1,038	16
	Barrio 2	1,039	17
	Barrio 3	1,039	18
	Barrio 4	1,039	19
Hauza	Barrio 1	1,313	20, 21
	Barrio 2	1,313	22
	Barrio 3	1,314	23, 24
	Barrio 4	1,314	25
Tifariti	Barrio 1	1,203	26
	Barrio 2	1,203	27
	Barrio 3	1,203	28
	Barrio 4	1,204	29
Mheiriz	Barrio 1	1,278	30, 31
	Barrio 2	1,279	32
	Barrio 3	1,279	33
	Barrio 4	1,279	34, 35
Total	**28**	**35,118**	**35**

10.3 QUESTIONNAIRE

1. معلومات أساسية (تستكمل قبل الوصول إلى الأسرة)			
معلومات المقابل	1.1	اسم المقابلة (المجرد)	|_____|
	1.2	رقم الاستجواب	| __ __ __ __ __ __ __ __ __ __|
	1.3	تاريخ المقابلة (اليوم/ الشهر/ السنة)	|__ __/__ __/__ __|
مكان الأسرة	1.4	اسم المخيم	|_____|
	1.5	مكان السكن الحالي (المخيم/الدائرة/الحي)	|_____|
معلومات الأسرة	1.6	اسم رب الأسرة	|_____|

2. الديموغرافيا							
2.1	هل تلقت العائلة مساعدة غذائية خلال 4 أسابيع الماضية من برنامج الأغذية العالمي؟ إذا كان الجواب بالنفي، انتقل إلى السؤال 2.3					لا :0 نعم :1	|___|
2.2	كم عدد الحصص المتوقع(المفروض) ان تتلقاها أسرتك خلال الأسابيع 4 الماضية من برنامج الأغذية العالمي؟						|___|
2.3	ملاحظة: هل تجري مقابلة مع رجل أم امرأة؟	ذكر :1 أنثى :2	|___|	2.4	ما هو **جنس** رب الأسرة؟	ذكر :1 أنثى :2	|___|
2.5	ما هي الحالة الاجتماعية لرب الأسرة؟				أعزب :1 متزوج :2 مطلق/منفصل :3 أرمل :4		|___|
2.6	ما هو عمر رب الأسرة؟ (بالسنوات)		|___|	2.7	ما هو حجم الأسرة؟ (بما في ذلك رب الأسرة)		|___|
2.8	عدد أفراد أعضاء الأسرة	a. اقل من سنتين	b.2-4 سنوات	c. 5-17 سنة	d. 18-59 سنة	e. أكثر من 60 سنة	
2.8.1	ذكر	|___|	|___|	|___|	|___|	|___|	
2.8.2	أنثى	|___|	|___|	|___|	|___|	|___|	
2.9	كم من أعضاء الأسرة الإناث حوامل أو مرضعات؟						|___|
2.10	كم من الذين أعمارهم 59-18 في الأسرة معالين (بما في ذلك الأشخاص ذوو الإعاقة، والمصابون بأمراض مزمنة، وغيرهم) ؟ أي اضطراب يستمر على مدى فترة طويلة (3 أشهر على الأقل) ويؤثر على الأداء البدني والعاطفي والفكري والمهني والاجتماعي والروحي. والأمثلة الشائعة هي مرض السكري وأمراض القلب والربو وما إلى ذلك						|___|
2.11	كم أعضاء الاسرة الذين يعانون مما يلي						
2.11.1	امراض مزمنة	|___|	2.11.2	اعاقة			|___|

