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FOOD SECURITY & LIVELIHOODS CLUSTER
Strengthening Humanitarian Response

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Food Security & Livelihoods Assessment in Eastern Ukraine, GCA

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Introduction

I. Context

East Ukraine is in its eighth year[1] of armed conflict, plunging an economically troubled region into a socio-economic decline. Civilian populations of Donetsk and Luhansk Oblasts (collectively referred to as Donbas) continue to experience ongoing ceasefire violations along the 428 kilometers of the contact line, effectively dividing the conflict area into government-controlled areas (GCAs) and non-government-controlled areas (NGCAs). Prior to the conflict, the East Ukraine conflict area was the most densely populated and productive part of the country.[2] Because of the conflict, families have been forced to face daily risks to their lives, suffered limited access to food and essential basic services, lacked livelihood opportunities, and faced a deep economic crisis.

The protracted nature of the conflict has led to an erosion of resilience capacity, significant loss of lives, concerns over the protection of civilians, and extensive damage to critical infrastructure in conflict-affected areas. Within the context of this protracted conflict, many young people of working age have left the region, resulting in a higher concentration of people with vulnerabilities in the 20-km area around the contact line than in other parts of the country.[3] The conflict-driven blockade offers limited livelihood opportunities. Most of the population rely on pensions, since a high proportion of the population is elderly (64%).[4] The closure of the entry-exit checkpoints (EECPs) along the contact line has left hundreds of thousands of people (55% of households) without access to social entitlements, which is especially difficult for people over 60 years old.

The ongoing conflict, coupled with the COVID-19 pandemic, exacerbates the conflict-affected population's pre-existing food security and livelihood challenges. As expected, food and livelihood insecurity has been rising, with 1.5 million people projected to need assistance in 2021, a 51% increase compared to the previous year. Out of this total number of people in need, 42% of the food- and livelihood-vulnerable are food insecure.[5] The MSNA (Multi-Sectoral Needs Assessment) 2021 estimated that 9% of the population in NGCA and 5% in GCA are food insecure[6]. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) estimated that a total of 3.4 million people needed some form of humanitarian assistance in 2021.[7]

The fast-declining projected food and livelihood security in 2021 was attributed to several factors, some of which are interlinked and mutually reinforcing: disrupted access to markets, ongoing restriction of movements of people across the contact line, reduction in industrial production, slow economic growth

[1] Since February 20, 2014.
[2] https://reliefweb.int/report/ukraine/acaps-briefing-note-ukraine-conflict-donetsk-and-luhansk-4-november-2019.
[3] https://reliefweb.int/sites/reliefweb.int/files/resources/REACH_UKR_Report_MSNA-GCA_May-2021.pdf.
[4] MSNA in GCA, October 2020.
[5] https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/hno_2021-eng_-_2021-02-09.pdf.
[6] https://www.impact-repository.org/document/reach/0845aeea/REACH_UKR_Dataset_MSNA-GCA_September-2021.xlsx
[7] https://reliefweb.int/report/ukraine/ukraine-humanitarian-funding-priorities-august-december-2021-enuk.

coupled with high unemployment, and limited livelihood opportunities. On the GCA side of the Eastern conflict area and including internally displaced persons (IDPs) outside Donetsk and Luhansk Oblasts, 400,000 people were food insecure,[8] and over 200,000 people required livelihood support.[9] Overall, women are overrepresented among those in need (70% are women). Women have worse food consumption levels than men, which increases their vulnerability.[10]

The decrease in industrial production has partly aggravated this gap. The average unemployment rate[11] for Ukraine increased from the pre-conflict 2013 period to the beginning of 2021 by 3.7 percentage points, reaching 10.9% in the first quarter (Q1) of 2021. The situation has slightly improved in the second quarter but is unlikely to fully recover to the pre-pandemic level in the near future. In conflict-affected areas, the unemployment rates by the second quarter of 2021 are the highest nationwide: 15.7% in Donetska oblast and 16.6% in Luhanska oblast (compared to the national average of 10.3%).[12] As expected, about 58% of the population have needs related to the deteriorating living conditions,[13] contributing to the deployment of negative coping strategies.

