British Embassy Yerevan

WFP World Food Programme

r insights

Food Security and Vulnerability Assessment in Armenia, February 2021

Contents

Executive Summary

1. Methodology 6

1.1 Research objective and questions 6

1.2 Data collection method and tool 6

1.3 Sample 7

2. Household Profile 8

3. Household Food Security 11

3.1 Household Food Consumption 11

3.2 Factors Influencing Food Consumption in EFSA 1 and EFSA 2 19

3.3 Household Food Insecurity Due to Financial Resources 20

3.4 Household Food Consumption – Nutrition 22

3.5 Access to Resources and Main Concerns 24

5. Comprehensive Food Security 33

6. Assistance to households 34

7. Changes in consumption over time – Panel analysis 35

Conclusions 40

Glossary of Terms 42

ANNEX 1 | Questionnaire 44

ANNEX 2 | Sample structure 54

Disclaimer: This publication was made possible thanks to the financial support of the British Embassy Yerevan. Contents are the sole responsibility of World Food Programme and cannot be taken to reflect the view of the UK Government.

List of Figures

Figure 1: Distribution of Households by settlement type 8
Figure 2: Gender of the household head 8
Figure 3: Number of household members 9
Figure 4: Housing situation 9
Figure 5: Source of income 9
Figure 6: Total monthly HH income 10
Figure 7: Monthly income per capita 10
Figure 8: Household with elderly only 11
Figure 9: Number of children in the household 11
Figure 10: Food Consumption Score 12
Figure 11: Food Consumption Score by settlement type 13
Figure 12: Food Insecurity level dynamics by settlement type 13
Figure 13: Food Consumption Score by region (EFSA 2) 14
Figure 14: Food Consumption Score dynamics by regions 14
Figure 15: Food Consumption Score by Income per capita 15
Figure 16: Availability of staple foods stock 16
Figure 17: How long would stock last 16
Figure 18: Food Consumption Score by Available food stock 17
Figure 19: Food Insecurity by gender and education of HH head, number of children at home, living arrangement and support received 18
Figure 20: Households under the risk of becoming food insecure (FCS of 35-50) 18
Figure 21: Food Consumption Score - Nutrition 23
Figure 22: Food Consumption Score - Nutrition by Food Consumption Score Groups (EFSA 2) 23
Figure 23: Income disruption due to Covid-19 24
Figure 24: Reasons of interrupted income 25
Figure 25: Disruption of access to grocery stores 26
Figure 26: Main reasons for disrupted access to grocery stores/market 26
Figure 27: Main Concerns of the households (EFSA 2) 27
Figure 28: Perceived increase in food and non-food commodities, top products (EFSA 2) 28
Figure 29: Livelihood Coping Strategy Index 29
Figure 30: Livelihood Coping Strategy Index by Food Consumption Score 30
Figure 31: Coping strategies by household characteristics 31
Figure 32: Comprehensive food security comparison EFSA1 and EFSA2 35
Figure 33: Comprehensive food security comparison EFSA1 and EFSA2 by region 354
Figure 34: Assistance received 335
Figure 35: Food Consumption Score (FCS) by received assistance 34
Figure 36. Distribution of Households by settlement type in the panel 36
Figure 37. Distribution of households by gender of household head in the panel 36
Figure 38. Dynamics of food security in the panel 37
Figure 39. Dynamics of coping strategy adoption in the panel 37
Figure 40. Food security dynamics by adoption of coping strategies 38

Executive Summary

The outbreak of the second wave of COVID-19 pandemic as well as the Nagorno Karabakh (NK) conflict situation In Armenia has triggered the necessity of periodically tracking and measuring the Food Security situation in Armenia to capture the changes and anticipate food crisis in the country if any.

The second Food Security Assessment (EFSA 2) has enabled WFP to compare the food security situation with the baseline study of June-July 2020 **among Armenian Nationals and hosting families of spontaneous arrivals** and contributed to the evidence base for emergency response planning, targeting as well as prioritizing of actions for relevant stakeholders. The WFP Armenia contracted R-Insights Research Company for implementation of the two assessments.

For the second assessment, the data collection took place in November-December 2020. The study explored food security among Armenian households and compared those results with the ones from the previous similar research (EFSA 1), conducted in June-July of 2020. The survey used a nationally and regionally representative random sample of 4, 237 respondents. Due to limitations evoked by COVID-19 pandemic, a **telephone interviewing method** was used for this assessment.

Food Security Assessment survey 2 (EFSA 2) results indicated that households' comprehensive food security level was at the similar level with EFSA 1, with 19 percent and 17 percent respectively. Although household food consumption improved compared to EFSA 1 by 5.8 percentage points, reaching 90.2 percent acceptable food consumption, household's economic vulnerability and adoption of livelihood coping strategies showed a deterioration.

The results from multivariate analysis (logistic regression) reveal that the households led by men, households with a head that has higher education, living in a home owned by the household, having stock of staple food, and higher income positively impacted the ability of the household to be food secure. In EFSA 1, being from a rural area also had a positive impact on food consumption of a household but this was not observed in EFSA 2. Moreover, the proportion of inacceptable food consumption households in rural and urban settlements was about the same in winter months.

Households with 4 and more children were extremely food insecure in both surveys with food insecurity of about 22 percent. There appeared to be no significant difference of food security among households that have received any type of assistance and the ones that haven't received any. During EFSA 2 the highest share of food insecurity was reported in **Lori, Shirak, and Gegharkunik** regions with 11 percent of food insecurity level for each.

The reported experience of food insecurity due to lack of financial resources (FIES) improved compared to EFSA 1 as well. About half of the respondents reported that the difficulties and negative experiences they faced were due to both war and COVID -19, whereas COVID-19 as the sole reason for the negative experience was reported by slightly higher proportion of respondents.

Nonetheless, in terms of quality of the diet, considering the regular intake of protein and important micro-nutrients, food security rates experienced ups and downs. Overall, intake of iron-rich products was significantly lower compared to food rich in Vitamin A and protein. In EFSA 2 intake of iron and protein-rich food slightly increased in contrast to food rich in Vitamin A, which slightly decreased in EFSA 2. Moreover, **households with poor and borderline Food Consumption Score also ranked lower on nutritional aspects of the diet.** In particular, the households with poor and borderline FCS had low Iron, Vitamin A, and protein intake.

The reason behind the unchanged food security level was in part due to reopened economy and the copying strategies adopted by the households. **The implementation of severe coping strategies (crisis and emergency coping strategies) experienced no improvement, remaining 58.7 percent combined.** This might have served as one of the main reasons of improvement in food security, although it is a short-term solution as those resources will be depleted soon. Nonetheless, adoption of crisis coping strategies decreased by 4.2 percentage points compared to EFSA 1. Male-headed households, the ones with higher education, higher income, households living in an own house, having staple food stock, and not receiving assistance are less prone to adopting coping strategies. Adoption of emergency coping strategies was high for households from rural areas (25 percent).

Analysis of panel data[1] revealed that there was improvement in food consumption (moving from inacceptable food consumption category to acceptable food consumption category) for 11 percent of the households and worsening in food consumption for 6.3 percent of the households. In addition, 43 percent of the households implemented severe coping strategies in EFSA 1 and EFSA 2, and 18.5 percent of the households had to adopt severe coping strategies in EFSA 2 although in EFSA 1 they adopted less severe ones. However, only 68 percent the households implementing severe coping strategies in both surveys managed to maintain food consumption in both surveys. Hierarchical linear modelling illustrates that on average there was an increase in FCS score of households and that variability can explained by stock of staple food and household income. **Assistance received was also a significant predictor of acceptable food consumption.**

The main concern of the households also went through transformations since June-July 2020. While COVID-19 and its social-economic consequences were the major concern of the household respondents in EFSA 1, in EFSA 2 the main concern shifted to the war in Nagorno Karabakh, its consequences, army-related issues and the political situation in Armenia (around 60 percent). However, the vast majority of the respondents mentioned an increase in food commodity prices.

The unchanged food security situation in EFSA 2 might be sustained for a short period of time, as households continue applying severe coping strategies. Moreover, enduring increase in food commodity prices may confound the situation if mitigating steps are not taken by policymakers.

In order to understand the root causes and drivers of food insecurity, and kind of coping mechanisms used by various stakeholders and the impact of indebtedness, EFSA 3 in March/April 2021 will have qualitative assessment to complement the findings of the quantitative assessment.

[1] Panel data is a multi-dimensional data measuring the same households over time to track the evolution of the outcomes.

1. Methodology

1.1 Research objective and questions

The objective of this study was to establish an evidence base with a specific focus on food security on a national level for the Government of Armenia, WFP Armenia Country Office, local and international partners to guide food security responses, targeting and prioritization. The research included assessment of food security among the respondents and comparison of the change over time during COVID-19.

The assessment answered the following questions:

- Which population groups are food-insecure (how many are affected, where are they located, how many will be affected in the future)?
- How has the COVID-19 affected people's ability to meet their food and other essential needs?
- What is the impact on nutrition, what are the coping mechanisms for the difficult times and the lean season? Do people choose more shelf-stable and less nutritious foods?
- How are households reallocating their resources and prioritizing among different and possibly new essential needs including food, hygiene, health, shelter, transport, etc.?
- Can the affected people cope with and recover unaided? Are they already receiving assistance?
- Is additional assistance needed? If so, what type? When? Where? How much? For how long?

1.2 Data collection method and tool

Due to limitations evoked by COVID-19 pandemic and to keep the Food Security Assessments comparable to each other, **telephone interviewing method** was used for the assessments. Computer-assisted telephone interviewing (CATI) system was utilized for data collection purposes. Benefits of this system involved:

1. **Random selection** of phone numbers and autodialing
2. **Opportunity to implement phone interviews from home**
3. **Designing/programming the questionnaire online** by eliminating logical errors and data entry errors and cutting costs on data entry exercise.
4. **Audio recording** of 100 percent of the interviews (with respondents' prior consent) to enable total quality checks of interviews.
5. **Generating a database** of questionnaires in a real-time mode, i.e. each filled-in questionnaire is placed in a unified database on central server immediately after competing each interview.
6. Possibility to **track interviewers** in the field, tracking duration of interviews, executing online follow up to interview process etc.

The average interview duration was 34 minutes, very close to survey 1 - EFSA 1 (35 minutes). The second survey of Emergency Food Security Assessment (EFSA 2) [2] was conducted among households in Armenia from November to December 2020, interviewing the member of the households who could best answer household food consumption and expenditure related questions.

Research tool – the questionnaire, consisted of nine sections: general information, demographic information, food insecurity level, food consumption and food sources, livelihood coping strategies, food and market accessibility, income sources, and main concerns of respondents. In contrast to EFSA 1, EFSA 2 did not include information about the food and nutrition patterns of 0-23 months old children.

Data collection and analysis was carried out by the R-Insights Research Company.

1.3 Sample

Target group of the assessment was the adult population residing in Armenia for at least 10 months during the previous year.

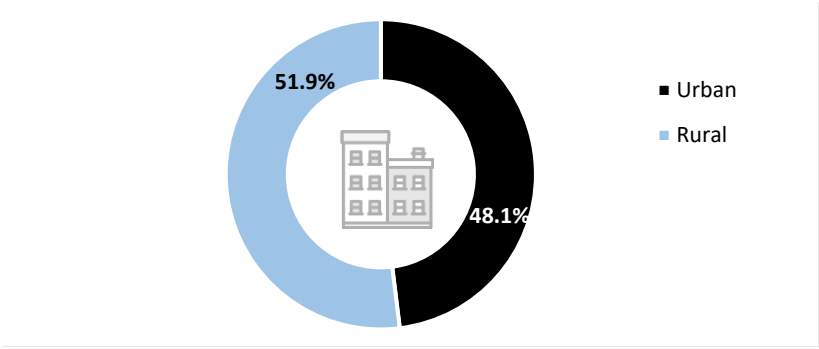
The survey used a **nationally and regionally representative random sample** (95 percent confidence interval, 2 percent margin of error for nationally representative and 5 percent margin of error for regionally representative random sample). The sample structure implied **the following strata**: capital city, other urban and rural settlements in regions. The sample size was 4,237 (see ANNEX 2). From EFSA 1, 717 respondents agreed to participate in EFSA 2, as well, which enabled to generate a small pool of panel data which is a multi-dimensional data measuring the same households over time to track the evolution of the outcomes.

[2] Emergency Food Security Assessment EFSA 1 was conducted from June to July 2020

2. Household Profile

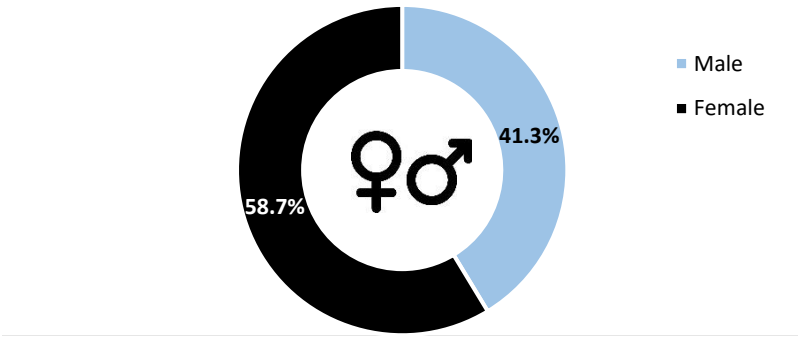
The survey was conducted among adult residents of the Republic of Armenia, who had resided in the country for more than 10 months during the previous 12 months. On average 384 households were interviewed in each region of Armenia including Yerevan, which assured the representativeness of the data at the regional level. The proportion of rural and urban areas in each region was controlled through quotas applied during data collection process.

Figure 1: Distribution of Households by settlement type, %, N=4,237



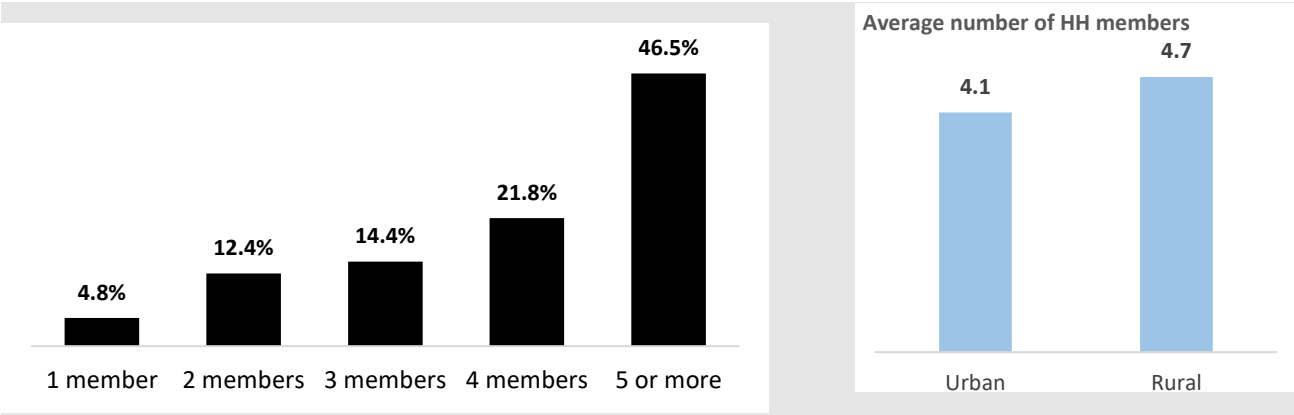
There were more women in the survey (58.7 percent) than male as more families mentioned that a female member could best answer household food consumption, diet decision-making and expenditure related questions.

Figure 2: Gender of the household head, %, N=4,237



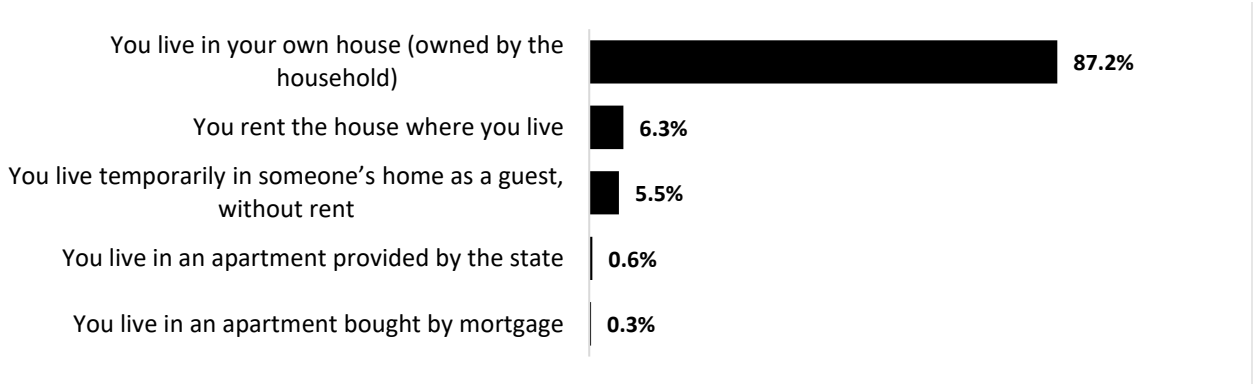
Almost half of the households (46.5 percent) had 5 members or more and 4.8 percent comprised of just 1 member. The average number of household members participating in this assessment was 4.4.

Figure 3: Number of household members, %, N=4,237



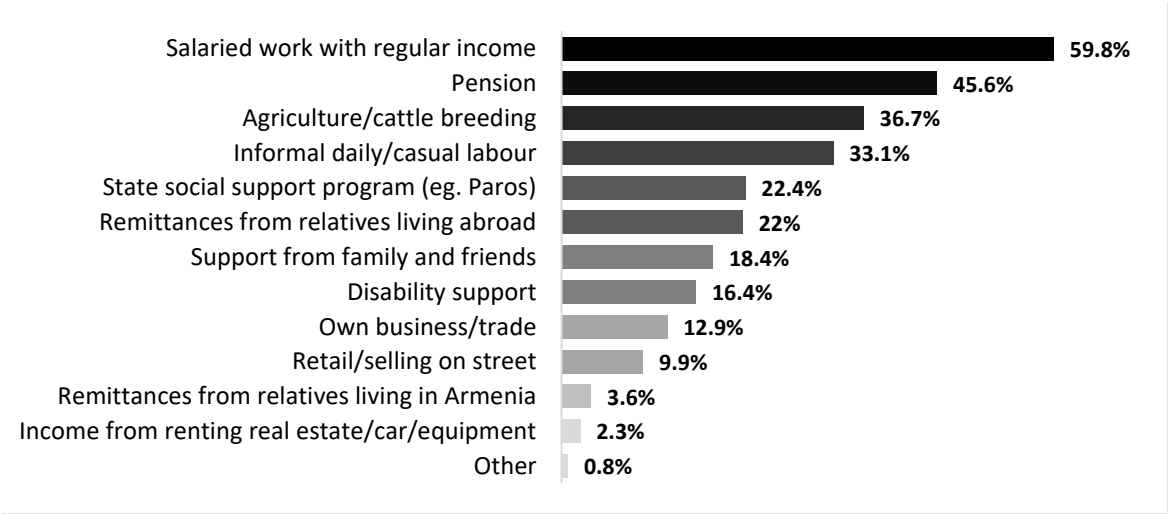
The majority of the respondents lived in a house they own, about 87 percent, and 6 percent rented the house where they lived.