3. درجة استهلاك الأغذية			
فقط للنساء الحوامل والمرضعات يوم أمس، هل أكلت (c) المواد الغذائية التالية؟	المصدر الرئيسي كيف تم الحصول (b) على هذا الغذاء؟ اكتب المصدر الرئيسي للغذاء خلال ال 7 أيام الماضية	نمط الاستهلاك كم عدد أيام الأكل (a) في الأيام 7 الماضية إذا كان '0'، لا تحدد المصدر الرئيسي	على مدى الأيام السبعة الماضية كم عدد الأيام التي تناول أفراد أسرتك المواد الغذائية التالية وما هو المصدر؟ (اكتب 0 إذا لم تستهلك في آخر 7 أيام) لا تحسب الأغذية المستهلكة بكميات قليلة جدا أو المواد التي يستهلكها فرد واحد فقط من أفراد الأسرة.
لا :0 نعم :1 لا توجد نساء حوامل ومرضعات في الأسرة :99	لم يأكل:0 إنتاج ذاتي :1 مساعدة غذائية(برنامج غ ع أو منظمات أخرى) :2 تلقي هدية من الأقارب أو الأصدقاء :3 شراء من السوق :4 مقايضة(بدل) :5 تجمع(مناسبة- فرح-سبوع -وفاة) :6 دين أو سلف:7	لم يؤكل :0 يوم واحد :1 يومان :2 أيام3 :3 أيام4 :4 أيام5 :5 أيام6 :6 كل يوم :7	

3.1.1	**النشويات و الدرنات:** الأرز و العجائن و دقيق القمح و الشعير و البطاطس و الخبز	|___|	|___|	|___|
3.1.2	**البقول والمكسرات والبذور**: الفول، الحمص، العدس، اللوز، البازلاء ، المكسرات	|___|	|___|	|___|
3.1.3	**الحليب ومنتجات الألبان**: الزبادي ومسحوق الحليب والحليب الطازج والجبن	|___|	|___|	|___|
3.1.4	**البيض واللحم (لحم الأعضاء و لحم اللحم) والسمك**: الجمل و البقر والدجاج والضأن والماعز والتونة	|___|	|___|	|___|
	إذا كان 0 -> انتقل إلى السؤال 3.1.5			
3.1.4.1	**لحم اللحم:** الجمل، الضأن، الماعز، الدجاج، لحم البقر	|___|	|___|	|___|
3.1.4.2	**لحم الأعضاء:** الكبد، الكلى، القلب أو الأعضاء الأخرى (**الأفشاي**)	|___|	|___|	|___|
3.1.4.3	**الأسماك / المحار:** الأسماك المعلبة والأسماك الطازجة والأسماك المجففة و التونة	|___|	|___|	|___|
3.1.4.4	**البيض**	|___|	|___|	|___|
3.1.5	**الخضروات والأوراق:** السبانخ والخيار والباذنجان والكورجيت والفلفل والجزر والبصل والطماطم	|___|	|___|	|___|
	إذا كان 0 -> انتقل إلى السؤال 3.1.6			
3.1.5.1	**الخضروات البرتقالية اللون (فيتامين (أ):** الجزر و الفلفل الأحمر و القرع والبطاطا الحلوة	|___|	|___|	|___|
3.1.5.2	**الخضروات الورقية الخضراء**: السبانخ، القرنبيط، أوراق الكرمة	|___|	|___|	|___|
3.1.6	**الفواكه**: البرتقال و التفاح و الموز و التمر و البطيخ	|___|	|___|	|___|
	إذا كان 0 -> انتقل إلى السؤال 3.1.7			
3.1.6.1	**الفواكه البرتقالية اللون (فيتامين أ)**: البطيخ الشمام و المانجو و البابايا والمشمش و الخوخ	|___|	|___|	|___|
3.1.7	**زيت / دهون**: زيت نباتي و زيت زيتون و زبدة و سمن نباتي و دهون حيوانية	|___|	|___|	|___|
3.1.8	**السكر / الحلويات**: السكر والعسل والكعك والمشروبات السكرية / الشاي	|___|	|___|	|___|
3.1.9	**التوابل/ البهارات:** الثوم وصلصة الطماطم	|___|	|___|	|___|
3.1.10	مزيج الصويا و الذرة (**CSB**) / غوفيو	|___|	|___|	|___|