The significant increase in prices for food and basic items is likely to deteriorate the food security status of the affected population. Despite the rich harvest of crops in Ukraine in 2021, the cost the Food Security & Livelihoods Cluster (FSLC) food basket increased drastically. As of October 2021, the average cost for Ukraine was Ukrainian hryvnia (UAH) 1,336 (a 19% increase compared to October 2020). In Donetska GCA, the food basket cost increased even more drastically: UAH 1,666 as of October 2021, a 44% increase since October 2020. In Luhanska GCA, the recent food basket cost is UAH 1,242 (a 9% increase from October 2020). At the same time, the UAH exchange rate remains relatively stable and is showing a decreasing trend, dropping from 1 USD = 28.3 UAH in October 2020 to 1 USD = 26.3 UAH in October 2021.[14]

The Joint Market Monitoring conducted in August–September 2021 by ACCESS Consortium partners (ACTED, PIN, MdM, and IMPACT) jointly with NRC and Save the Children in the Eastern conflict area is more evidence of a significant price increase. On the GCA side, high prices remain the prevailing constraint in accessing markets, with 87% of customers reporting a price issue. Annual change in price in GCA is significant and was 34% for food and 31% for agricultural inputs compared to the corresponding period of 2020. All monitored food items were available, except for vegetables and honey, which were not available in a few shops.[15]

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[8] Moderately and severely insecure people, based on 2020 MSNA in the GCA assessment.

[9] Calculation based on State Statistics Service data on unemployment (based on International Labour Organization (ILO) methodology) and National Monitoring System by the International Organization for Migration (IOM).

[10] https://www.impact-repository.org/document/reach/14fbe661/REACH_UKR_Report_MSNA-in-NGCA_February-2020.pdf.

[11] Assessed based on ILO methodology.

[12] http://www.ukrstat.gov.ua/.

[13] https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/hno_2021-eng_-_2021-02-09.pdf.

[14] The FSLC continues monitoring food basket costs that World Food Programme (WFP) had monitored. The food basket includes 23 major food commodities from the national food basket of Ukraine. The data source is the State Statistics Service of Ukraine.

[15] https://app.powerbi.com/view?.

Agriculture is one of the main drivers of the economy of Ukraine. According to WB statistics agri-food sector, including forestry and fisheries, share in GDP in 2020 constituted 9,3%.[16] Agriculture employs 22% of the labor force, and one-third of Ukraine's population live in rural areas. Ukraine has some of the best land resources for agricultural production in Europe. More than 70 percent of the country's total area is suitable for agriculture, of which almost half are arable lands. Both fisheries and forestry are relevant subsectors of agriculture that potentially contribute to the national economy of the country. The forests, most of which are located in the Carpathian and Polissia regions, contribute approximately 1.2 percent of the GDP. The Agri-food sector is critical for the country's trade balance and earning foreign exchange. Agriculture also contributes significantly to the subsistence, food security, and livelihoods of the rural population. Only 9.3% of all capital investments are invested into agri sector development, the majority of which are private investment: state investment into agriculture constitutes 0.02% of total state investment[17].

The importance of food and agriculture for the Ukrainian population goes beyond the agricultural share of the national GDP. According to the State Statistics Service of Ukraine, on average, 43.1% of all household expenditures are on food. The share of food expenditures is 51.5% for Donetsk GCA and 39.0% for Luhansk GCA.[18]

At the same time, the share of the working-age population engaged in the agricultural sector was 18% in 2018–2019 and 17% in 2020. Of more concern is that food production is a source of food and/or income for some 35% of people residing in conflict areas, who reported ownership of an agricultural plot.

In this context, the Food and Agriculture Organization of the United Nations (FAO), as the lead agency of the FSLC,[19] took the responsibility of conducting the present study to determine the most recent food security and livelihoods conditions in the area.

The partners of the FSLC are international and national organizations working in the country with programs to improve food security, livelihoods, and resilience, from the immediate relief of people in need to longer-term food production and food security objectives. The aim of the FSLC is to ensure an adequate coordination of food security interventions in the country, to avoid overlaps and reduce gaps, to promote the nexus between humanitarian and development interventions, and to strengthen local capacities.