Figure 4: Housing situation, %, N=4,237



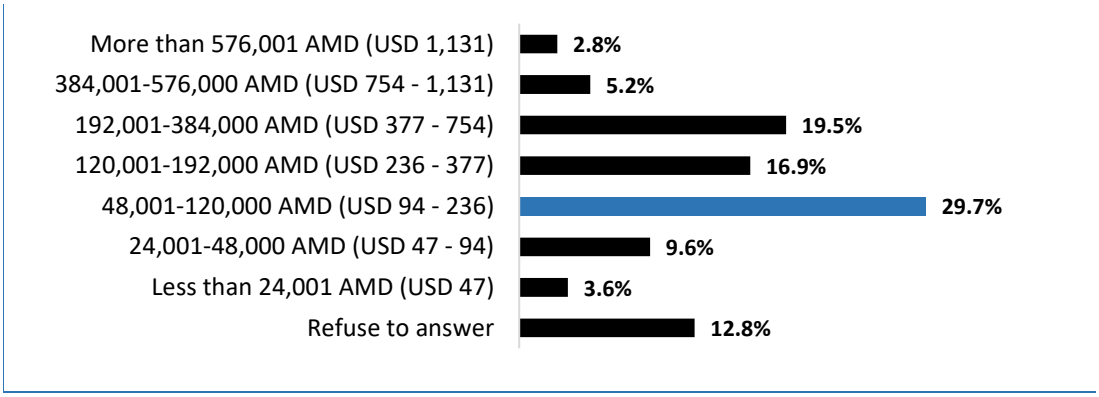
The main source of income of respondents was salaried work (60 percent), followed by pension (46 percent), agriculture / cattle breeding (37 percent) and informal casual labor (33 percent).

Figure 5: Source of income, %, N=4,237



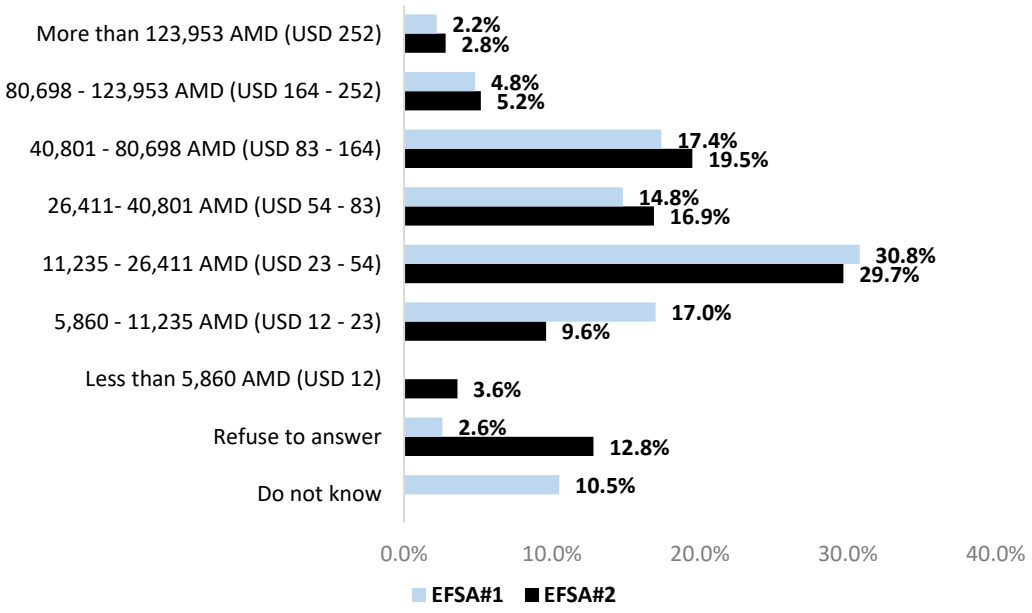
Around 2.8 percent of the households had an income above 576,000 AMD (1131 USD[3] and more), and around 43 percent under 120,000 AMD (236 USD).

Figure 6: Total monthly HH income, %, N=4,237



The comparison of monthly income per capita in EFSA 1 and EFSA 2 shows that there was an increase in income groups above 26,411 AMD in November –December, as well as a decrease in 5,860-11,235 AMD income group. Interestingly in EFSA 2, less than 5,860 (USD 12) monthly income per capita was reported by 3.6 percent, while in EFSA 1 it was not reported.

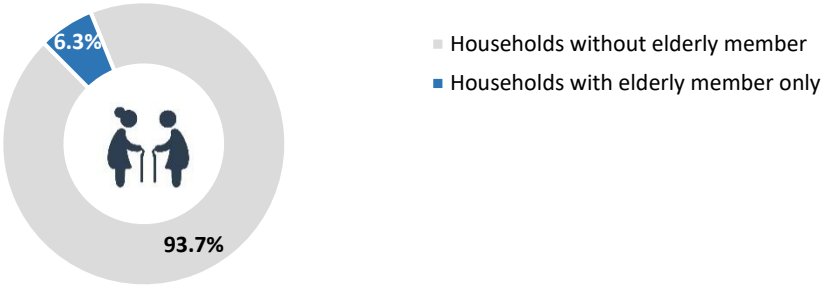
Figure 7: Monthly income per capita



Around 6.3 percent of the households were comprised of elderly only. The highest percentage of them mentioned pension as their source of income (87.7 percent).

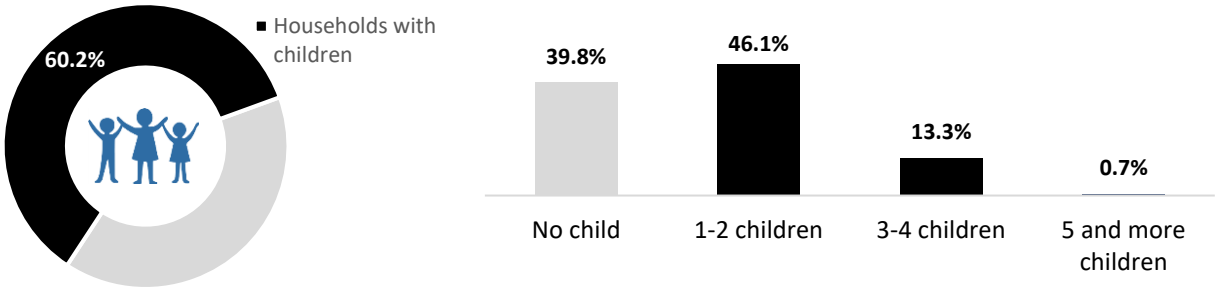
[3] The average USD exchange rate of 509.4 for November and December months was used to convert the values in AMD, source – Central Bank of Armenia

Figure 8: Household with elderly only, %, N=4,237



Around 60 percent of the households have at least one child. Almost half of the households have 1-2 children and 0.7 percent reported having 5 and more children.

Figure 9: Number of children in the household, %, N=4,237



3. Household Food Security

3.1 Household Food Consumption

WFP uses Food Consumption Score (FCS) as a proxy for a household's access to food. The measure provides a snapshot of household's food security at the survey time. The score is comprised of three levels: poor consumption, borderline consumption, and acceptable consumption[4]. In this chapter the food security by various social demographic groups is reviewed as well as the changes over time by comparing the survey results (EFSA 2) with the previous survey (EFSA 1). To measure statistically significant differences between groups, proportion tests with α=0.05 were implemented.

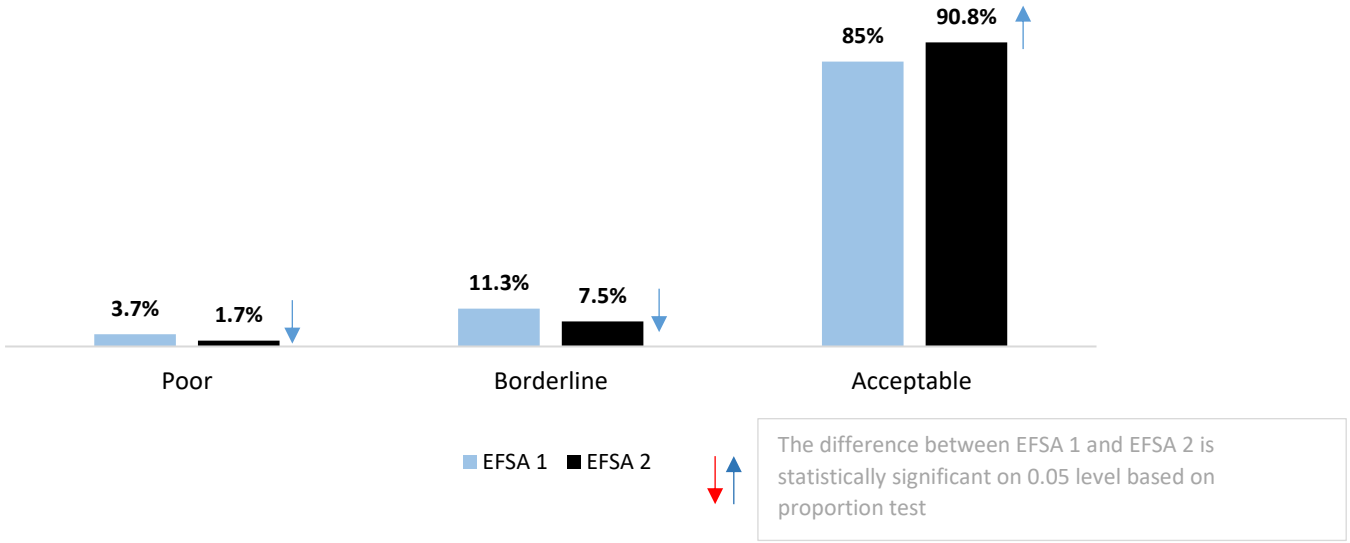
Food consumption score analysis shows that there was an improvement in food security in Armenia during November-December 2020 by 5.8 percentage points compared to June-July. Around 9.2 percent of households were found to be unacceptable food consumption during the EFSA 2. On contrary to EFSA 1, there was no significant difference in food consumption based on

[4] For more information on index visit FCS - Food Consumption Score Guidelines

settlement type of households. The marzes with the highest rate of food insecurity were Lori, Shirak and Gegharkunik (11 percent) during EFSA 2 which is largely consistent with the EFSA 1 findings, with exception of Yerevan where the rate of inacceptable food consumption was also among the highest. There was a significant improvement in food consumption in all marzes except for Aragatsotn and Ararat. Food consumption has also improved in all income groups, most importantly in low-income households, by 5.8 percentage points for 11,235–26,411 AMD income group and by 2.9 percentage points for 26,411-40,801 AMD income group. In EFSA 2 the proportion of households having staple food stock increased by 21 percentage points, reaching 53 percent of all the respondents. Similar to EFSA 1, the households with staple stock had higher food consumption level. The analysis showed that households led by men, where HH head has higher education, households led by men owning a house are more food secure. The households with more than 4 children are highly food insecure (22.7 percent), and their food consumption levels remained the same between EFSA 1 and EFSA 2.

The analysis shows that during seven days prior to the assessment, 1.7 percent of households had poor food consumption, and 7.5 percent of household had borderline food consumption score. The poor and borderline food consumption levels together are considered as a proxy for the share of Food Insecure households in the country and for November-December 2020 it constituted 9.2 percent. Overall, food security has improved compared to June-July. In EFSA 1, 85 percent of the households were food secure (acceptable consumption level), while the percentage of households with acceptable food consumption significantly increased during EFSA 2, reaching 90.8 percent.

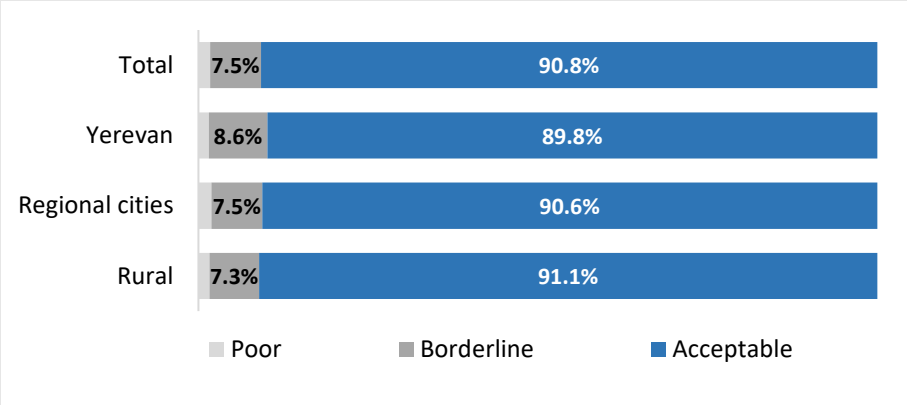
Figure 10: Food Consumption Score, %, N = 4,237



Q31. How many days over the last 7 days, did you and members of your household eat or prepared the following food items?

The comparison of assessment results per settlement type didn't show any statistically significant differences in food consumption score.

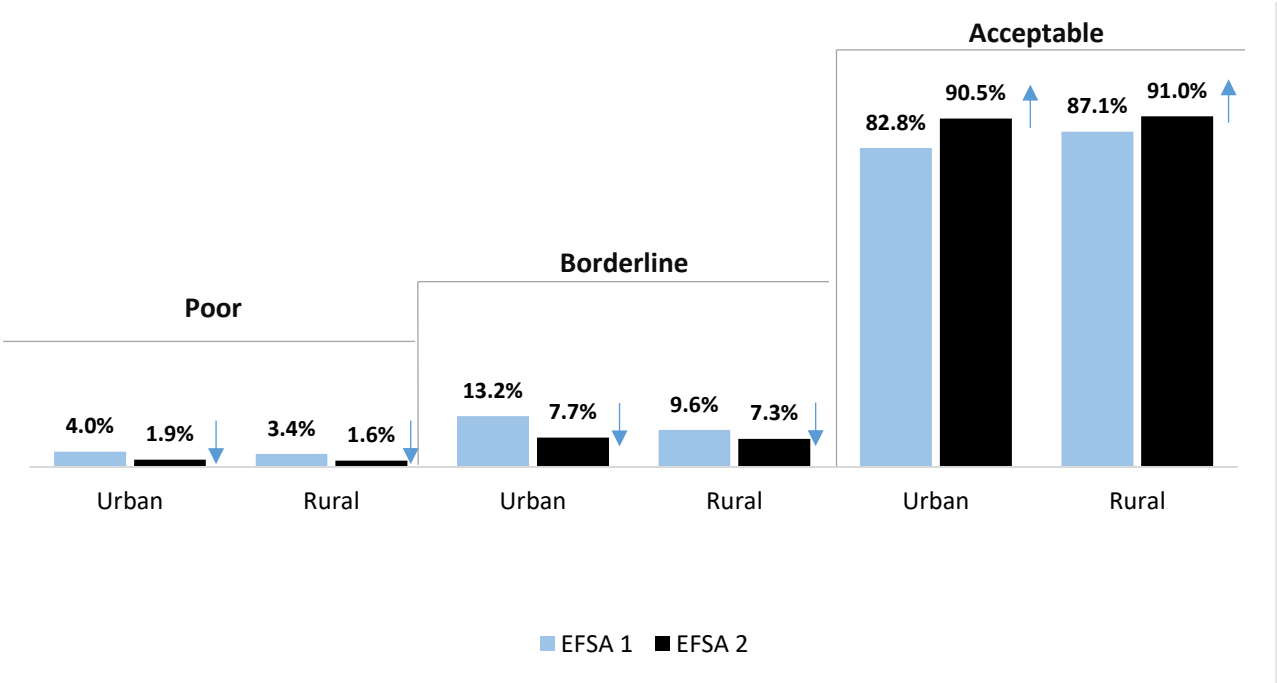
Figure 11: Food Consumption Score by settlement type



Q31. How many days over the last 7 days, did you and members of your household eat or prepared the following food items?

Food consumption in rural and urban areas was significantly different during EFSA 1 showing a higher percentage of HHs with acceptable food consumption in rural areas. However, in EFSA 2 the analysis of food consumption levels per settlement types didn't show any difference. Moreover, food consumption level increased in both rural and urban settlements in EFSA 2 compared to EFSA 1, with a higher increase in urban settlements (7.7 percentage points). This improvement may be a result of resuming economy by easing COVID-19 limitations, including reopening businesses, eliminating restrictions[5] and increased Government help packages/ social safety nets.

Figure 12: Food Insecurity level dynamics by settlement type

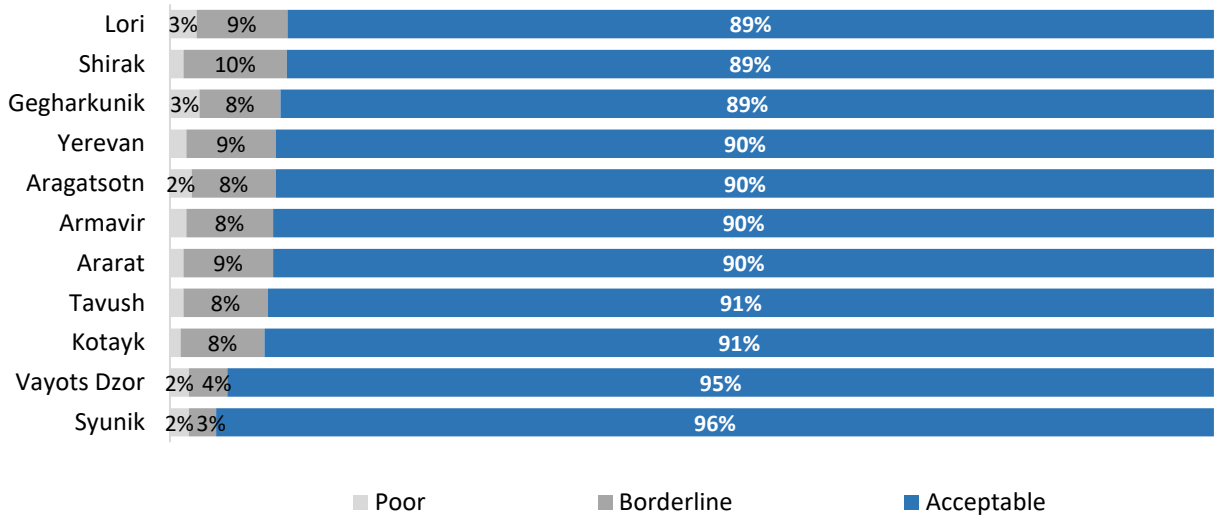


Q31. How many days over the last 7 days, did you and members of your household eat or prepared the following food items?

[5] https://www.worldbank.org/en/country/armenia/overview

During EFSA 2, the highest share of inacceptable food consumption was reported in Lori, Shirak and Gegharkunik regions with 11 percent of HH with inacceptable food consumption for each. The regions of Lori and Gegharkunik had the highest proportion of poor FCS. The most food secure regions according to FCS were Syunik (96 percent) and Vayots Dzor (95 percent).