4. استراتيجيات التكيف القائمة على الاستهلاك

	في الأيام السبعة الماضية، إذا كانت هناك أوقات لم يكن لديك فيها ما يكفي من الغذاء أو المال لشراء الطعام، كم مرة اضطرت أسرتك إلى:	أيام 4 :4 غير مطبق :0 أيام 5 :5 يوم واحد :1 أيام 6 :6 يومان :2 كل يوم :7 أيام3 :3
4.1	الاعتماد على الأغذية الأقل تفضيلا و الأقل تكلفة؟	|___|
4.2	إعارة الأغذية أو الاعتماد على مساعدة من الأصدقاء أو الأقارب؟	|___|
4.3	تقليل عدد الوجبات التي تؤكل يوميا؟	|___|
4.4	تقليل حجم حصة الوجبات؟	|___|
4.5	تقليل الكميات التي يستهلكها الكبار حتى يتمكن الأطفال من تناول الطعام؟	|___|

5. استراتيجيات التكيف القائمة على سبل العيش

	خلال ال 30 يوما الماضية، هل كان على أي شخص في أسرتك الانخراط في أي من الأنشطة التالية لأنه لم يكن هناك ما يكفي من الطعام أو المال لشراء الطعام؟	لا :0 نعم :1	**إذا كان الجواب بالنفي "لا" فلماذا؟** لا حاجة لاستخدام الاستراتيجية التكيف هذه :0 سبق استنفاد هذه الاستراتيجية :1
5.1	بيع ممتلكات /حاجيات الاسرة (راديو، أثاث، ثلاجة، تلفزيون)	|___|	|___|
5.2	استهلاك المدخرات	|___|	|___|
5.3	شراء الاغذية بالإنتمان أو استعارة الاغذية	|___|	|___|
5.4	إرسال أفراد الأسرة لتناول الغذاء في أماكن أخرى	|___|	|___|
5.5	بيع الممتلكات الإنتاجية أو وسائل النقل (آلة الخياطة، عربة يدوية ، دراجة، سيارة، الخ)	|___|	|___|
5.6	سحب الأطفال من المدرسة	|___|	|___|
5.7	تقليل النفقات غير الغذائية على الصحة (بما في ذلك الادوية) والتعليم	|___|	|___|
5.8	بيع منزل أو أرض	|___|	|___|
5.9	بيع آخر الحيوانات الإناث(الولادة)	|___|	|___|

6. النفقات والدخل والائتمان

		كم تنفق أسرتك على المواد التالية خلال الشهر الماضي ('0' إذا لم تكن هناك نفقات) (اطلب من المجيب تقدير إجمالي القيمة النقدية للمواد لمدة 30 يوما.) **الشهر الماضي**		
	6.1 **نفقات الغذاء**	a. نقد	b. الشراء بالائتمان **بالديـــــــــن**	c. تلقي كمساعد/هبة/انتاج ذاتي **مجانا**
6.1.1	**نشويات ودرنات** (الذرة والأرز والذرة الرفيعة والقمح والخبز و المكرونة)	DZD |_____|	DZD |_____|	DZD |_____|
6.1.2	**الدرنات** (البطاطس، وجذور)	DZD |_____|	DZD |_____|	DZD |_____|
6.1.3	**البقول** (الفاصوليا، والبازلاء، والفول السوداني و حمص وعدس)	DZD |_____|	DZD |_____|	DZD |_____|
6.1.4	فواكه وخضراوات	DZD |_____|	DZD |_____|	DZD |_____|
6.1.5	الأسماك / اللحوم / البيض / الدواجن	DZD |_____|	DZD |_____|	DZD |_____|
6.1.6	الزيت والدهون والزبدة	DZD |_____|	DZD |_____|	DZD |_____|
6.1.7	الحليب والجبن والزبادي	DZD |_____|	DZD |_____|	DZD |_____|
6.1.8	السكر / الملح الكيك والبسكويت والعسل و المربى و مشروبات غازية أو سكرية	DZD |_____|	DZD |_____|	DZD |_____|
6.1.9	شاى و قهوة	DZD |_____|	DZD |_____|	DZD |_____|
6.1.10	الوجبات / الوجبات الخفيفة الأخرى المستهلكة خارج المنزل	DZD |_____|	DZD |_____|	DZD |_____|