II. Objective of the survey

The objectives of the proposed Food Security Assessment (FSA) were as follows:

1. Identify the food security needs and gaps which will inform the Humanitarian Needs Overview (HNO) and Humanitarian Response Plan (HRP),
2. Carry out evidence-based analysis for informed decisions and prioritization of the response,

[16] [1] https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=UA&most_recent_value_desc=false
[17] State Statistics Service of Ukraine.
[18] http://www.ukrstat.gov.ua/druk/publicat/kat_u/2020/zb/06/zb_vrd_19_ue.pdf.
[19] The Food Security & Livelihoods Cluster (FSLC) has been established globally to coordinate the food security response during a humanitarian crisis, addressing issues of food availability, access, utilization, and stability. The Food Security Cluster (FSC) was established by the Interagency Standing Committee (IASC; https://interagencystandingcommittee.org/) and is co-led by the Food and Agricultural Organization (FAO) of the United Nations and the WFP at the global level.

3. Provide better targeting of the affected population and thus better programming.

As there exists no baseline assessments of the food security and livelihood situation in the target areas, this study will be considered as a baseline for future assessments, using the most relevant tools for food security measurement and evaluation of livelihood conditions.

Methodology

I. Survey design

The FSA is planned to be conducted in two rounds, to cover two seasons (post-winter and the post-harvest) targeting the population of the Donetsk and Luhansk Oblasts. For the second round of data collection in GCA, conducted in September and October 2021, targeted 1,680 HHs distributed as in Table 1 below. The sample was designed to be stratified by location, with the aim to ensure adequate representativeness of the population of interest and was created with the objective of enhancing the data quality and minimizing the statistical errors to the maximum possible extent, considering the modalities adopted for data collection. The sample size is determined based on a maximum expected theoretical statistical error of 5.0% in the most difficult to reach areas (those in the 10km buffer zone between GCA and NGCA).

The actual sample distribution is presented in Table 1 below, while more details are provided in the appendix.

Table 1. Sample Size Distribution for the first round of data collection

Coverage	*Sample size*	*Target population size*	*Theoretical statistical error (%)*
Donetsk GCA 10+ zone	**780**	**1 486 303**	**2.0**
Urban 50+	400	957 835	2.7
Urban 50- & Rural	380	528 468	2.9
Urban (13 districts)	*250*	*375 411*	*3.6*
Rural (8 districts)	*130*	*153 057*	*5.0*
Luhansk GCA 10+ zone	**780**	**628 791**	**2.0**
Urban 50+	380	255 342	2.9
Urban 50- + Rural	400	373 449	2.7
Urban (8 districts)	*260*	*222 120*	*3.4*
Rural (7 districts)	*140*	*151 329*	*4.6*
Donetsk + Luhansk 0-10 km zone GCA	**120**	**239 758**	**5.0**
Total sample size GCA	***1680***	***2 354 852***	

Urban 50 +: *the populated urban centres with 50 thousand inhabitants or more*
Urban 50- + Rural: *the smaller urban centres (less than 50 thousand inhabitants) plus rural areas*
Donetsk + Luhansk 0-10 km zone NGCA: *the areas within 0 to 10 kilometres from the conflict line*
Source: KIIS

II. Questionnaire

The study uses some of the most recent and advanced survey-based tools to assess the food security and livelihoods condition of the population.

The **Food Insecurity Experience Scale** (FIES), the main tool used in this study to assess food insecurity, is a food security measurement system developed by FAO and applied worldwide since 2014.[20] In addition

[20] http://www.fao.org/in-action/voices-of-the-hungry/using-fies/en/

to its primary use to measure the prevalence of annual food insecurity in the context of the global SDG monitoring framework, it is also an effective tool in assessing the recent food security situation in emergency situations, by appropriate adaptation of the reference period. (See Boero et al., 2021).[21]

The FIES survey module is composed of a small set of questions inquiring on the occurrence of conditions that are typically associated with food insecurity. The responses provided are used to derive a quantitative scale of severity and to estimate the probability of being food insecure, at various levels of severity, for each interviewed individual/household. Those probabilities, in turn, are used to estimate the prevalence of food insecurity in the study population, at different levels of severity. Two classes of food security severity described as "moderate" and "severe" in the context of the SDG monitoring framework and intended to be comparable across countries and over time are used in this report.

Another set of questions used in this study to complement the food security assessment of the target population is based on the livelihood Coping Strategy Index (L-CSI)[22]. Those who reported having experienced food insecurity, were prompted to report which livelihood adaptation strategies they used to cope with it, choosing among a set of common ones. Further, relevant information on the socio-economic conditions of the surveyed households is collected and used to contextualize the food security and livelihood assessment. Hence, the questionnaire includes sections on demographic information, main incomes sources and changes in income over the reference period, in addition to the main aspects of agriculture income and production.