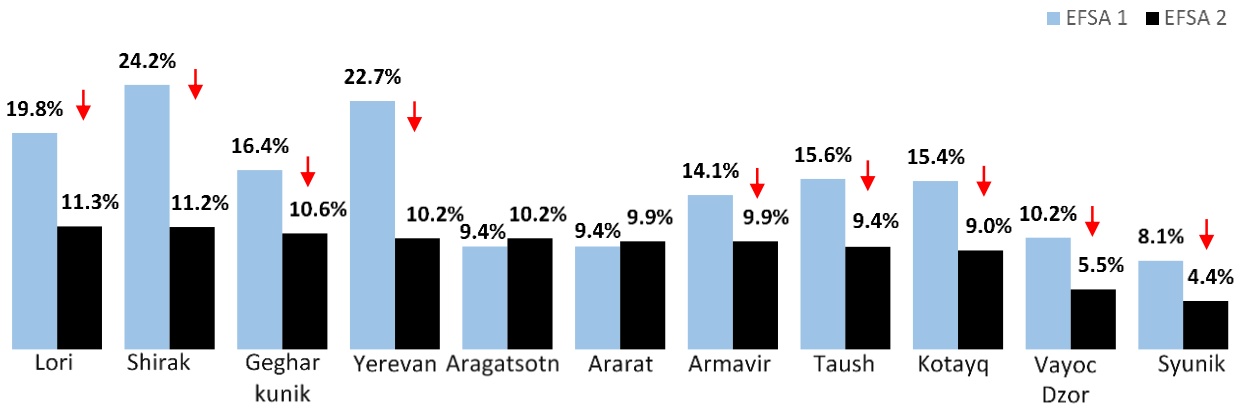
Figure 13: Food Consumption Score by region (EFSA 2)



Q31. How many days over the last 7 days, did you and members of your household eat or prepared the following food items?

The assessment findings showed a significant increase in food consumption levels in almost all regions. The largest improvement in food consumption was reported in Shirak region and Yerevan (around 13 percentage points). Although in EFSA 1 Shirak had the worst status is terms of food consumption in EFSA 2 with 24 percent food consumption it improved its FCS score. In EFSA 2 the worst status of food consumption was reported in Lori region (11.3 percent). There was no significant change in FCS in Aragatsotn and Ararat regions.

Figure 14: Food Consumption Score dynamics by regions

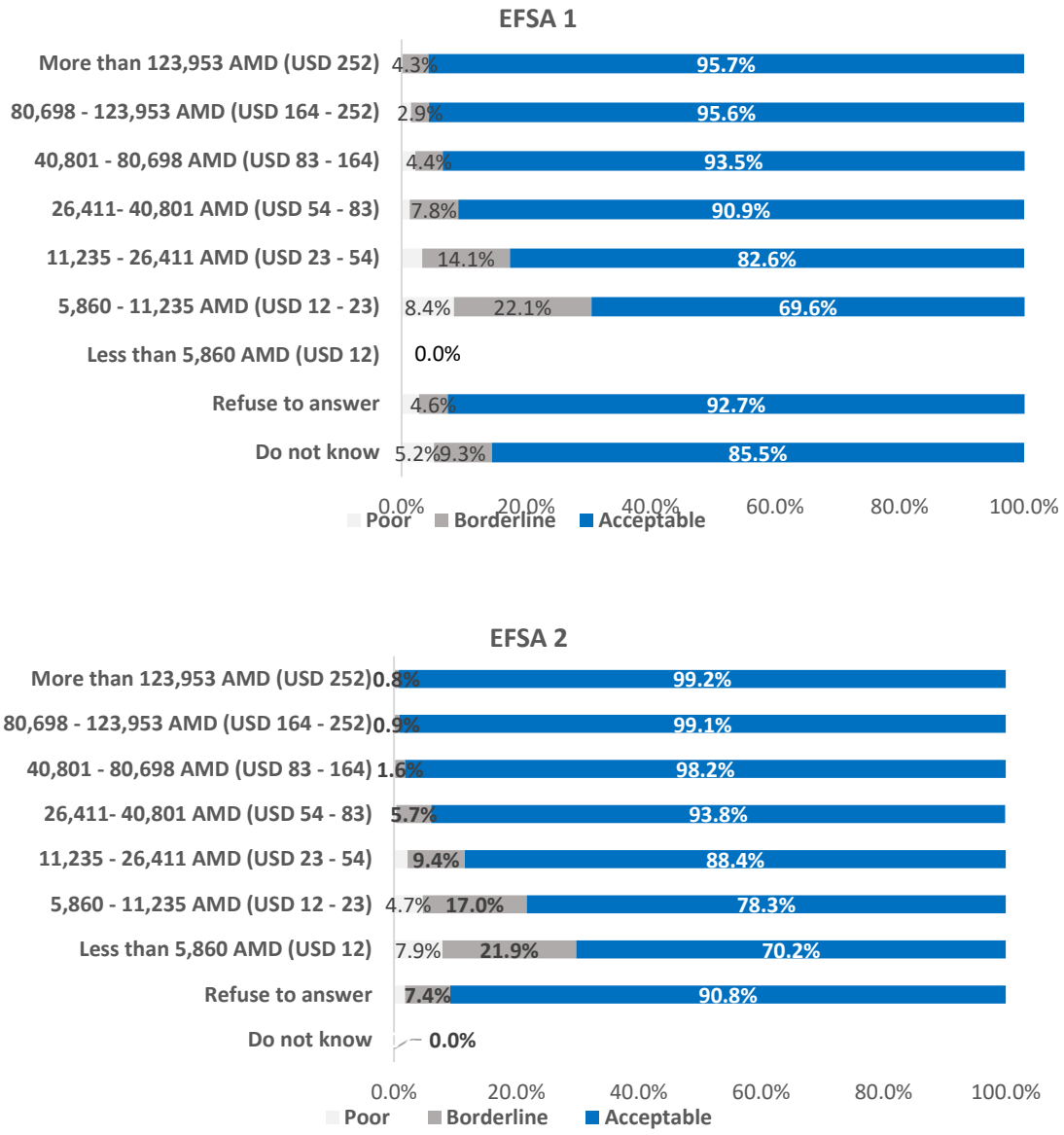


Q31. How many days over the last 7 days, did you and members of your household eat or prepared the following food items?

Food consumption score per monthly income per capita was also compared with EFSA 1 findings. It has also improved in all income groups, and especially in households with income per capita below 80.698 AMD (164 USD). About 5.8 percentage points improvement in FCS was recorded for the income group of 11,235–26,411 AMD which was the most vulnerable one based on the EFSA 1 results. In case of income group 26,411-40,801 AMD FCS has improved by 2.9 percentage points since June-July.

Nonetheless, food insecurity was still very high in households with income per capita of less than 40,801 AMD (83 USD). This segment was the most food insecure one in EFSA 1 as well.

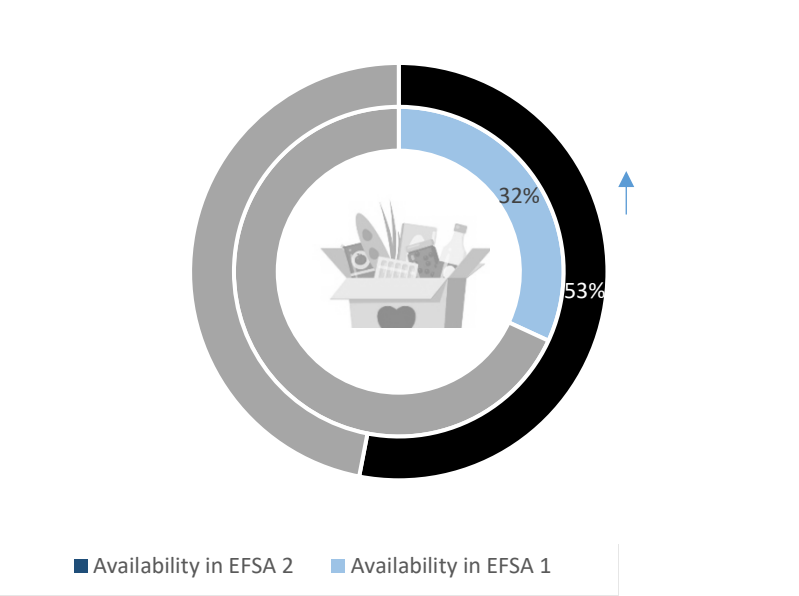
Figure 15: Food Consumption Score by Income per capita



Q31. How many days over the last 7 days, did you and members of your household eat or prepared the following food items?

Availability of staple food stock at households increased largely in EFSA 2 (by 21 percentage points), reaching 53 percent.

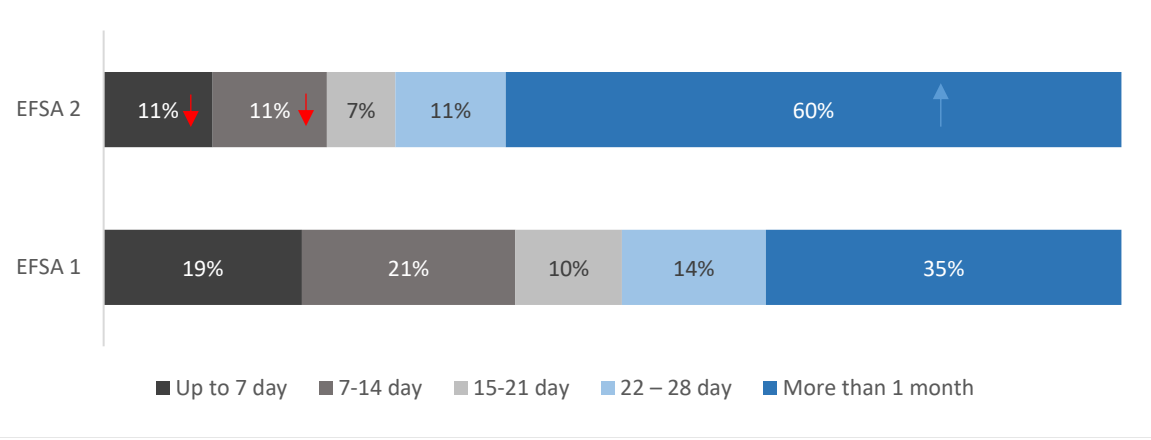
Figure 16: Availability of staple foods stock



Q33. Does your household currently have a stock of staple foods (e.g. wheat flour, rice, spelt)

Not only more households obtained staple food stocks but also the size of stock increased. In EFSA 2, 60 percent of the households, mentioning to have staple food stock, reported that the stock would last for more than a month, compared to 35 percent of the households in the same category from EFSA 1.

Figure 17: How long would stock last

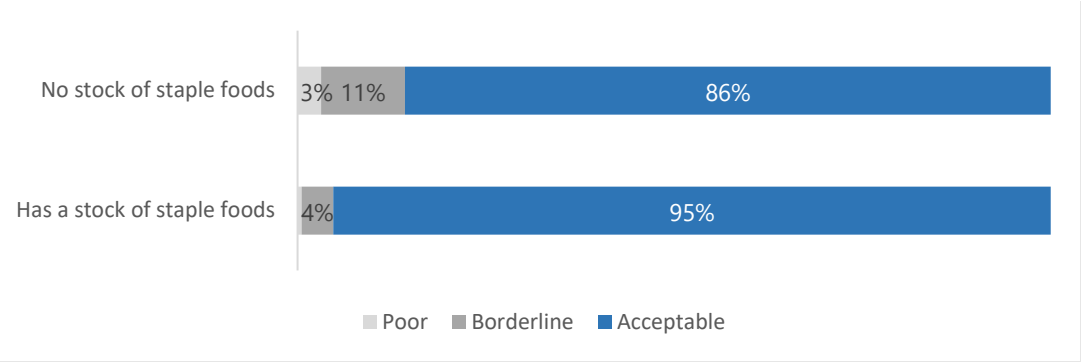


Q34. How long do you think the food stock would last?

Households with staple food stock were far more food secure, compared to the ones with no food stock, with a difference of around 9 percentage points in food security level. In this regard, the results

of EFSA 2 did not differ significantly from the ones of EFSA 1[6], although there is a slight increase of food security in both groups.

Figure 18: Food Consumption Score by Available food stock

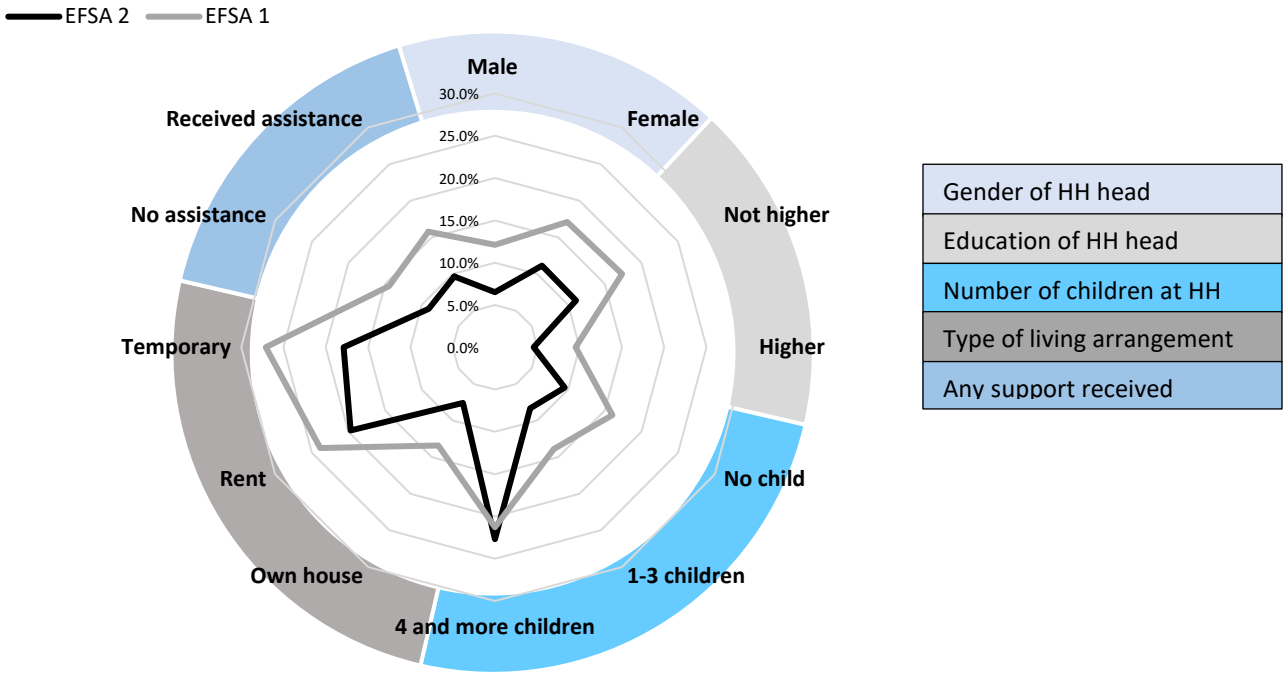


Food consumption has changed from EFSA 1 to EFSA 2 based on several subgroups. Similar to EFSA 1, EFSA 2 results indicated that households led by women has more inacceptable food consumption levels compared to male-headed headed households, 11.1 percent and 6.5 percent respectively. Nonetheless, both groups show similar improvement in food consumption from EFSA 1 to EFSA 2 (around 6 pp).

Households with a head having higher education are more food secure (11.1 percent) compared to the ones with lower level of education (4.6 percent). Both groups of households (HH head with and without higher education) report to have better food security in EFSA 2. Households with up to 3 children were significantly less food insecure compared to the ones with 4 and more children and no children. One of possible reasons for the households with 1-3 children being more food secure could be the fact that those households adopted more coping strategies compared to the ones with no children (This is explained in the next chapter). Nonetheless, the households with no children were able to recover food consumption in EFSA 2, whereas food security in households with 4 and more children remained the same, with a high food consumption score of around 22 percent. Homeowners had higher food consumption during both surveys. Paying rent made it more difficult to recover food security after the lockdown; the households that owned a house or temporarily lived in someone else's house showed a better improvement in food consumption, compared to the households that pay rent. In EFSA 2 food consumption level of both groups improved commensurately, reaching about 9 percent from 15 percent of EFSA 1.

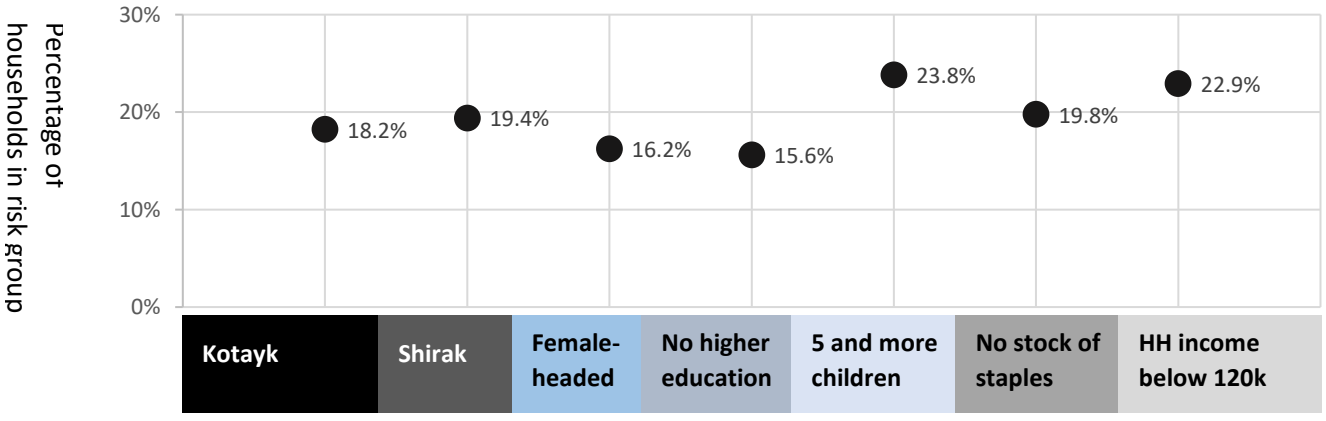
[6] Food Security and Vulnerability Assessment in Armenia, UN WFP, 2020

Figure 19: Food Insecurity by gender and education of HH head, number of children at home, living arrangement and support received



Looking at the demographics of households that were right above the borderline score of FCS (with scores between 35 and 50), its noted that the population of Kotayk (18 percent) and Shirak (19 percent) regions, female-headed households with 5 and more children (24 percent), with no stock of staple food (20 percent), and with income below 120,000 AMD (23 percent) were under the risk of becoming food insecure. Overall, 12.2 percent of the households fell under this category.

Figure 20: Households under the risk of becoming food insecure (FCS of 35-50)



3.2 Factors Influencing Food Consumption in EFSA 1 and EFSA 2

Data collection in two time periods enables the measurement of the effect of factors influencing food security levels and the change of those effects. To measure these effects logistic regression analysis was conducted[7]. The dependent variable, food consumption takes value 1 if the household had acceptable food consumption and 0 in case of poor and borderline food consumption.

The factors positively influencing food consumption were higher education of Household (HH) head, male gender of HH head, higher number of family members (only in EFSA 1), living in a household-owned house, presence of staple food stock, higher household income and living in rural areas (only in EFSA 1).