		كم تنفق أسرتك على المواد التالية خلال الشهر الماضي ('0' إذا لم تكن هناك نفقات) **الشهر الماضي**		
	6.2نفقات الاسرة على المدى القصير	a. نقد	b. الشراء بالائتمان **بالديـــــن**	c. تلقي مساعدة/ هبة **مجـــانا**
6.2.1	نفقات الطهي (المواد غير الغذائية، الغاز، الفحم ومواد التدفئة)	DZD |_____|	DZD |_____|	DZD |_____|
6.2.2	الماء	DZD |_____|	DZD |_____|	DZD |_____|
6.2.3	وسائل النظافة	DZD |_____|	DZD |_____|	DZD |_____|
6.2.4	التبغ	DZD |_____|	DZD |_____|	DZD |_____|
6.2.5	الأعلاف الحيوانية وعلاج الحيوانات	DZD |_____|	DZD |_____|	DZD |_____|
6.2.6	النقل	DZD |_____|	DZD |_____|	DZD |_____|
6.2.7	الاتصالات أو التيليفونات	DZD |_____|	DZD |_____|	DZD |_____|
6.2.8	الوقود (مازوت أو بنزين	DZD |_____|	DZD |_____|	DZD |_____|

		كم تنفق أسرتك على المواد التالية خلال الستة أشهر الماضية ('0' إذا لم يكن هناك إنفاق) **الشهر الماضي**		
	6.3نفقات الأسرة على المدى الطويل	a. نقد	b. الشراء بالائتمان **بالديـــن**	c. تلقي مساعدة/ هبة **مجـــانا**
6.3.1	المناسبات الاجتماعية (حفلات الزفاف، الاعياد، االوفاة، السبوع .... الخ)	DZD |_____|	DZD |_____|	DZD |_____|
6.3.2	الكهرباء	DZD |_____|	DZD |_____|	DZD |_____|
6.3.3	البناء / ترميم المنازل	DZD |_____|	DZD |_____|	DZD |_____|
6.3.4	ذات الصلة بالصحة	DZD |_____|	DZD |_____|	DZD |_____|
6.3.5	ذات صلة بالتعليم	DZD |_____|	DZD |_____|	DZD |_____|
6.3.6	الأدوات المنزلية الأساسية (الأثاث، التلفزيون، الثلاجة، الهاتف، مكيف الهواء وما إلى ذلك)	DZD |_____|	DZD |_____|	DZD |_____|
6.3.7	الملابس و الاحذية	DZD |_____|	DZD |_____|	DZD |_____|
6.3.8	سداد الديون	DZD |_____|	DZD |_____|	DZD |_____|
6.3.9	المدخرات (توفير المال)	DZD |_____|		
6.3.10	جميع النفقات الأخرى	DZD |_____|	DZD |_____|	DZD |_____|

6.4	هل هذه النفقات غير عادية مقارنة بالفترات الأخرى من **السنة؟**(إذا كان لا، إنتقل إلى 6.5.1)	لا :0 نعم :1	|_____|
6.4.1	إذا كانت الإجابة بنعم، أيها على وجه الخصوص؟ (اكتب عدد النفقات من الجزء 6.1-6.3)		|_____|