The full questionnaire is reproduced in **annex 2**.

As mentioned, the study is designed to eventually cover two main periods: post-winter and post–harvest, which are considered to be, respectively, the most and least problematic ones in terms of economic stress for the population in both areas. For the assessment of the food security situation during the 2020/21 post-winter season, reported here, the reference period used for the FIES questions was the month of April 2021, while other information has been collected with reference to the period between February and April 2021. A second round of data collection is planned to collect information that refer to the period from the beginning of June to the end of August.

III. Data collection method

FAO implemented the FSA with the support of a local partner, the **Kyiv International Institute of Sociology** (KIIS)[23], a leading sociologic research institution with proven capacity for data collection and analysis in Ukraine. In the recent past, KIIS has been providing survey services to various international organizations in Ukraine, including the World Bank, OSCE and various UN agencies (UNDP, UNICEF, WFP), using telephone interviews to people selected from a verified database of respondents residing in the GCA and NGCA.

With FAO support, KIIS translated, pre-tested and adapted to the local context the questionnaire provided by FAO in English. The adaptation included discussing and choosing the most appropriate phrasing of each of the questions and of the coded responses to ensure their applicability to the context of Eastern Ukraine. FAO led training sessions with KIIS's enumerators to assure an accurate common understanding of the

[21] http://www.fao.org/documents/card/en/c/cb5623en/
[22] https://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp211058.pdf
[23] https://www.kiis.com.ua/?lang=eng

overall questionnaire (and of the FIES module in particular) and to agree on the most appropriate way of asking the questions during the interviews.

Considering the ongoing situation with the COVID-19 pandemic and related quarantine restrictions, KISS collected data remotely, through phone interviews. The sampling frame was based on their available phone numbers database. Respondents were selected randomly from that list, and interviews continued until the established number of interviews had been completed in each of the areas as described in Table 1.

KIIS delivered a final, cleaned, vetted, and weighted dataset in Excel and SPSS format to FAO including a description of how sampling weights were computed.

IV. Data analysis

The Food Security and Nutrition Statistics Team (FSNST) at FAO headquarters in Rome, in strict coordination wit-h the FAO Ukraine office and members of the Food Security Cluster, has conducted the data analysis and led the writing of this report.

The various sections of the micro dataset have been analysed using customized routines written in R, assuring compliance with international standard methods of analysis for this type of data.

When relevant, appropriate post-stratification weights have been used in the analysis. These were computed to compensate for the difference in the sex and age composition in the realized sample and in the population and to limit the possibility of bias induced by the sample selection procedure and possibly by self-selection linked to refusals and non-response.

V. Study limitations

The context of the study, which has been conducted in the middle of the on-going COVID-19 pandemic and which targets areas and populations located in a conflict zone, has determined conditions that required some adaptations and that deserve attention as possible limitations.

Face-to-face interviews (which would have been the preferred mode of data collection for these type of studies) were not an option, as the target populations are located in conflict areas with limited access, but also because of the restrictions to movements imposed as measures to contain the spread of COVID19. This forced the use of phone interviews, whose main limitation is that the targeted population will not include people who do not have access to a phone. In the context of Eastern Ukraine, we expect phone coverage to be rather complete, and the database of phone numbers used by KIIS to be sufficiently representative of the general population in the areas to exclude large coverage bias. Nevertheless, to the extent that there exist people in the target population who have no access to phone and that those people are more likely found among the food insecure, **results in this study may be somewhat underestimating the actual extent of food insecurity**.

Key Results

I. Characterization of the represented population

The total sample of 1680 respondents from the GCA has been stratified by area as described in Table 1 above, and post-stratification weight have been used to reflect the distribution of actual respondents by sex, age, education.

After applying the sampling weights, the represented population will have the characteristics summarized in Table 2 below. (For a description of the actual sample, see the Annex)

II. Incomes, Livelihoods and Vulnerability

This section provides an overview of the livelihood profile of the target population as emerged from the analysis of the responses. Data have been processed taking the appropriate sampling weights into consideration so that results refer to the entire target population of the people living in the studied areas. The objective of this section is to present readers with an overall picture of the socio-economic vulnerability.