Table 1: The impact of household attributes on Food Security in EFSA 1 and EFSA 2

Dependent variable:		EFSA 1		EFSA 2	
Food Consumption = 1		Odds ratio	SE	Odds ratio	SE
Intercept		14.7	(0.3) ***	14.2	(0.7) ***
Gender	Female	0.8	(0.1) *	0.8	(0.1) **
	Male				
Education	HH head with higher education	1.5	(0.1) ***	1.6	(0.2) ***
	HH head with no higher education				
Children in HH	4 and more children	0.5	(0.3) *	0.5	0.4
	1-3 children	1.0	0.1	1.3	0.2
	No child				
Number of members in HH	Number of family members	1.1	(0.0) **	1.0	0.0
Elderly members in HH	Household comprised of only elderly	1.2	0.2	1.2	0.3
	Household comprised of not only elderly				
Settlement type	Other housing type	0.4	0.5	0.2	0.4
	Temporary	0.6	(0.2) ***	0.6	(0.2) ***
	Rent a house	0.7	(0.2) ***	0.4	(0.2) ***
	Own house				
Stock of staple	Did not have a stock of staple food	0.6	(0.1) ***	0.4	(0.1) ***
	Had a stock of staple food				
Income	Refuse to answer	0.4	0.3	0.1	0.6
	Less than 48,000 AMD	0.2	(0.3) ***	0.0	(0.6) ***
	48,001-120,000 AMD	0.3	(0.3) ***	0.1	(0.6) ***
	120,001-192,000 AMD	0.6	(0.3) *	0.2	(0.6) **
	192,001-384,000 AMD	0.7	0.3	0.6	0.7
	More than 384,001 AMD				
Assistance	Received some assistance	1.0	0.1	1.1	0.1
	No assistance received				
Type of community	Rural	1.7	(0.1) ***	1.2	0.1
	Urban				
N of cases included		4219		4237	

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

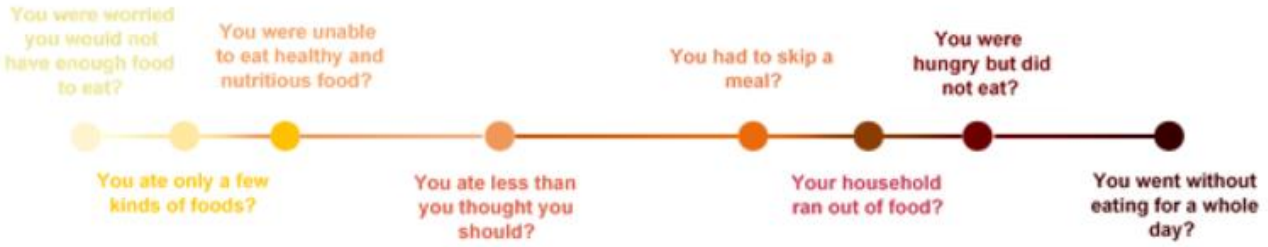
[7] The specification of the estimated model is the following:

$$\ln(p/(1-p)) = \alpha 0 + \alpha 1 * \text{HH head Gender} + \alpha 2 * \text{HH head education} + \alpha 3 * \text{Number of children at HH} + \alpha 4 * \text{Number of family members} + \alpha 5 * \text{Household with elderly only} + \alpha 6 * \text{Living arrangement} + \alpha 7 * \text{Stock of Staple Food} + \alpha 8 * \text{HH Income} + \alpha 9 * \text{Assistance received} + \alpha 10 * \text{Region}$$

Logistic regression table above indicates that gender of household head was a decisive factor in food consumption during both surveys (EFSA 1 and EFSA 2) and the magnitude of effect remained the same, which is shown by odds ratios. Specifically, the odds of households led by women to be food secure during both surveys was 20 percentage points (pp) higher compared to households led by men, keeping all the other variables constant. Higher education of household head also significantly influenced the odds of being food secure by 60pp in EFSA 2 and by 50pp in EFSA 1. Having 4 and more children was a factor significantly influencing food consumption in EFSA 1 but not in EFSA 2. In EFSA 1 higher number of family members was associated with higher food consumption but in EFSA 2 that was not the case. The negative impact of renting a house became more severe in EFSA 2; the odds of households with acceptable food consumption was 30pp lower compared to home-owners in EFSA 1, whereas in EFSA 2 the odds of being food secure were 60pp lower compared to home-owning households. Absence of staple food stocks negatively impacted food consumption during both surveys. Having higher levels of household income was a major factor in food security; for instance, having household income below 48,000 AMD decreases the odds of being food secure by 80pp. Note that no statistical difference was found between households with income 192,001-384,000 AMD and above 384,000 AMD, which means that on average those groups were equally likely to be food secure. Being from a rural settlement, significantly increased the odds of being food secure compared to urban settlements in EFSA 1, but not in EFSA 2.

3.3 Household Food Insecurity Due to Financial Resources

The survey used the FAO's Food Insecurity Experience Scale as well, which indicated that people have faced food security issues during the previous months due to COVID-19 pandemic. The set of eight questions compose a scale that covers a range of severity of food insecurity[8].



Overall, there were less people in EFSA 2 who mentioned household food insecurity experiences due to lack of financial resources. The impact of COVID-19 was weaker, whereas the impact of war escalated in Nagorno-Karabakh became another major reason.

Although the driver of main changes in food security in summer months was COVID-19, the war escalated in autumn appeared to be another factor that impacted food security of households. About 41.5 percent of respondents stated that the conflict in Nagorno-Karabakh somehow impacted their food security experience, whereas COVID-19 was mentioned by slightly more respondents. The table below shows that around half of the respondents reported that the negative experiences

[8] The Food Insecurity Experience Scale, Voices of the Hungry, Food and Agriculture Organisation of the United Nations http://www.fao.org/in-action/voices-of-the-hungry/fies/en/

mentioned in the statements were due to both war and COVID-19, whereas COVID-19 as the sole reason for the negative experience was mentioned by a slightly higher proportion of respondents. The color-coding in the table above indicates that all experiences of food deprivation improved in EFSA 2. The proportion of families worrying about food improved by 9.6 percentage points. There was also significant improvement in the opportunity of eating healthy and nutritious food and less households had to skip a meal because of lack of financial or other resources, each by almost 8 percentage points.

Table 2: Food Insecurity level due to financial resources

Green color-coding indicates improvement in the score in EFSA 2, compared to EFSA 1	*EFSA 1*		*EFSA 2*			
	Yes (%)	*Was it due to COVID? Yes (%)*	*Yes (%)*	*Was it due to COVID? Yes (%)*	*Was it due to conflict? Yes (%)*	*Both Yes (%)*
During the last 30 days, was there a time when you or others in your household worried about not having enough food to eat because of a lack of money or other resources?	45.9	76.4	36.3	14.2	13.8	53.3
During the last 30 days, was there a time when you or others in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?	41.1	73.8	33.6	16.5	12.4	48.4
During the last 30 days, was there a time when you or others in your household ate only a few kinds of foods because of a lack of money or other resources?	52.6	69.7	47.1	15.2	10.0	49.6
During the last 30 days, was there a time when you or others in your household had to skip a meal because there was not enough money or other resources to get food?	32.7	74.4	25.3	17.2	11.3	48.0
During the last 30 days, was there a time when you or others in your household ate less than you wanted through you should because of a lack of money or other resources?	38.7	76.6	32.9	16.0	11.2	50.3
During the last 30 days, was there a time when your household ran out of food because of a lack of money or other resources?	45.2	72.0	37.4	17.0	10.5	47.3
During the last 30 days, was there a time when you or others in your household were hungry but did not eat because there was not enough money or other resources for food?	17.0	78.3	12.6	17.8	9.4	52.2
During the last 30 days, was there a time when you or others in your household went without eating for a whole day because of a lack of money or other resources?	6.1	77.8	3.6	19.0	14.4	49.0

3.4 Household Food Consumption – Nutrition

Food Consumption Score is a proxy indicator for households' food access and is based on the frequency of consumption and dietary diversity. However, it does not assess the actual quality of the diet in terms of regular intake of protein and important micro-nutrients.

Social-economic challenges of COVID-19 has negatively impacted nutrition and dietary practices of household around the world. In Armenia, those negative consequences have been exacerbated by the conflict in Nagorno –Karabakh as well. As a result, people shift diets to more shelf-stable and less nutritious foods. This can bring about malnutrition and stunting.

In addition to the FCS based on the survey data the Food Consumption Score – Nutrition (FCS-N) was calculated. The FSC-N is taking a closer look at the consumption of Protein-rich, Iron-rich, or Vitamin A rich foods.

The following food sub-groups are considered while calculating the consumption of Protein, Vitamin A, and Heme – Iron.[9]

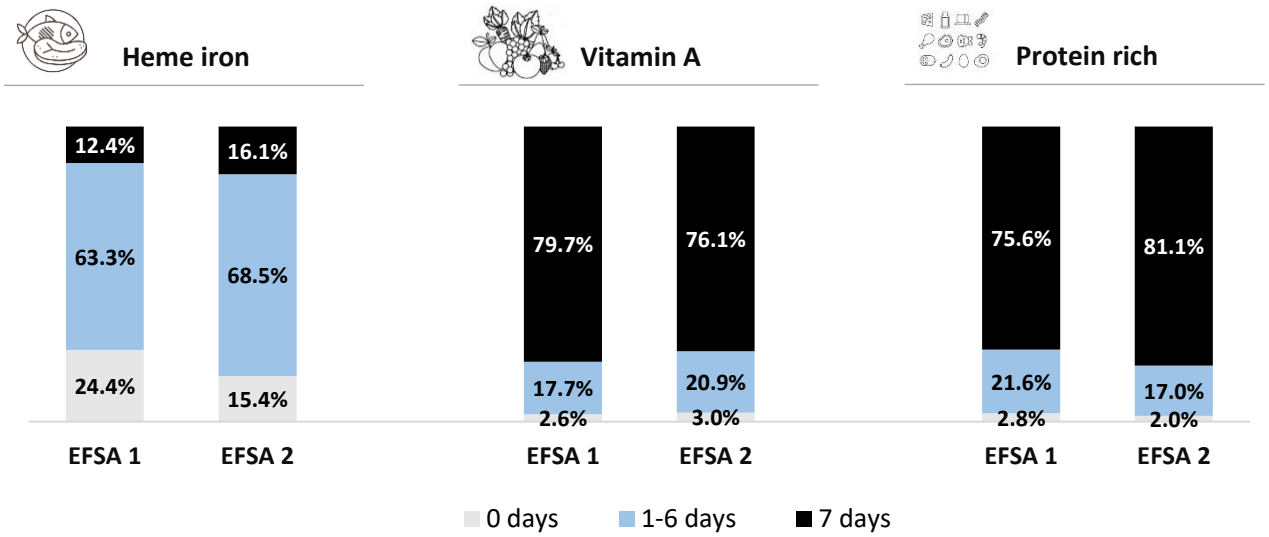
- **Vitamin A-rich foods**: Dairy, Organ meat, Eggs, Orange veg, Green veg, and Orange fruits
- **Protein-rich foods**: Pulses, Dairy, Flesh meat, Organ meat, Fish and Eggs
- **Heme iron-rich foods**: Flesh meat, Organ meat, and Fish

The results of FCS-N analysis showed that there was a significant increase in intake of Heme iron-rich food and a slight increase in protein-rich food. Nonetheless there was also a slight decrease in Vitamin A-rich food. Moreover, poor and borderline FCS households became more food insecure in terms of nutritional value of food they consume.

FCS-N should be taken with some caution, particularly looking at protein numbers. The foods in this category include eggs and dairy, and this can probably explain the high numbers here. As we can see in the graph below, the intake of iron-rich products was significantly lower compared to food rich in Vitamin A and protein. In EFSA 2 the intake of iron and protein-rich food slightly increased in contrast

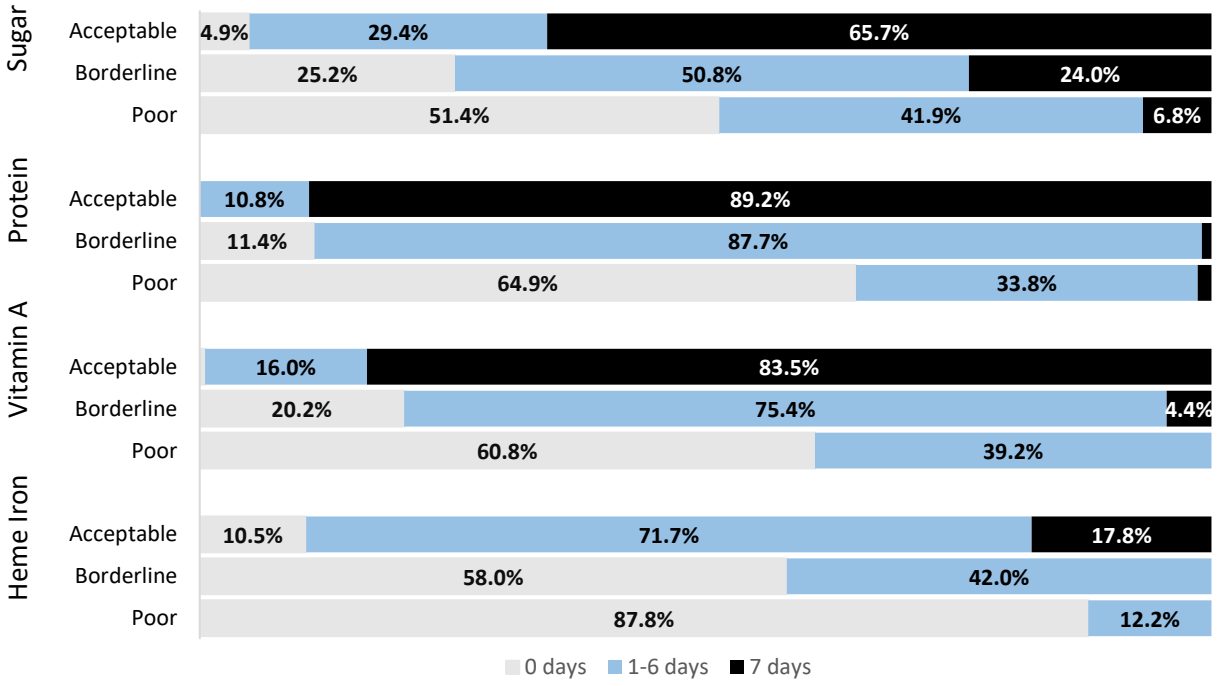
to food rich in Vitamin A, which slightly decreased. In EFSA 2 The proportion of those not consuming iron-rich food at all significantly decreased by 9 percentage points, while everyday intake of protein has increased by 5.5 percentage points.

Figure 21: Food Consumption Score - Nutrition



The households with poor and borderline FCS also ranked lower on nutritional aspects of the diet. In particular, the households with poor and borderline FCS had low Iron, Vitamin A, and protein intake. At the same time, the households with acceptable FCS scored high on sugar intake with 65.7 percent everyday sugar use.

Figure 22: Food Consumption Score - Nutrition by Food Consumption Score Groups (EFSA 2)



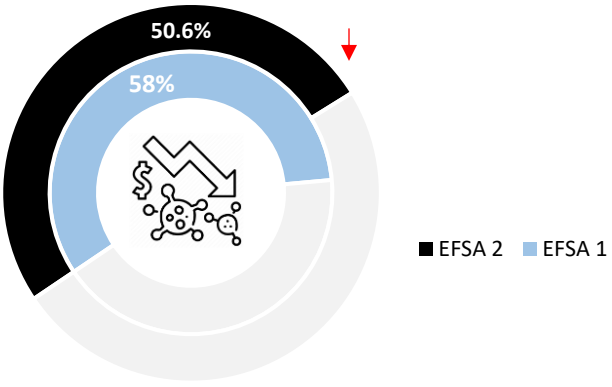
In poor FCS households' low intake of iron-rich food has slightly intensified in a negative way in EFSA 2 compared to EFSA 1. In poor and borderline FCS groups, the intake of food rich in Vitamin A and protein has diminished. At the same time, sugar consumption has intensified significantly for all groups. Whereas 0-day intake of heme iron in poor FCS group was 81.4 percent in EFSA 1, it has worsened by 6.4 percentage points in EFSA 2. Moreover, in poor FCS group 0-day intake of Vitamin A has worsened by 14 percentage points in EFSA 2 and protein intake by 11.7 percentage points.

3.5 Access to Resources and Main Concerns

Overall, 7.3 percentage points less respondents reported disruption of household income compared to EFSA 1. The improvement is related to the removal of the COVID-19 related restrictions, partial recovery of the business activities and employment. However, there was an increase in job loss abroad, decrease in remittances from relatives living abroad, and decrease in income from retail due to seasonal reasons (agricultural products). In spite of all the changes, the main concern of the respondents in EFSA 2 was no longer COVID-19 or social-economic aspects of their livelihood. Instead, respondents indicated the conflict with its consequences, as well as the unstable political situation in the country as the main reasons to worry about. Interestingly, the majority of the respondents mentioned the increase in food commodity prices among their concerns. This seems alarming as the recurrent price hikes have also been confirmed by the National Statistical Committee.

The respondents were asked a general question on the disruption of household income due to COVID-19 without specific time period. In EFSA 2, 50.7 percent of respondents reported that current COVID-19 outbreak disrupted their HH income. Compared to EFSA 1, In EFSA2 7.3 percentage point less respondents reported disrupted income due to COVID-19.

Figure 23: Income disruption due to COVID-19



Q42. Has the current outbreak of COVID-19 disrupted your HH income?

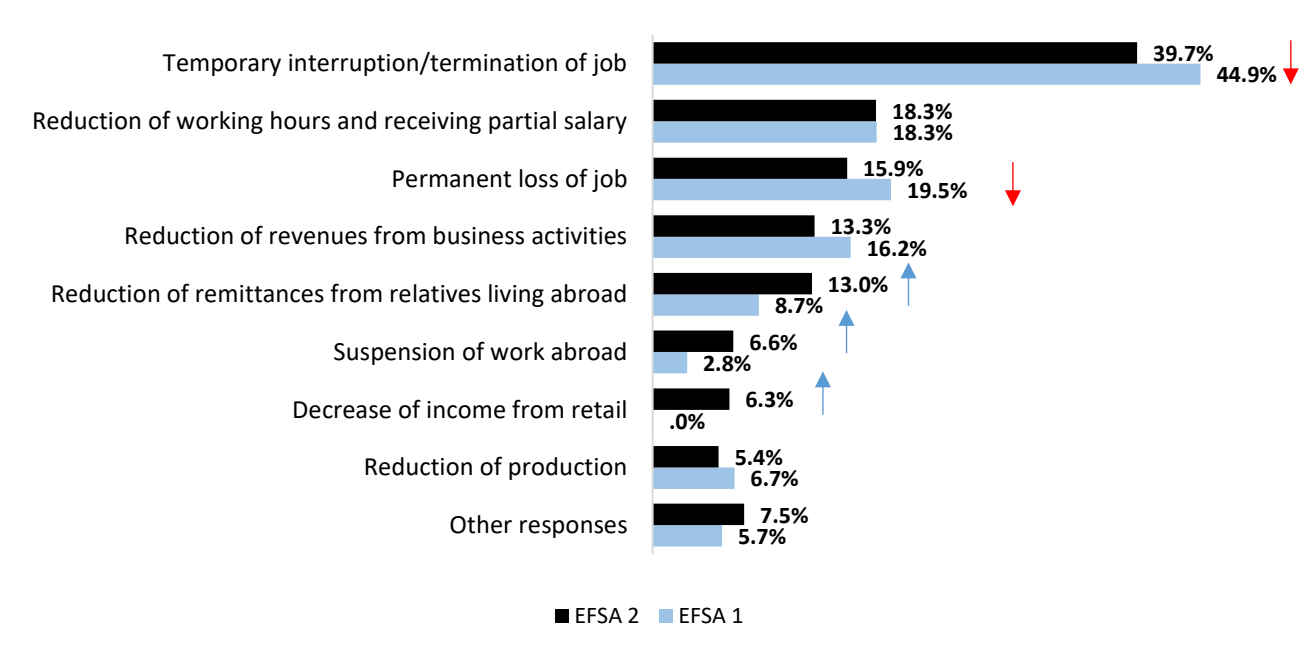
The main reasons for that disruption were the temporary interruption / termination of employment (39.7 percent), reduction of working hours (18.3 percent), permanent job loss (15.9 percent), and reduction of revenues from business activities (13.3 percent). The impact of COVID-19 has become less severe on temporary interruption or loss of employment in Armenia, but the situation seems to

be exacerbated for households heavily depending on seasonal migration and remittances. In addition, although almost all sectors operate in the same way as during pre-lockdown period, the habits of consumer might have also changed: a number of companies started to operate remotely without having any physical office rental, public transportation as well as restaurants and cafes were not functioning with their full capacity as they did prior to the pandemic. Furthermore, people still avoided crowded places as infection and fatality rates were still significant.