6.5 **الدخل** ما هي مصادر الدخل الرئيسية الثلاثة التي تستخدمونها لتغطية هذه النفقات؟		(a) العمل الرسمي(الثابت) :1 العمالة غير الرسمية(الغير الثابت) :2 الأعمال الصغيرة (مشاريع أو أعمال خاصة):3 الثروة الحيوانية 4: القرابة / الهدايا من العائلة / الأصدقاء :5 المساعدة الخارجية (من المنظمات غير الحكومية ووكالات الأمم المتحدة والحكومة) :6 الاقتراض(الدين) :7 التوفير :8 المعاش التقاعدي :9 التحويلات من الخارج(**مهاجر**) :10 99: N/A	(b) يرجى تقدير المساهمة النسبية في إجمالي الدخل لكل نشاط (يجب أن يكون المجموع100**%**)	
6.5.1	مصدر الدخل الرئيسي الأساسي	|___|	%|____|	
6.5.2	مصدر الدخل الثاني	|___|	%|____|	
6.5.3	مصدر الدخل الثالث	|___|	%|____|	
6.5.4	هل تمتلك الأسرة مواشي		لا :0 نعم :1	|____|
6.5.5	إذا كانت الإجابة بنعم (من فضلك ضع دائرة على الإختيارات الآتية)		جمال.1 ماعز .2 .3بقرة جاج .4 غنم .5 أشياء أخرى .6	
6-6الدين				
6.6.1	هل أخذت أي ديون خلال ال 6 أشهر الماضية؟ (يرجى أخذ بعين الاعتبارالديون المسجلة في 6.1 الى6.3) **(إذا كان "لا"، انتقل إلى الجزء 7)**		لا :0 نعم :1	|___|
6.6.2	ما هو مقدار هذا الدين (بالدينار الجزائري)		DZD |_____|	
6.6.3	ما هو السبب الرئيسي لهذا الدين؟	شراء الطعام :1 تغطية النفقات الصحية :2 شراء علف الحيوان، البيطري :3 شراء الوسائل الزراعية (البذور، الأدوات، الخ) :4 شراء الحيوانات :5 شراء الملابس والأحذية :6 دفع ثمن الاحتفالات :7 دفع الضرائب و الخدمات :8 بدء الأعمال :9 البناء :10 لا يوجد :11	|___|	
6.6.4	كم من الوقت ستستغرق لتسديد الدين؟ **(بالأسابيع)**		|___|	
6.6.5	من الذي قدم لك الدين؟	أقرباء :1 جار / صديق :2 مؤسسة ائتمان رسمية لبنك / منظمة قروض صغيرة) :3 مؤسسة ائتمان غير رسمية (مورد أو مركز اجتماعي) :4 منظمات غير حكومية :5 صاحب متجر :6	|___|	