Due to COVID-19 restrictions by many countries Armenia faced reduction of remittances and people had difficulties with seasonal job migration. For example, many seasonal workers were not able to travel to Russian Federation for their seasonal jobs because of the closed borders [10]. Those households whose income source were lost due to COVID-19 restrictions were highly vulnerable from the food security perspectives.

According to inflow of remittances gross income of seasonal workers received from works classified as services decreased by 30.9 million dollars in the third quarter of 2020, compared to the same period of the previous year[11]. The decrease of income from retail may have seasonal character as the category includes sales of agricultural production; whereas summer and autumn in Armenia are rich in production of fruits and vegetables, in winter only those with access to greenhouse and ability to import agricultural products managed to generate revenues from retail.

Figure 24: Reasons of interrupted income

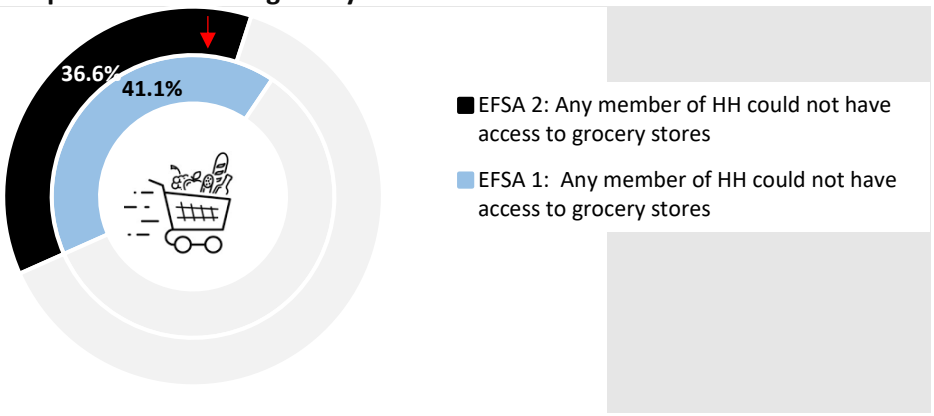


Q43. How has the current outbreak of COVID-19 disrupted your HH income?

[10] Inflow of Remittances by Balance of Payments, Central Bank of Armenia
https://www.cba.am/en/SitePages/statexternalsector.aspx
[11] For more information on FCS-N calculation visit Food Consumption Score Nutritional Analysis (FCS-N) Guidelines

Less people report lack of access to grocery stores compared to June-July when some of the shops and supermarkets were forcefully closed as a result of COVID-19 restrictions. 36.6 percent of respondents reported lack of access to grocery stores compared to 41.1 percent of EFSA 1 as more businesses were reopened after the lockdown limitations.

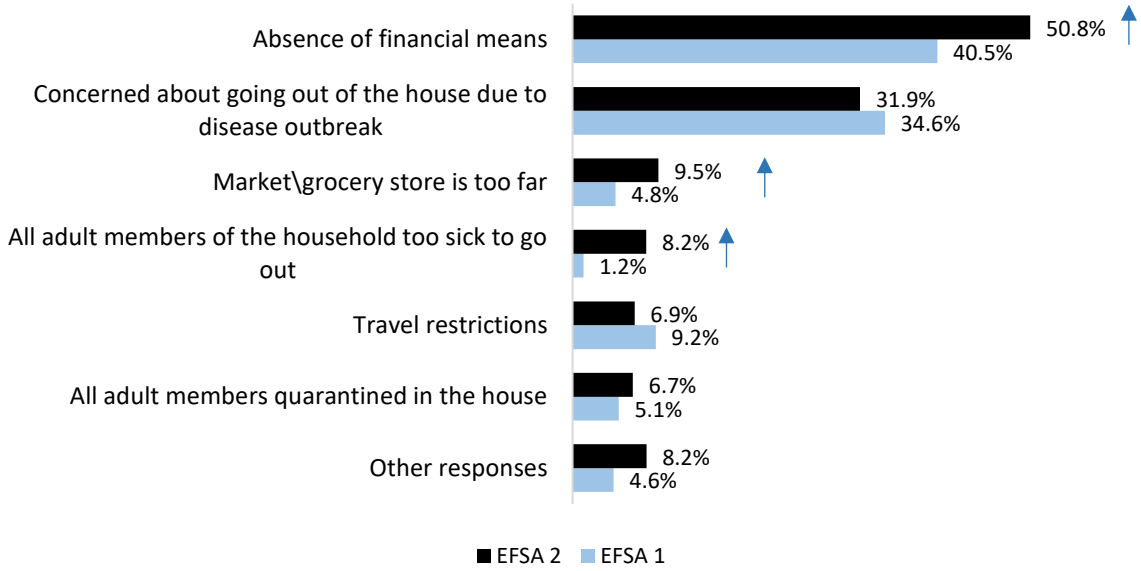
Figure 25: Disruption of access to grocery stores



Q35. In the past 7 days, has there been a time when you or your household members needed, but could not access the grocery store or market due to some obstacles related to the current situation?

The impact of absence of financial resources remained the major reason (50.8 percent) for lack of access to grocery stores. Significantly more people reported not being able to go to store as all the household members were sick (8.2 percent)[12]during November-December 2020. The proportion of people avoiding grocery stores as a crowded public place has remained almost as high as in EFSA 1, comprising 31.9 percent of the respondents.

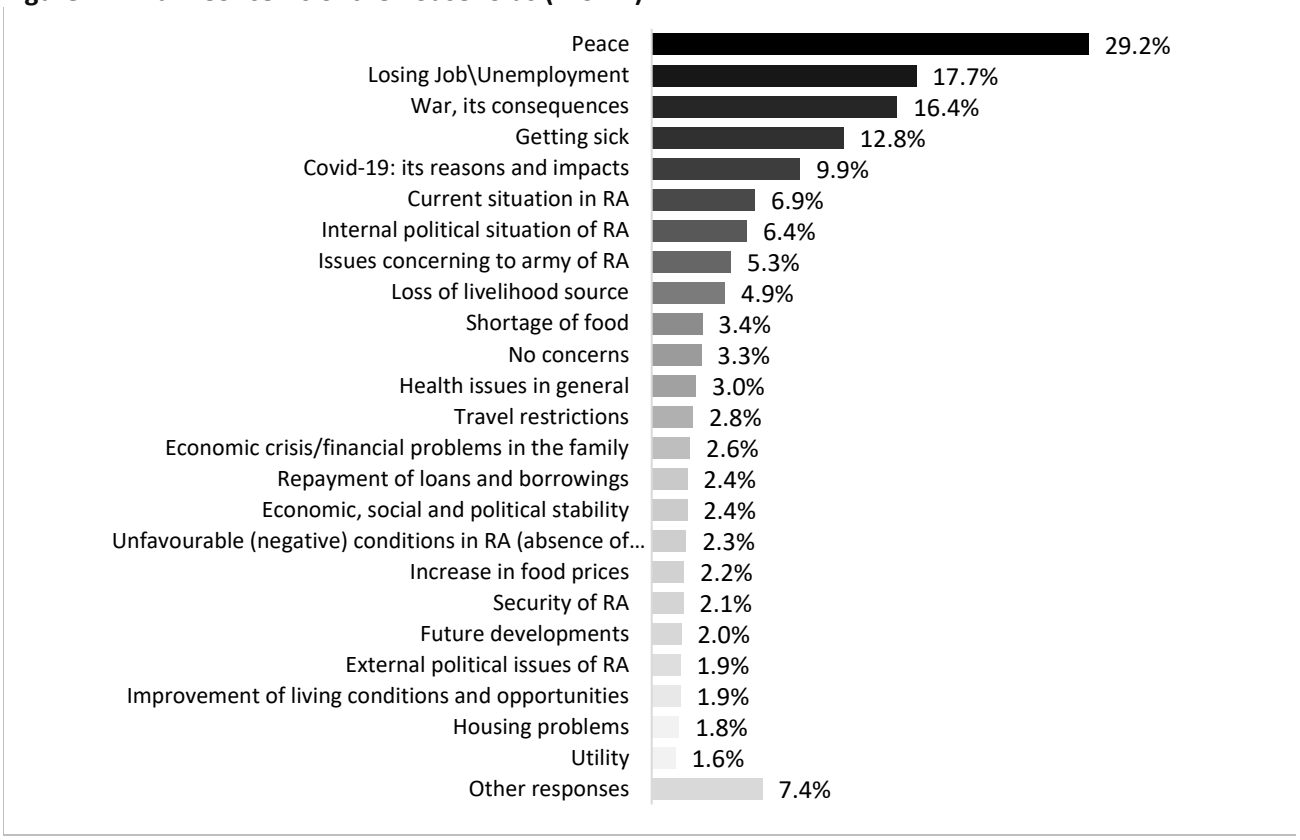
Figure 26: Main reasons for disrupted access to grocery stores/market



[12] https://www.worldometers.info/coronavirus/country/armenia/

The list of main concerns in the households drastically differed from the ones in EFSA 1. While for EFSA 1 the main concerns were the worries of getting sick (41.6 percent) and becoming unemployed (41.6 percent), these concerns became less important after the conflict in Nagorno-Karabakh. Based on the results of EFSA 2, 29 percent of the respondents were concerned about establishing peace in the country, 16.4 percent about the consequences of the war, 15 percent about the political and overall situation in the country. Becoming unemployed was the worry of only 16.4 percent of the respondents. About 12.8 percent of respondents were worried about getting sick and 4.9 percent were concerned about their loss of livelihood source.

Figure 27: Main Concerns of the households (EFSA 2)



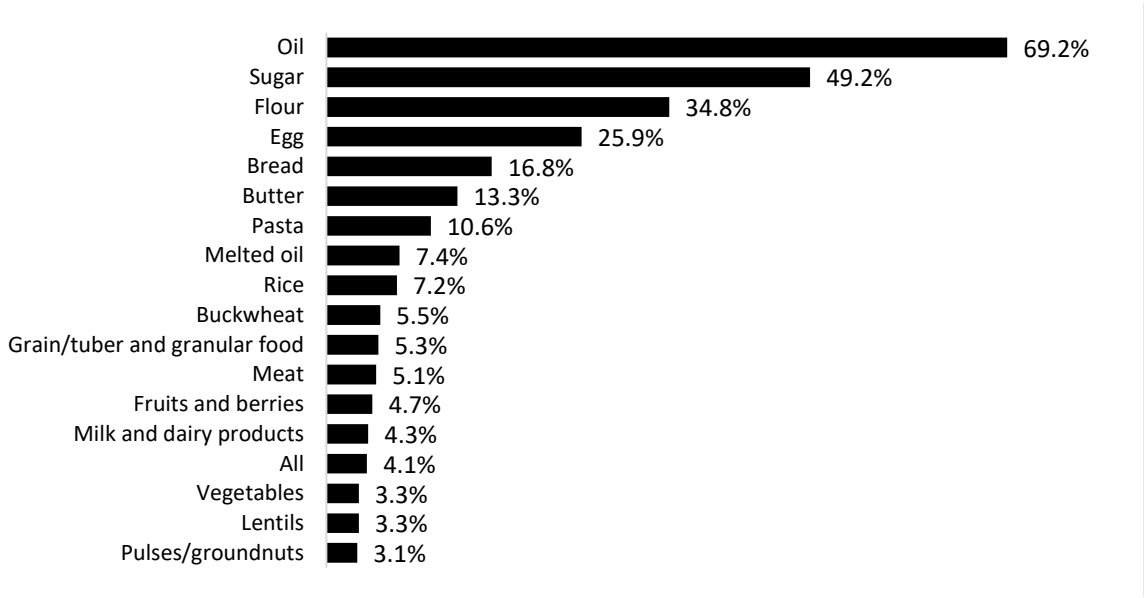
Q47. What is your most important concern under the current circumstances?

Consumer price index percentage change for food in November 2020, published by National Statistical Service, was 0.9 percent higher compared to the same month of the previous [13]. There was increase in prices of oil (7 percent), fruits (9.7 percent), eggs (6 percent), rice (7.6 percent), bread and cereals (3.5 percent), and flour (10.6). These changes were captured also by EFSA 2. From consumer side,73.2 percent of the respondents mentioned that they noticed increase in prices of commodities. Majority of those that noticed increase, mentioned the increase of oil price (69 percent), 49 percent mentioned sugar price increase and 35 percent flour price increase. Eggs, bread, butter, and pasta were on the top of the list as well. The situation became more alarming when we observed consumer price index for January 2021 with 6.5 percentage increase for food, compared

[13] Consumer price indexes in the Republic of Armenia, January-November 2020

to January 2020. This includes 26.4 percent increase for eggs, 8.4 percent for bread, 11.2 percent for rice and 13.8 percent for flour.

Figure 28: Perceived increase in food and non-food commodities, top products (EFSA 2)



Q38. In the past 7 days, have you experienced any increase in the price of food and non-food commodities? Which commodities?

4. Coping Mechanisms

Worsened social-economic conditions have urged many households to adopt various coping mechanisms to ameliorate their living conditions and overcome the challenges of pandemic and war.

The assessment along with the FCS, measured Livelihood Coping Strategy Index (LCSI). The livelihoods-based coping strategy index is used to better understand the longer-term coping capacity of households in response to shocks. Each strategy is associated with a level of severity[14], which is a country or context specific. Each level of severity is described by three different strategies that households apply based on their needs (overall, ten strategies).

- Stress strategies indicate a reduced ability to deal with future shocks as the result of a current reduction in resources or increase in debts.
- Crisis strategies are often associated with the direct reduction of future productivity as it is connected to the reduction of expenses on health or education or selling of assets such as means of transportation.

[14] The levels of severity are defined as none, stress, crisis or emergency

- Emergency strategies affect future productivity as well but are more difficult to reverse or more dramatic in nature than crisis strategies as it they associated with selling the house or land, the last female animals, working children who are under 15 years old, and similar severe actions.

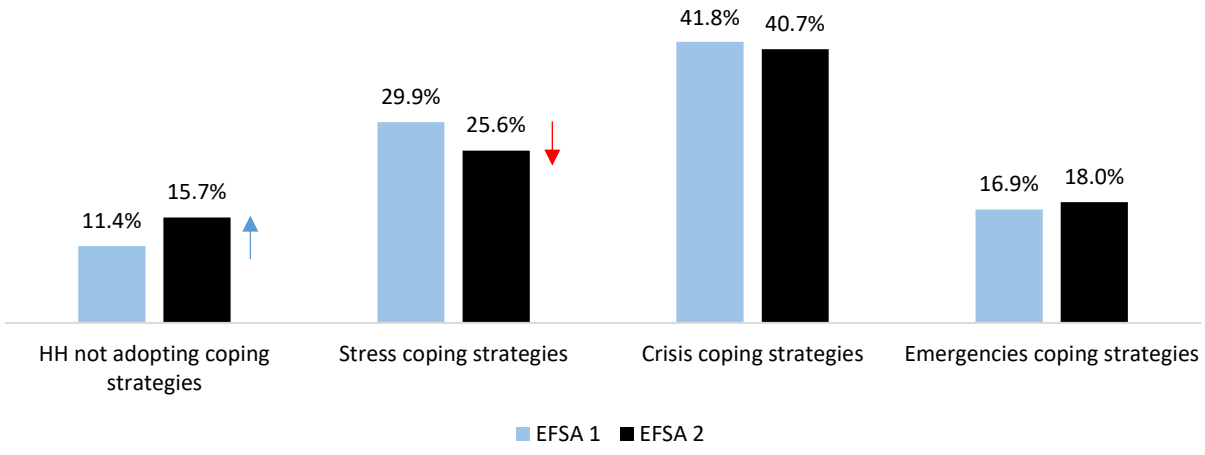
The Livelihood Coping Strategy Index is calculated based on WFP methodology and is a result of a higher weighting given to some coping strategies compared to others. Coping strategies are ranked in the following order (descending in severity): emergency, crisis, stress coping strategies.

By tracking the dynamics of coping strategies, we can have a better roadmap of the strategies implemented by various social groups.

In EFSA 2 adoption of crisis and emergency coping strategies remained as high as in EFSA 1, 58.7 percent and only adoption of stress coping strategies decreased slightly. Households led by men, the ones with higher education, in Yerevan, higher income, living in a house owned by household, having staple food stock, and not receiving assistance are less prone to adopting coping strategies. Adoption of emergency coping strategies was high for households from rural areas (25 percent). The households with poor FCS adopted more stress coping strategies, whereas the ones with borderline FCS increased the proportion of crisis coping strategies in EFSA 2 compared to EFSA 1.

The majority of the respondents to this survey applied some form of coping strategies and only 15.7 percent managed to have uninterrupted access to food. About 18 percent of households applied emergency coping strategies to access food for their families in the past 30 days. At the same time, the proportion of households not adopting any coping mechanisms significantly increased compared to EFSA 1 at the expense of stress coping strategies, the decrease of which was also statistically significant. Overall, the implementation of severe coping strategies (crisis and emergency coping strategies) experienced no improvement, remaining 58.7 percent combined. This might have served as one of the main reasons of improvement in food security, although it is a short-term remedy as those resources will be depleted soon.