7. المساعدة: المسؤولية و الارتياح و الاستحقاق و الاستخدام			
7.1	**هل تعرف كيف تم اختيار الناس لتلقي المساعدة من برنامج الأغذية العالمي؟** إذا كانت الإجابة بنعم، يرجى وصف الطريقة التي تم اختيارهم بها (إذا كان المستجوب غير قادر على وصف هذا، يجب أن يكون الجواب لا)	لا :0 نعم :1	|___|
7.2	هل قيل لك بالضبط ما الذي يحق لك الحصول عليه؟ ملاحظة للمحاسب: إذا كانت الإجابة بنعم، يرجى وصف استحقاقاتك (إذا كان المستجوب غير قادر على الوصف بشكل صحيح، يجب أن تكون الإجابة **لا** على هذا السؤال)	لا :0 نعم :1	|___|
7.3	**هل تعرف متى ينتهي برنامج المساعدة الغذائية الذي تشارك فيه من برنامج الغذية العالمي؟** (إذا كان المستفتى غير قادر على الوصف بشكل صحيح، يجب أن تكون الإجابة **لا** على هذا السؤال)	لا :0 نعم :1	|___|
7.4	**إذا كنت ترغب في الاتصال بالوكالة التي تقدم المساعدة (برنامج الأغذية العالمي أو شريك) حول أي شيء - على سبيل المثال، لطرح سؤال أو تقديم شكوى - هل تعرف ماذا تفعل / بمن تتصل؟** ملاحظة للمحاسب: إذا كانت الإجابة بنعم، يرجى الوصف (إذا كان المستجوب غير قادر على وصف هذا، يجب أن يكون الجواب **لا**)	لا :0 نعم :1	|___|
7.5.1	هل تذهب إلى نقطة التوزيع للحصول على حصتك أو يتم إيصالها إلى منزلك؟ (إذا كان يتم إيصالها، انتقل إلى 6.7)	يتم التقاطها :1 يتم إيصالها :2	|___|
7.5.2	ما هي المدة التي قضيتها في نقطة التوزيع أثناء التوزيع الأخير؟ (بالدقائق)		|_____|
7.5.3	كيف يمكنك نقل الأغذية إلى المنزل؟	حمل على الأقدام :1 عربة يدوية :2 دراجة :3 سيارة :4 حمار :5 غير ذلك :6	|___|
7.6	هل تحملت أي تكاليف لنقل الأغذية إلى المنزل؟ (إذا كان "لا"، انتقل إلى 7.7)	لا :0 نعم :1	|___|
7.6.1	إذا كانت الإجابة بنعم، كيف دفعت؟	عيني :1 نقد :2 غير ذلك :3	|___|
7.7	خلال فترة التوزيع الأخيرة، هل استلمت كمية الطعام التي كان من المفترض أن تستلمها وتم إبلاغك لتلقيها؟	لا :0 نعم :1	|___|
7.8	إذا تم استلام أي من المواد الغذائية التالية من برنامج الغذية العالمي خلال الشهر الماضي للعائلة، يرجى ذكر كمية كل منها:		

			الكمية	برنامج الأغذية العالمي	
|_____|Kg	الفاصوليا	7.8.6	|_____|Kg	دقيق القمح	7.8.1
|_____|Kg	العدس	7.8.7	|_____|Kg	الأرز	7.8.2
|_____|Kg	السكر	7.8.8	|_____|Kg	الشعير	7.8.3
|_____| L	الزيت	7.8.9	|_____|Kg	العجائن	7.8.4
			|_____|Kg	خليط الذرة و الصويا	7.8.5

7.9.1	هل شاركت الأسرة المواد التي يقدمها برنامج الأغذية العالمي؟	لا :0 نعم :1 |___|
7.9.2	إذا كانت الإجابة بنعم، فمن الذين شاركوا الطعام؟ (يرجى وضع دائرة على كل ما ينطبق عليه) **(من الممكن أن يكون لديك خيارات متعددة)**	الجيران :1 الزوار :2 الأسرة الموسعة :3 آخرون :4
7.10.1	هل تم بيع أو تبادل أي منتجات في إطار المساعدة التي يقدمها برنامج الأغذية العالمي خلال آخر توزيع؟ (إذا كان "لا"، انتقل إلى 7.11)	لا :0 نعم :1 |___|
7.10.2	إذا كانت الإجابة بنعم، العدد بالكيلوغرام لهذه المنتجات التي تم بيعها أو تبادلها؟	كغ|___|

الثاني |___|	الأول |___|	الطعام غير مفضل / لشراء غيرها / الأطعمة المفضلة :1 وقود الطبخ والغاز والكهرباء :2 الصحة / الطب :3 التعليم / الكتب :4 الملابس / الأحذية :5 ممتلكات المطبخ للطهي :6 ممتلكات منزلية أخرى :7 النقل :8 الترفيه :9 النظافة / مواد التنظيف :10 سداد الديون :11 لا يوجد مصدر آخر للدخل :12 غير ذلك :13	إذا كانت الإجابة بنعم، ما هي الاحتياجات التي استخدمت المال لتغطيتها؟ (يرجى ذكر 2 من الاحتياجات الرئيسية بالترتيب حسب الأهمية)	7.10.3
|___|	الرجل :1 المرأة :2 كلاهما :3	من الذي في أسرتك يقرر كيف يتم استخدام الحصص من برنامج الأغذية العالمي(إما للاستهلاك أو البيع أو التجارة أو للاستلاف أو مشاركة جزء منه)؟		7.11