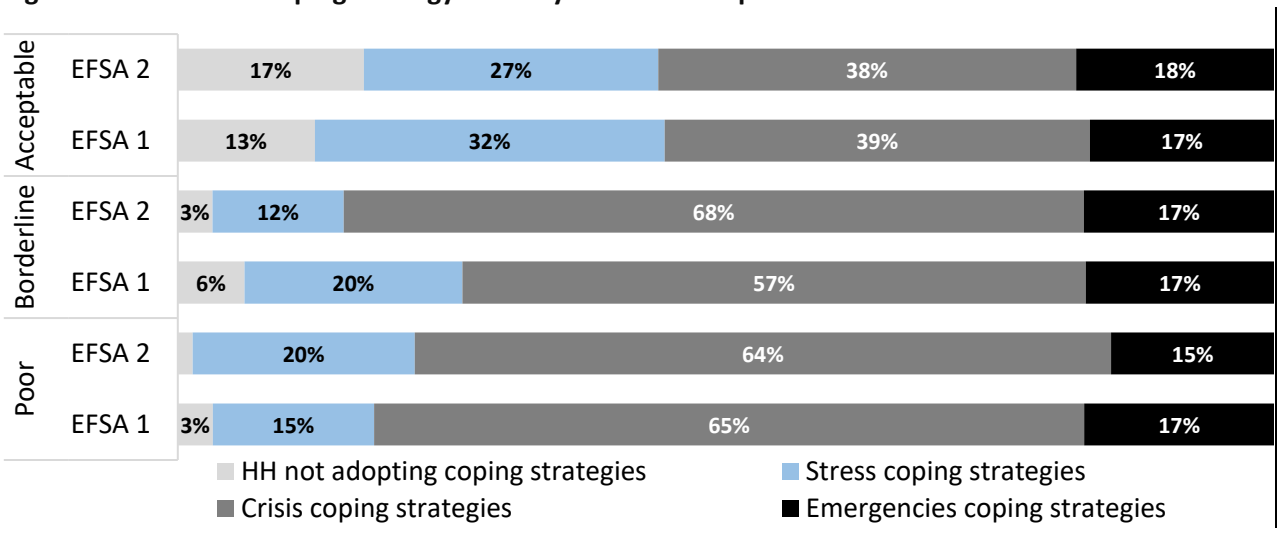
Figure 29: Livelihood Coping Strategy Index



Q32.9. During the past 30 days, did anyone in your household have to engage in any following behaviors due to a lack of food or money to buy food?

The graph below shows that although in EFSA 1 adoption of emergency coping strategies was identical in all FCS groups, in EFSA 2 a slightly smaller proportion of those strategies was utilized by poor FCS group. Instead, poor FCS households have adopted more stress coping strategies in EFSA 2 compared to EFSA 1. More households of acceptable FCS have adopted no coping strategies in EFSA 2 (17 percent compared to 13 percent of EFSA 1). Finally, borderline FCS households have adopted a significantly higher proportion of crisis coping strategies instead of stress coping strategies compared to EFSA 1.

Figure 30: Livelihood Coping Strategy Index by Food Consumption Score



Q32.9. During the past 30 days, did anyone in your household have to engage in any following behaviors due to a lack of food or a lack of money to buy food?

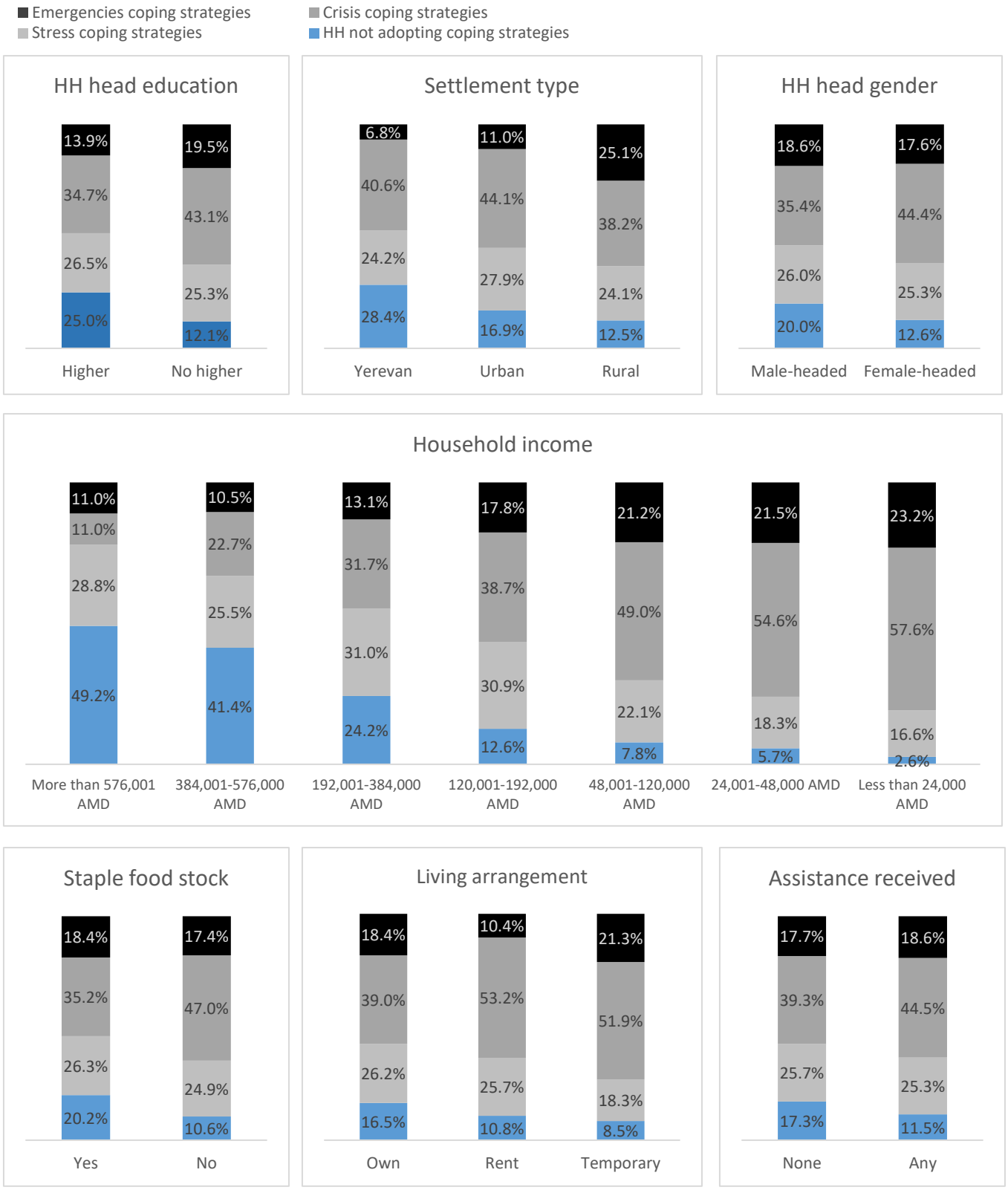
About half of the respondents spent their savings (54 percent), 41 percent purchased food on credit, 40 percent borrowed money, and 38 percent reduced non-food expenses (including medicine) and education. In 2.4 percent of households, children under 15 years old were working to contribute to household income and 7.4 percent sold the last female animal. Previously widely used sources that could not be used anymore were borrowing money, reducing non-food expenses, and receiving food from relatives and neighbors.

Table 3: In detail description of coping strategies

Coping strategy (large group)	Coping strategy (small groups)	No, because I did not face a shortage of food (%)	No, because I have already engaged in this activity within the last 12 months (%)	Yes (%)	Not applicable (%)
Stress strategies	Sold household assets/goods (radio, furniture, refrigerator, television, jewelry, etc.)	81.9%	6.7%	6.8%	4.6%
	Spent savings	21.9%	4.5%	53.8%	19.8%
	Borrowed money	50.2%	8.9%	39.7%	1.2%
	Purchased food on credit or borrowed money (Purchase on credit)	51.3%	6.9%	40.6%	1.2%
Crisis strategies	Reduced non-food expenses on health (including medicine) and education	48.4%	7.6%	37.5%	6.5%
	Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc.)	63.1%	5.1%	3.8%	28.0%
	Were dependent on food assistance and/or support from neighbors and relatives as only food/income source	74.4%	7.4%	14.7%	3.5%
Emergency strategies	Sold house or land	87.8%	3.6%	1.4%	7.2%
	Sold last female animals	22.4%	4.3%	7.3%	65.9%
	Children (under 15 years old) were working to contribute to household income (e.g. casual labor)	47.8%	1.3%	2.4%	48.5%

The households with a head that had higher education were twice less likely to adopt coping strategies (13 percentage point difference). Those households were also less likely to implement emergency or crisis coping strategies. Respondents from Yerevan were also less likely to adopt coping strategies. Households led by men were less prone to adopt coping strategies but the proportion of adoption of emergency coping strategies is about the same as for households led by women. As expected, households with higher income applied less severe coping strategies. Households with staple food stock adopted fewer coping strategies but the proportion of emergency coping strategies was about the same for the households with and without food stock. Households living in a house owned by them were less prone to adopting coping strategies.

Figure 31: Coping strategies by household characteristics



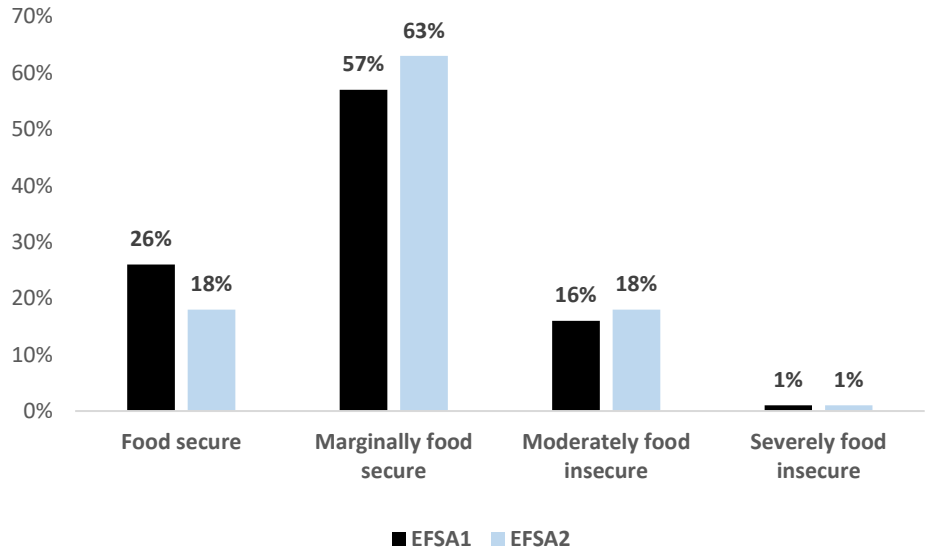
5. Comprehensive Food Security

Consolidated food security indicator (rCARI) is an aggregated food security index to report on population's comprehensive food security status. This composite indicator is used to determine the number of food insecure people when data from regular assessments are not available due to access issues. This is to assess a) the current status of households' food consumption (assessed based on food consumption patterns); and b) the current coping capacity of households to meet future needs (assessed based on economic vulnerability and adoption of livelihood coping strategies).

The indicators used to calculate this consolidated food security indicator are food consumption score, livelihood coping strategies, income sources and changes in income due to the shocks.

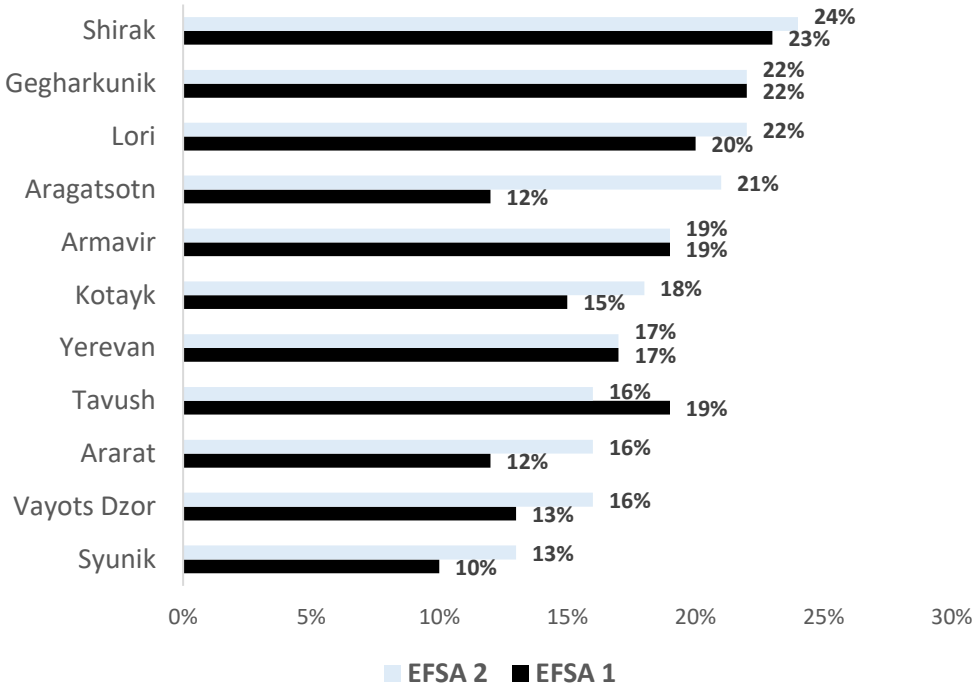
The comparison of comprehensive food security shows similar levels of moderately and severely food insecurity in EFSA 1 and EFSA 2 with 17 percent and 19 percent respectively.

Figure 32: Comprehensive food security comparison EFSA1 and EFSA2



Regional distribution in view of comprehensive food security revealed increase in almost all marzes with exception of Gegharkunik, Armavir, Yerevan and Tavush marzes in ESFA 2. The most significant increase was shown in Aragatsotn marz with 12 percent in EFSA 1 and 21 percent in EFSA 2. Interestingly, in Tavush the indicator decreased in 3 percentage points.

Figure 33: Comprehensive food security comparison EFSA 1 and EFSA 2 by region



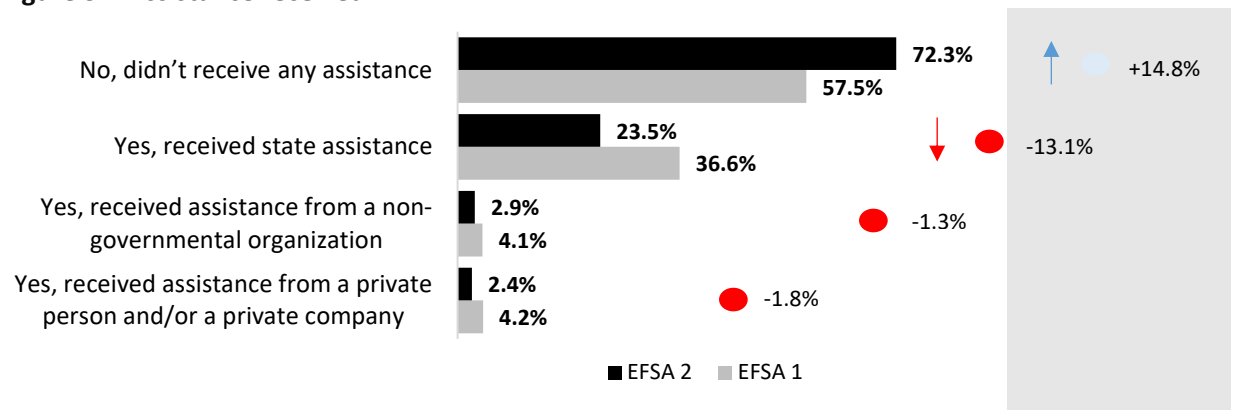
6. Assistance to households

The economic hardships imposed by COVID-19 and the conflict in Nagorno-Karabakh continue to impact food consumption in households. More than the half of the households did not receive any form of assistance during EFSA 1. In summer, 2020, Armenian government initiated a series of mechanisms of one-time help to support families and businesses.

In EFSA 2, 72 percent of the households did not receive assistance. The higher level of support by the state during EFSA 1 (15 percentage points higher compared to EFSA 2) was due to the fact that in summer 2020 the government of RA implemented 22 programs to address economic and social impact of COVID-19, which was a one-time support to individuals, households, and businesses[15].

[15] https://www.gov.am/en/covid-19-cragrer./

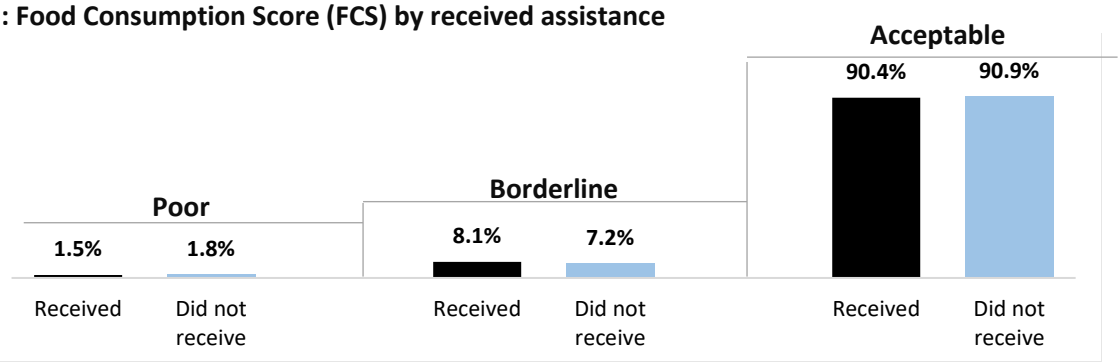
Figure 34: Assistance received



Q44. Has your household or anyone in your household received any assistance (cash, food, etc.) from the Government or any other organization related to COVID-19 and state of emergency?

During the survey period, many international organizations and NGOs started distributing goods and assistance particularly targeting the households having children and this was also captured by the survey: more households with children received assistance, compared to the ones with no children. The distribution of assistance received also varied based on the number of family members, spontaneous arrivals from Nagorno-Karabakh gender of HH head. There is no significant difference in the distribution by settlement type. More households with elderly only received state support. Similar to EFSA 1, households' food security did not vary significantly based on receiving assistance.

Figure 35: Food Consumption Score (FCS) by received assistance



Q44. Has your household or anyone in your household received any assistance (cash, food, etc.) from the Government or any other organization related to COVID-19 and state of emergency?

7. Changes in consumption over time – Panel analysis

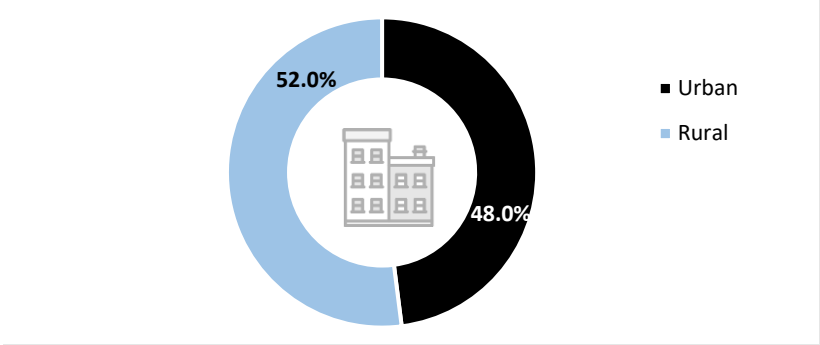
The respondents from EFSA 1 were contacted and invited to participate in EFSA 2. Overall, 717 respondents agreed to participate in EFSA 2. To track the changes in households over time, analysis of panel data was implemented and presented in this chapter.

Panel analysis among the same households conducted in June-July and November-December revealed that there was improvement in food security (moving from poor or borderline food consumption category to acceptable food consumption category) for 11 percent of the households and worsening in food consumption for 6.3 percent of the households. In addition, 43 percent of the households implemented severe coping strategies in both surveys and 18.5 percent of the households had to adopt severe coping strategies in EFSA 2 although in EFSA 1 they adopted only

not severe ones. However, only 68 percent the households implementing severe coping strategies in both surveys managed to remain food secure in both time periods. Hierarchical linear modelling illustrates that on average there was an increase in FCS score of households and that variability can be explained by stock of staple food and household income. Assistance received was also a significant predictor of food security, although in multiple regression analysis its effect did not remain significant.

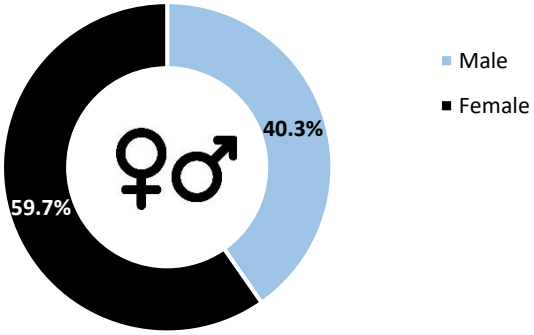
About 48 percent of the households participating in both surveys in EFSA 2 were from urban settlements[16].

Figure 36. Distribution of Households by settlement type in the panel



Around 60 percent of the households participating in the panel were led by women.

Figure 37. Distribution of households by gender of household head in the panel

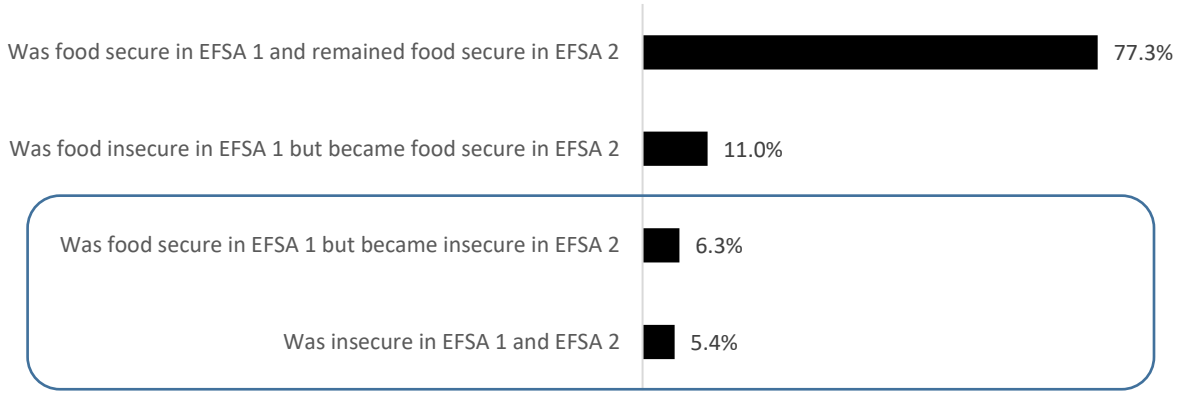


In panel analysis the dynamics of food consumption in the households were observed. 77 percent of the households remained having acceptable food consumption in EFSA 1 and EFSA 2 and 11 percent of the households was able to recover its inacceptable food consumption though they had inacceptable food consumption in EFSA 1. 6.3 percent of the households reported to no longer maintain food security in EFSA 2 and 5.4 percent of the households remained having inacceptable

[16] Note some households change their place of residence, for example in EFSA 1 the proportion of the same segment was 47.4 percent

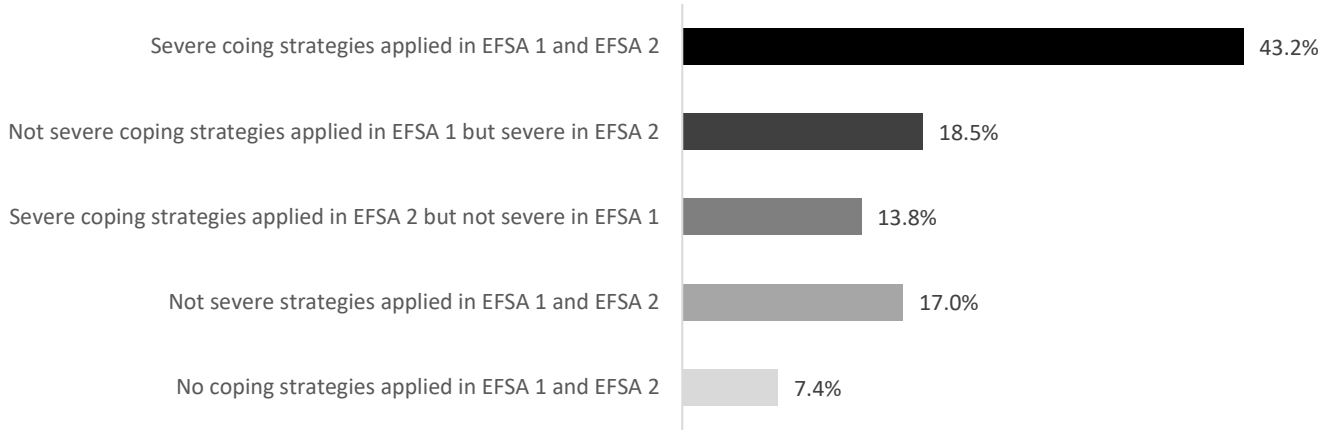
food consumption in EFSA 1 and EFSA 2. This last two groups need special attention as the most vulnerable ones.

Figure 38. Dynamics of food security in the panel



Dynamics of adoption of coping strategies was also tracked over time. Coping strategies were classified based on severity. As severe coping strategies were considered emergency and crisis coping strategies. Not severe one was considered stress strategy at some point of time along with not implementing any strategy. The graph below illustrates that 43 percent of the households implemented severe coping strategies in both time periods of survey and 18.5 percent of the households had to adopt severe coping strategies in EFSA 2 although in EFSA 1 they adopted only not severe ones. Only 7.4 percent of the households did not implement any coping strategy in both time periods.

Figure 39. Dynamics of coping strategy adoption in the panel



Panel observations were conducted to measure the changes in outcomes over time among the same households. It showed that 89 percent of the households not adopting any coping strategies were able to remain havingacceptable food consumption over time, and 93 percent of those adopting not severe coping strategies remained food secure. Nonetheless, only 68 percent the households implementing severe coping strategies in both surveys managed to remain food secure in both EFSA

1 and EFSA 2. Chi-square test shows a significant association between food consumption and coping strategies.

Figure 40. Food security dynamics by adoption of coping strategies

Chi-square test (49.17) *** Significant on level 0.01		Adoption of coping strategies				
		No coping strategies applied in EFSA 1 and EFSA 2	Not severe strategies applied in EFSA 1 and EFSA 2	Severe coping strategies in EFSA 2 but not severe in EFSA 1	Not severe coping strategies in EFSA 1 but severe in EFSA 2	Severe coping strategies applied in EFSA 1 and EFSA 2
Food security	Was insecure in EFSA 1 and EFSA 2	0.0%	1.6%	2.0%	5.3%	9.0%
	Was food secure in EFSA 1 but became insecure in EFSA 2	0.0%	.8%	2.0%	9.0%	9.7%
	Was food insecure in EFSA 1 but became food secure in EFSA 2	11.3%	4.9%	12.1%	10.5%	13.2%
	Was food secure in EFSA 1 and remained food secure in EFSA 2	88.7%	92.6%	83.8%	75.2%	68.1%

To measure the changes in effect of COVID-19 and the war, using panel data is especially helpful by implementing growth curve modelling. Panel data is a multi-dimensional data measuring the same households over time to track the evolution of the outcomes. For this purpose, hierarchical linear modelling is applied, where fixed effects estimator (also known as the within estimator) helps to control for omitted variable bias. The dependent variable of the model is Food Consumption Score.

There fixed effect regression model 1 includes the null model, which indicates that there was a significant change over time (2.3-point difference between the time periods). Nonetheless, when we add control variables, the effect of time variable does not persist. Model 2 illustrates that when the variables of available staple food stock and household income are included, the effect of time variable is no longer significant. We can say that we were able to capture the time variant change by controlling for these two variables. By controlling for all the household variable, we see that the effect of time variable is still not sustained. On average households headed by men had higher FCS score, each child decreases FCS score by 1.7 points. Households with staple food stock had 7.8 points higher food security compared to the households with no staple food stock. Higher income was associated with higher FCS score. Interestingly, receiving assistance on average increased FCS score by 2.5 points over time.

Table 4. Growth curve modelling – estimates of fixed effect parameters

Dependent variable:		Model 1 (Null)		Model 2		Model 3	
Food Security Score		Coef.	SE	Coef.	SE	Coef.	SE
Intercept		62.2	(1.5) ***	62.6	(2.2) ***	42.3	(6.5) ***
Time (EFSA 1 and EFSA 2)	Fixed effects of time variable	2.3	(0.8) ***	0.4	(0.9)	1.1	(0.9)
Gender	Female					-1.8	(1.2)
Education	HH head with higher education					6.8	(1.5) ***
Children in HH	Number of children in family					-1.7	(0.8) **
Number of members in HH	Number of family members					1.1	(0.5) **
Settlement type	Other housing type					0[b]	0.0
	Temporary					-3.1	(5.2)
	Rent a house					-0.4	(5.3)
	Own house					4.7	(4.7)
Stock of staple	Had a stock of staple food			7.8	(1.2) ***	7.2	(1.2) ***
Income	Refuse to answer			0[b]	0	0[b]	(0.0)
	120,000 AMD or less			-6.5	(1.9) ***	-1.7	(0.8) ***
	120,001-192,000 AMD			3.6	(2.2)	2.7	(2.2)
	192,001-384,000 AMD			8.0	(2.2) ***	6.8	(2.2) ***
	More than 384,000 AMD			11.8	(3.0) ***	9.0	(3.0) ***
Assistance	Received some assistance					2.5	(1.2) **
Type of community	Rural					4.2	(1.4) **
N of cases included		**1432**		**1432**		**1432**	

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

Conclusions

Food Security Assessment survey 2 (EFSA 2) results indicated that households' comprehensive food security level was at the similar level with EFSA 1, with 19 percent and 17 percent respectively. Although household food consumption improved compared to EFSA 1 by 5.8 percentage points, reaching 90.2 percent acceptable food consumption, household economic vulnerability and adoption of livelihood coping strategies showed a deterioration. In addition, quality of the diet in terms of regular intake of protein and micro-nutrients improved only for Heme Iron intake and Protein, whereas decreased for Vitamin-A rich food (dairy products, green vegetables, orange fruits, etc.).

Although the driver of main changes in food security in summer months was COVID-19, the conflict erupted in autumn was another factor that impacted food security of households as reported by FAO Food Insecurity Experience Scale (FIES). About 41.5 percent of respondents stated that the conflict in Nagorno-Karabakh somehow impacted their food security experience, whereas COVID-19 was mentioned by slightly more respondents. Nonetheless, the reported concerns related to food security due to lack of financial resources measured by using the questions in FIES improved compared to EFSA 1. In particular, there was a significant improvement in the opportunity of eating healthy and nutritious food and less households had to skip a meal because of lack of financial or other resources, each by almost 8 percentage points.

Gradual recovery of the economy after pandemic and the copying strategies adopted by the households seem to have played a major role in food security status. Similar to EFSA 1, households continued adopting severe coping strategies (crisis and emergency coping strategies) 58.7 percent combined. This might have served as one of the main reasons of sustained food security level, although it is a short-term solution as those resources will be depleted soon. In addition, less respondents reported disruption of HH income due to COVID-19 (improvement by 7.4 percentage points), mostly due to less interruption / loss of employment and decrease in income from business activities. Instead, there was an increase in loss of job abroad and remittances.

The results from multivariate logistic regression revealed that households led by men, households with a head having higher education, living in a house owned by the household, having stocks of staple food, and higher income positively impacted the ability of the households to be have better food consumption. Households from a rural area also had a positive impact on food consumption in EFSA 1, while in ESFA 2 this was not an influencing factor. Moreover, the proportion of food insecure households in rural and urban settlements was about the same in winter months. This change could be due to seasonal food security as rural households no longer generate income from selling farm goods in winter months. There appeared to be no significant difference in food security of the households that received any type of assistance and the ones that received none.

Households with four and more children were extremely food insecure in both surveys with food insecurity of about 22 percent. During EFSA 2 the highest share of food insecurity was reported in Lori, Shirak and Gegharkunik regions with 11 percent of food insecurity level for each.

The changes in autumn brought about changes in main concern of the households. While COVID-19 and its social-economic consequences were the major concern of the household respondents in EFSA 1, in EFSA 2 the main concern reported by the respondents was the conflict in Nagorno Karabakh, its consequences, army-related issues and the political situation in Armenia (around 60 percent).

Coping strategy	Relieve the impact on households of shocks that they are unable to protect themselves against, through mitigation or prevention, due to lack of assets, access to instruments or the magnitude of the shock. They include social assistance or welfare programmes as well as relief operations in response to natural disasters or civil disturbances. These measures prevent the troughs in income profiles that would reduce levels of well-being below accepted thresholds (OECD, 2007).
Food consumption score (FCS) Indicator	Score calculated using the frequency of consumption of different food groups consumed by a household during the seven days before the survey. The standard thresholds are poor, borderline and acceptable food consumption (WFP, 2015).
Food Consumption Score Nutritional Analysis (FSC-N)	Consumption of nutrient rich groups by the HH and which are essential for nutritional health and well-being: protein, iron and vitamin A (WFP, 2015).
Food Insecurity Experience Scale (FIES)	A statistical scale designed to measure unobservable traits such as aptitude/intelligence, personality, and a broad range of social psychology and health-related conditions (FAO).
Food security	Food security exists when all people, always, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. The four pillars of food security are availability, access, utilization and stability. The nutritional dimension is integral to the concept of food security (FAO, 2009).
Heme iron	Dietary iron is found in two forms, heme and non-heme iron. Heme iron, which is present mainly in meat, poultry and fish, is well absorbed. Non-heme iron, which accounts for the majority of the iron in plants, is less well absorbed. More than 95 percent of functional iron in the human body is in the form of heme (Hooda, Shah and Zhang, 2014).
Iron Deficiency Anemia	Iron-deficiency anemia is a common type of anemia that occurs if you do not have enough iron in your body. People with mild or moderate iron-deficiency anemia may not have any signs or symptoms. More severe iron-deficiency anemia may cause fatigue or tiredness, shortness of breath, or chest pain (NHLB Institute). Iron deficiency impairs the cognitive development of children from infancy through to adolescence. It damages immune mechanisms, and is associated with increased morbidity rates (WHO, 2001)
Livelihood Coping Strategy (LCS) Indicator	An existing WFP corporate indicator that is collected to understand the behaviors in which vulnerable households engage to meet their immediate food security needs in times of crisis or shock. It is designed to assess the extent to which households engage in such behaviors, but also considers the impact of these coping strategies on the household's livelihood: given that certain behaviors may affect longer-term productive ability, households' engaging in

	these will have a reduced capacity to cope when faced with future hardships. Households are categorized based on severity (stress, crisis or emergency) of livelihood coping strategies employed (WFP, 2018).
Malnutrition	Refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients (WHO, 2016).
Stunting	Stunting is the impaired growth and development that children experience from poor nutrition, repeated infection, and inadequate psychosocial stimulation. Children are defined as stunted if their height-for-age is more than two standard deviations below the WHO Child Growth Standards median (WHO).

ANNEX 1 | Questionnaire

WFP Emergency Food Security Assessment. COVID-19
Phone interview questionnaire. SECOND ROUND

Introduction. Hello, my name is (……), I'm calling you from **R-Insights research and consulting** company on behalf of the **United Nations World Food Programme** (WFP). We are conducting a survey to understand food, market and health situation in Armenia. Your phone number was selected randomly. The survey is anonymous. The data will be analyzed in generalized version. Our phone call is recorded for quality assurance. Could you please allocate 15 minutes to answer our questions?

1.	Yes	**CONTINUE**
2.	No	**STOP THE SURVEY**

Q0.1. Please indicate whether you are participating in diet decision-making process of the household and/or preparing meals for household consumption, or whether you are well aware of all of these processes. It is also important to be well aware of the household expenditures.

1.	Yes	**CONTINUE**
2.	No	**STOP THE SURVEY**

INTERVIEWER. IF THE ANSWER IS NO, ASK TO CONDUCT THE SURVEY WITH THE MEMBER OF THE HOUSEHOLD WHO CAN BEST ANSWER HOUSEHOLD FOOD CONSUMPTION AND EXPENDITURE RELATED QUESTIONS.

SECTION 1. GENERAL INFORMATION ABOUT THE RESPONDENT

Q1. Interview Date and Time |__|__| / |__|__| /|__|__|__|__|

Q2. Are you permanently residing in Armenia? **ONE RESPONSE**

1.	Yes	**CONTINUE**
2.	No	**STOP THE SURVEY**

Q3. Did you reside on the territory of Armenia for more than 10 months within last 12 months? **ONE RESPONSE**

1.	Yes	**CONTINUE**
2.	No	**STOP THE SURVEY**

Q4. Please indicate the name of your place of residence. LITERALLY REGISTER THE NAME OF THE PLACE OF RESIDENCE

Q4.1 NAME OF THE VILLAGE	**Q4.2 NAME OF THE CITY**

Q5. SELECT THE APPROPRIATE REGION, ONE RESPONSE

1	Yerevan	**ASK Q5.1**
2	Aragatsotn urban	**GO TO Q6**
12	Aragatsotn rural	**GO TO Q6**
3	Armavir urban	**GO TO Q6**
13	Armavir rural	**GO TO Q6**
4	Ararat urban	**GO TO Q6**
14	Ararat rural	**GO TO Q6**
5	Kotayq urban	**GO TO Q6**

7	Lory urban	**GO TO Q6**
17	Lory rural	**GO TO Q6**
8	Gegharquniq urban	**GO TO Q6**
18	Gegharquniq rural	**GO TO Q6**
9	Vayoc Dzor urban	**GO TO Q6**
19	Vayoc Dzor rural	**GO TO Q6**
10	Tavush urban	**GO TO Q6**
20	Tavush rural	**GO TO Q6**

15	Kotayq rural	**GO TO Q6**
6	Shirak urban	**GO TO Q6**
16	Shirak rural	**GO TO Q6**

11	Syuniq urban	**GO TO Q6**
21	Syuniq rural	**GO TO Q6**

Q5.1 In which administrative district do you permanently live in Yerevan? ONE ANSWER

1. Achapnyak	**CONTINUE**
2. Avan	**CONTINUE**
3. Arabkir	**CONTINUE**
4. Davtashen	**CONTINUE**
5. Erebuni	**CONTINUE**
6. Kentron	**CONTINUE**
7. Malatia-Sebastia	**CONTINUE**
8. Nor Nork	**CONTINUE**
9. Nork-Marash	**CONTINUE**
10. Nubarashen	**CONTINUE**
11. Shengavit	**CONTINUE**
12. Kanaker-Zeytun	**CONTINUE**
99. Refuse to answer **(DO NOT READ)**	**STOP THE SURVEY**

SECTION 2. DEMOGRAPHIC SECTION

Q6. Gender of the respondent DO NOT READ OUT THE RESPONSE OPTIONS, ASK THE NAME TO DETREMINE

1. Male	**2. Female**

Q7.1 How old are you? FILL IN THE AGE OF THE RESPONDENT (ALREADY TURNED) |__|__|

Q7.2 THE PROGRAM AUTOMATICALLY SELECTS THE AGE GROUP OF THE RESPONDENT FROM THE FOLLOWING GROUPS: ONE RESPONSE

1. Up to 18 years old	**STOP THE SURVEY**
2. 18-24	**CONTINUE**
3. 25-34	**CONTINUE**
4. 35-44	**CONTINUE**
5. 45-54	**CONTINUE**
6. 55-64	**CONTINUE**
7. 65 years old and above	**CONTINUE**

Q8. What is your completed education level? **READ OUT THE RESPONSE OPTIONS IF NECESSARY, ACCEPT ONE RESPONSE**

1. No elementary and not literate
2. No elementary, but literate
3. Elementary
4. Primary
5. Secondary
6. Pre-vocational (crafts)
7. Secondary vocational (technical school, college)
8. Incomplete higher
9. Higher (Bachelor/Master)
10. Postgraduate (postgraduate studies)
99 Refuse to answer **(DO NOT READ)**

Q9. Are you the **head**[17] of your household?