8. الحماية: السلامة			
|___|	لا :0 نعم :1	هل تعرض أي فرد من أفراد أسرتك لمشاكل (السلامة) تتعلق **<u>بالحرارة أو الطقس</u>** سواء عند الذهاب إلى نقطة توزيع برنامج الأغذية العالمي أو في نقطة توزيع أو لدى العودة من نقطة التوزيع خلال الشهرين الماضيين؟	8.1
|___|	لا :0 نعم :1	هل تعرض أي من أعضاء أسرتك لمشاكل **<u>أخرى تتعلق بالسلامة</u>** (لا تتعلق بالطقس بل تتعلق بالأمن) إما عند الذهاب إلى نقطة التوزيع أو في نقطة التوزيع أو لدى العودة من نقطة التوزيع خلال الشهرين الماضيين؟ (إذا كان الجواب بالنفي **'لا'** في <u>كل</u> من **8.1 و8.2** يرجى الانتقال إلى **9.1**) إذا كانت الإجابة بنعم في أي من السؤالين 8.1 و 8.2 انتقل إلى 8.3	8.2
حوادث			
|___|	الذهاب إلى نقطة التوزيع :1 عند نقطة التوزيع :2 العودة من نقطة التوزيع :3	إذا كانت الإجابة بنعم، هل يمكن أن تخبرني أين حدثت المشكلة:	8.3
|___|		هل يمكن أن تخبرنا عمر أفراد الأسرة الذين عانوا من المشكلة؟ (إذا كان أكثر من واحد، تقديم عمر أصغر أعضاء الأسرة المتضررين مباشرة)	8.4
|___|	ذكر :1 أنثى :2 كلاهما :3	هل يمكن أن تخبرنا عن جنس فرد الأسرة الذي عانى من المشكلة؟	8.5
|___|	أي نوع من الاعتداء الجسدي (مثل القتل، والإصابة، والاعتداء الجنسي) :1 السرقة والابتزاز :2 الحصص الغذائية التي لا تقابل الاستحقاق :3 وقت الانتظار الطويل (> 2 ساعة) أو المسافة المفرطة (> 5 كم) :4 ظروف مهينة في موقع التوزيع (على سبيل المثال لا ظل، الاكتظاظ) :5 الاضطرار لتبادل المال أو الخدمات مقابل الغذاء :6 غير ذلك :7	هل يمكن أن تخبرنا بإيجاز ما هي طبيعة التحدي (سواء كانت فعلية أم محاولات)؟	8.6
|___|		ما الذي يمكن القيام به لجعله أكثر أمنا بالنسبة لك أو لأفراد آخرين من أسرتك للوصول إلى مواقع برنامج الأغذية العالمي؟	8.7

9. الوصول للمستفيد، الاقتراحات والمتابعة			
9.1	عموما، هل أنت راض عن كمية الطعام المقدم من برنامج الأغذية العالمي؟	0: لا 1: نعم	|___|
9.1.1	إذا كانت الإجابة "لا"، يرجى الإشارة إلى السبب:	|_____|	
9.2	عموما، هل أنت راض عن نوعية الغذاء المقدمة من برنامج الأغذية العالمي؟	0: لا 1: نعم	|___|
9.2.1	إذا كانت الإجابة "لا"، يرجى الإشارة إلى السبب:	|_____|	
9.3	هل لديك أي اقتراحات أو تعليقات أخرى للبرنامج؟ (ردود الفعل على عملية التوزيع، و محتوى السلة الغذائية، والقدرة على الطهي و استهلاك الطعام وما إلى ذلك)	|_____ _____ _____ _____ _____ _____|	

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