1. Yes GO TO Q12	**2. No ASK Q10 AND Q11**

ASK Q10, IF THE RESPONDENT IS NOT THE HEAD OF THE HOUSEHOLD, Q9=2

Q10. Please indicate the gender of the head of the HH.

1. Male	**2. Female**

ASK Q11, IF THE RESPONDENT IS NOT THE HEAD OF THE HOUSEHOLD, Q9=2

Q11. What is the completed education level of the head of the HH? READ OUT THE RESPONSE OPTIONS IF NECESSARY, ACCEPT ONE RESPONSE

1. No elementary and not literate
2. No elementary, but literate
3. Elementary
4. Primary
5. Secondary
6. Pre-vocational (crafts)
7. Secondary vocational (technical school, college)
8. Incomplete higher
9. Higher (Bachelor/Master)
10. Postgraduate (postgraduate studies)
99 Refuse to answer **(DO NOT READ)**

Q12.1 How many people are living in your household (including yourself)? Please, take into consideration only those members, who live in your HH at least 4 nights. Please, do not list those people, who live at your place as a guest.
BY SAYING GUEST WE MEAN A PERSON, WHO HAVE BEEN LIVING AT YOUR PLACE NOT PERMANENTLY
|__|

Q12.2 Now I will list age groups, please indicate how many males and females of each age group are living in your household.

	Male	**Female**
1. Children - under 2 years old		
3. 2-<5 years old		
4. 5-17 years old		
2. Children - 2 years old and above		
5. 18-59 years old (adults)		
6. 60 years old and above		

Q13_1_GST Now, please, let me know whether there is any guest in your house, **INCLUDED GUESTS FROM ARCAKH**? If yes, tell me, please, how many guests do have at your place now? |__|
Q13_2_NK How many people of your guests are from **ARCAKH, arrived at your place during the last 1-2 months**? |__|

[17] "A household is a person, a group of people with or without kinship ties, who live together in the same or interconnected accommodation, recognize an adult member as the **head of the household**, and have common facilities for cooking and eating together."

BY SAYING GUEST WE MEAN A PERSON, WHO HAVE BEEN LIVING AT YOUR PLACE NOT PERMANENTLY, BUT AT LEAST 4 NIGHTS WEEKLY

Q13_3_NK Tell me please, how long they are living with your at your place. Mention in days, please. |__|

ASK Q15_NK, IF Q13_2_NK>0

Q15_NK Now I will list age groups, please indicate how many males and females of each age group are living **AS GUEST FROM ARCAKH** in your household.

	Male	Female
1. Children - under 2 years old		
3. 2-<5 years old		
4. 5-17 years old		
2. Children - 2 years old and above		
5. 18-59 years old (adults)		
6. 60 years old and above		

Q16_NK. Whether your guests from Arcakh have been eating SAME food with you during the last 4 days? Please, mention for each age-gender group separately.

		Male		Female	
ASK IF Q15_NK_3>0	1. 2-<5 years old	1.Yes	2.No	1.Yes	2.No
ASK IF Q15_NK_4>0	2. 5-17 years old	1.Yes	2.No	1.Yes	2.No
ASK IF Q15_NK_5>0 OR Q15_NK_6>0	3. 18+	1.Yes	2.No	1.Yes	2.No

Q18. Which of the following living arrangements best describes your current housing situation? **READ OUT THE RESPONSE OPTIONS, ACCEPT ONE RESPONSE**

1.	You live in your own house (owned by the household)
2.	You rent the house where you live
3.	You live temporarily in someone's home as a guest, without rent
4.	Other **(REGISTER)** _____

SECTION 3. FOOD INSECURITY LEVEL

	1. Yes ASK Q27	2. No	99. Do not know (DO NOT READ)	97. Refuse to answer (DO NOT READ)	Q27. Was it due to COVID or War? READ OUT THE RESPONSE OPTIONS, ACCEPT ALL RESPONSES				
					1. Yes, it was due to COVID	3. Yes, it was due to War	2. No	99. Do not know (DO NOT READ)	97. RA (DO NOT READ)
Q19. During the last 30 days, was there a time when you or others in your household worried about not	**1**	**2**	**99**	**97**	**1**	**3**	**2**	**99**	**97**

having enough food to eat because of a lack of money or other resources?									
Q20. During the last 30 days, was there a time when you or others in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?	**1**	**2**	**99**	**97**	**1**	**3**	**2**	**99**	**97**
Q21. During the last 30 days, was there a time when you or others in your household ate only a few kinds of foods because of a lack of money or other resources?	**1**	**2**	**99**	**97**	**1**	**3**	**2**	**99**	**97**
Q22. During the last 30 days, was there a time when you or others in your household had to skip a meal because there was not enough money or other resources to get food?	**1**	**2**	**99**	**97**	**1**	**3**	**2**	**99**	**97**
Q23. During the last 30 days, was there a time when you or others in your household ate less than you wanted through you should because of a lack of money or other resources?	**1**	**2**	**99**	**97**	**1**	**3**	**2**	**99**	**97**
Q24. During the last 30 days, was there a time when your household ran out of food because of a lack of money or other resources?	**1**	**2**	**99**	**97**	**1**	**3**	**2**	**99**	**97**
Q25. During the last 30 days, was there a time when you or others in your household were hungry but did not eat because there was not enough money or other resources for food?	**1**	**2**	**99**	**97**	**1**	**3**	**2**	**99**	**97**
Q26. During the last 30 days, was there a time when you or others in your household went without eating for a whole day because of a lack of money or other resources?	**1**	**2**	**99**	**97**	**1**	**3**	**2**	**99**	**97**

SECTION 4. FOOD CONSUMPTION AND FOOD SOURCES

Q28. How many meals did the adults (**18+**) in the household eat **yesterday:** guests living with you should also been considered?

1. Female		**2. Male**	

ASK Q29, IF «0» IS NOT MENTIONED IN Q12

Q29. How many meals did the female children in this household eat **yesterday:** guests living with you should also been considered?

1. 2– < 5 years old children		**2. 5 – 17 years old children**	

ASK Q30, IF «0» IS NOT MENTIONED IN Q12

Q30. How many meals did the male children in this household eat **yesterday:** guests living with you should also been considered?

1. 2– < 5 years old children		**2. 5 – 17 years old children**	

Q31.1 How many days over the last 7 days, did you and members of your household eat or prepared the following food items?

INTERVIEWER: In this part DO NOT SELECT products that have not been used in large portions as the main ingredient of food, but have been used in small quantities, for example, to give flavor to food, or only a small piece of the given food item was consumed by 3-4 and more people.
!!! Do not consider food, which had been provided to you HH by the guests or for their protection and did not consumed by the main HH members

Q31.2 How was this food acquired? **READ OUT THE RESPONSE OPTIONS, ROTATE THE RESPONSE OPTIONS, FILL IN THE MAIN SOURCE OF FOOD FOR THE PAST 7 DAYS.**
01 = purchase in cash owned by the household, not by loan or on credit
02 = purchase on credit /նիսյա/
03 = food assistance
04 = support from relatives/friends
05 = exchange/barter
06 = borrowing /loan or borrowed money from someone else/
07 = gathering of wild plants
08 = hunting/fishing
09 = own production
10 = other

	Food product name/group	Examples	Days	Source
1.1	Foods made from grain	Porridge (oats, buckwheat, etc.), bread, lavash, rice, spelt, bulgur, millet, quinoa, rye, groats, pasta (noodles, macaroni, vermicelli) or other foods made from grains	|__|	|__|__|
1.2	White roots and tubers and plantains	Potato	|__|	|__|__|
1	**Cereals or tubers**	**Rice, buckwheat, bread, lavash, potato, etc.**	|__|	|__|__|
2	**Pulses and groundnuts**	**Beans, lentils, chickpeas, peas, peanuts, walnuts, almonds, hazelnuts and/or other nuts**	|__|	|__|__|
3	**Milk and milk products**	**Fresh milk, powdered milk, yogurt/Greek yogurt, cheese, other dairy products** (excluding margarine, sour cream, butter or small amounts of milk added to tea/coffee)	|__|	|__|__|
4.1	Organ meat	Liver, kidney, heart, tongue and other organs	|__|	|__|__|
4.2	Meat and poultry	Flesh meat: beef, lamb, goat, chicken, pork, duck	|__|	|__|__|
4.3	Fish and seafood	Fish, seafood, canned, dried, smoked fish	|__|	|__|__|
4.4	Egg	Chicken, quail, duck eggs	|__|	|__|__|
4	**Egg, meat, fish, seafood**	**Flesh meat (beef, lamb, pork, chicken, hunting, ect.), fish, egg, organ meat**	|__|	|__|__|
5.1	Vitamin A-rich vegetables, roots and tubers	Carrots, red peppers, pumpkin	|__|	|__|__|
5.2	Dark green leafy vegetables	Spinach, broccoli, or other dark green leaves	|__|	|__|__|
5.3	Other vegetables	Any other vegetable	|__|	|__|__|
5	**Vegetables**	**Carrot, cabbage, spinach and any other vegetables** (excluding potatoes)	|__|	|__|__|
6.1	Vitamin A-rich fruits	Apricot, peach, mango, sea buckthorn	|__|	|__|__|
6.2	Other fruits	Banana, apple, berries, orange and any other fruit	|__|	|__|__|
6	**Fruits**	**Apple, pear, banana, etc., berries**	|__|	|__|__|

7	**Sugar**	**Sugar, honey, fruit preserves, jam, cakes, candy, cookies, pastries and other sweets (sugary drinks: compote, juices, lemonades, etc.)**	|__|	|__|__|
8	**Oil**	**Vegetable oil, butter, ghee, margarine, sour cream***, 'rezhan,'* **other fats/oils**	|__|	|__|__|
9	**Spices, etc.**	**Spices, tea, coffee, cocoa, salt, garlic, yeast, baking powder, tomato paste, condiments including small amount of milk in tea and coffee**	|__|	|__|__|

SECTION 5. LIVELIHOOD COPING STRATEGY INDEX

Q32. During the past 30 days, did anyone in your household have to engage in any following behaviors due to a **lack of food or a lack of money to buy food?**

	1 = No, because I did not face a shortage of food	**2 = No, because I have already engaged in this activity within the last 12 months**	**3= Yes**	**4=Not applicable (DO NOT READ)**
1.4 Spent savings	1	2	3	4
1.5 Borrowed money	1	2	3	4
1.7 Purchased food on credit or borrowed money (Purchase on credit)	1	2	3	4
1.2 Reduced non-food expenses on health (including medicine) and education	1	2	3	4
1.10 Were dependent on food rations and/or support from neighbors and relatives as only food/income source	1	2	3	4
1.1 Sold household assets/goods (radio, furniture, refrigerator, television, jewelry, etc..)	1	2	3	4
1.8 Sold last female animals	1	2	3	4
1.3 Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc..)	1	2	3	4
1.9 Children (under 15 years old) were working to contribute to household income (e.g. casual labour)	1	2	3	4
1.6 Sold house or land	1	2	3	4

SECTION 6. FOOD AND MARKET ACCESSABILITY SECTION

Q33. Does your household currently have a stock of staple foods (eg. wheat flour, rice, spelt) **ACCEPT ONE RESPONSE**

1. Yes ASK Q34 | **2. No GO TO Q35** | **3. Difficult to remember GO TO Q35**

Q34. How long do you think the food stock would last? **ACCEPT ONE RESPONSE**

1.	Up to 7 days
2.	7-14 days
3.	15-21 days
4.	22 – 28 days
5.	More than 1 month

Q35. In the past 7 days, has there been a time when you or your household members needed, but could not access the grocery store or market due to some obstacles related to the current situation?

1. Yes ASK Q36 | **2. No GO TO Q37**

Q36. What were the reasons? **ACCEPT ALL APPLICABLE OPTIONS**
IF THE RESPONDENT SELECTS MORE THAN ONE OPTION, ASK HIM/HER TO CHOOSE THE MAIN REASON FROM THE SELECTED OPTIONS – Q36.2

Q36.2 Which one from the selected options is the main?

		Q36	Q36.2
1.	Market\grocery stores were closed	1	1
2.	Market\grocery store is too far	2	2
3.	Travel restrictions	3	3
4.	Concerned about going out of the house due to disease outbreak	4	4
5.	All adult members of the household too sick to go out	5	5
6.	All adult members quarantined in the house	6	6
7.	Other (**REGISTER**)_____	7	7

Q37. In the past **7 days**, have you experienced any increase in the price of food and non-food commodities?

1. Yes ASK Q38	**2. No GO TO Q39**

Q38. Which commodities?
(REGISTER)_____

SECTION 8. INCOME SOURCES

Q39. Many HHs have several sources of income. I will read out some possible sources of income and ask you to indicate whether your HH has had a monetary income from these sources in the last 12 months. Please remember about the income of all your HH members. **ACCEPT ALL RESPONSES**

1.	Salaried work with regular income	YES	NO
2.	Informal daily/casual labour	YES	NO
3.	Own business/trade	YES	NO
4.	Retail/selling on street	YES	NO
5.	Agriculture/cattle breeding	YES	NO
6.	Support from family and friends	YES	NO
7.	Remittances from relatives living in Armenia	YES	NO
8.	Remittances from relatives living abroad	YES	NO
9.	Income from renting real estate/car/equipment	YES	NO
10.	State social support program (eg. Paros)	YES	NO
11.	Pension	YES	NO
12.	Disability support	YES	NO
13.	Other (**SPECIFY**)		

Q40. How much was your total household income last month after paying taxes. **READ OUT THE RESPONSE OPTIONS IF NECESSARY, ACCEPT ONE RESPONSE. DO NOT CONSIDER GUESTS' INCOME, PLEASE**

1.	More than 576,001 AMD
2.	384,001-576,000 AMD
3.	192,001-384,000 AMD
4.	120,001-192,000 AMD
5.	48,001-120,000 AMD
6.	24,001-48,000 AMD
7.	Less than 24,000 AMD

8.	Do not know **(DO NOT READ)**
9.	Refuse to answer **(DO NOT READ)**

Q39_HH. Please, let us know, how many people from your Household are being earned money during the last 12 months? Take into consideration all types of activities and positions (for example, pensioner) which bring monetary income to your family. |__|

Q42. Has the current outbreak of COVID-19 disrupted your HH income? **ONE RESPONSE**

1. Yes ASK Q43	**2. No GO TO Q44**

Q43. How? **READ OUT THE RESPONSE OPTIONS, (INTERVIEWER CAN ACCEPT MORE THAN ONE RESPONSE)**

1.	Reduction of working hours and receiving partial salary
2.	Permanent loss of job
3.	Temporary interruption/termination of job
4.	Reduction of production
5.	Reduction of revenues from business activities
6.	Reduction or termination of remittances from relatives living in Armenia
7.	Reduction or termination of remittances from relatives living abroad
8.	Other (**SPECIFY**)

Q44. Has your household or anyone in your household received any assistance (cash, food, etc.) from the Government or any other organization related to COVID-19 and state of emergency? **READ OUT THE RESPONSE OPTIONS, ACCEPT ALL RESPONSES**

1.	Yes, received state assistance	**ASK Q45 AND Q46**
2.	Yes, received assistance from a non-governmental organization	**ASK Q45, THEN GO TO Q47**
3.	Yes, received assistance from a private person and/or a private company	**ASK Q45, THEN GO TO Q47**
4.	No, didn't receive any assistance	**GO TO Q47**

Q45.1 How often do you receive or have you received _____ **(ASK FROM SELECTED OPTIONS IN Q44)** assistance?

1.	One time	**GO TO Q46**
2.	2 times	**ASK Q45.2**
3.	3 times	
4.	4 times	
5.	5 times	
6.	Other **(DESCTIBE)**	

45.2 Please, notify how often do you receive or already have received _____ (ASK FROM SELECTED OPTIONS IN Q44) assistance?

1.	Weekly
2.	Monthly
3.	Once in two months
4.	Quarterly
5.	Other **(DESCTIBE)**

Q46. How satisfied are you with received state assistance? Please rate on a scale from 1 to 5, where 1 means "I am not satisfied at all" and 5 means "I am very satisfied".

1	2	3	4	5	98. Don't know (DO NOT READ)	99. Refuse to answer (DO NOT READ)

SECTION 9. ADDITIONAL

Q47. What is your most important concern under the current circumstances? **INTERVIEWER: DO NOT READ OUT THE RESPONSE OPTION, SELECT UP TO THREE RESPONSE OPTIONS THAT BEST FITS THE INFORMATION PROVIDED BY THE RESPONDENT, OTHERWISE SELECT OTHER**

1.	Shortage of food
2.	Increase in food prices
3.	Shortage of medicine
4.	Disruption of medical service
5.	Disruption of educational institutions
6.	Getting sick
7.	Losing Job\Unemployment
8.	Loss of livelihood source
9.	Travel restrictions
10.	No concerns
11.	Other (REGISTER) _____

Thank you very much!

ANNEX 2 | Sample structure

	Population according the National Statistical Service[18]			Sample structure, EFSA 2			
Region	Total	Urban	Rural	Margin of error	Total sample	Urban	Rural
Yerevan	1,084,000	-	-	**5%**	384	-	-
Aragatsotn	124,700	26,800	97,900	**5%**	384	82	302
Armavir	263,800	82,400	181,400	**5%**	385	120	265
Ararat	256,600	72,100	184,500	**5%**	385	108	277
Kotayk	250,900	136,800	114,100	**5%**	387	211	176
Shirak	231,400	135,600	95,800	**5%**	384	224	160
Lori	213,300	126,100	87,200	**5%**	391	234	157
Gegharkunik	227,700	66,600	161,100	**5%**	387	113	274
Vayots Dzor	48,500	17,100	31,400	**5%**	382	135	247
Tavush	121,500	51,400	70,100	**5%**	384	163	221
Syunik	137,300	93,200	44,100	**5%**	384	261	123
Total	**2,959,700**	**808,100**	**1,067,600**	**2%**	**4237**	**1650**	**2202**

[18] **https:/ https://www.armstat.am/file/article/nasel_01.01.2020.pdf**

World Food Programme

10 Vazgen Sargsyan St, Yerevan 00100, Armenia

Contact: takahiro.utsumi@wfp.org

Photos: WFP Armenia

WFP
wfp.org

vam
food security analysis