Main income sources

Respondent were asked to indicate and rank their "main" sources of income, chosen among the categories that can be read on the horizontal axis of the chart in Figure 1 below.

Income derived from "Pensions" is the category reported most frequently (by 41.7% of households overall) among their main sources of income. The second is the "Non-agricutural wage" (23.9%) followed by "Humanitarian/Social assistance" (reported by 20.9%). The "Own non-agricultural" and the "Own agricultural/wage labour" categories are claimed to be among the main sources of income just by 5.2% and 2.7% of the respondents, respectively, which reflects the relatively lower importance of self-employment in the study areas. The distribution of the relative frequency with which these sources of income are reported is rather similar across locations. Notable is the high percentage (62.2%) of the single person households reporting reliance on pension the of the main sources of income.

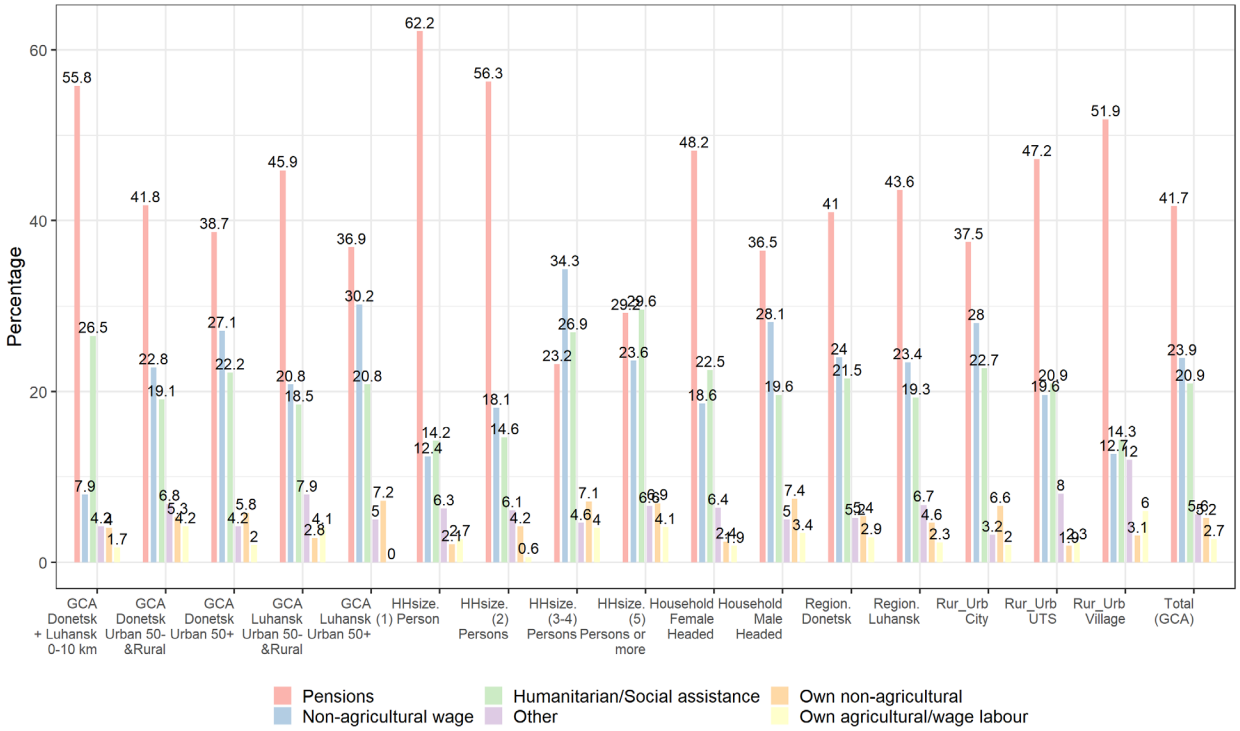
Table 2. Characteristics of the represented population in the FSLA survey

Coverage	Represented Population	Male/ Female		Male/ Female (HHead)	% by age (HHead)				% by education of HHEad*				% residency type	
		unweighted	weighted		≤ 25	26-45	46-60	> 60	a	b	c	d	Resident	Internally Displaced
Donetsk GCA 10+ zone	**1 794 407**	**27/73**	**45/55**	**55/45**	**3.8**	**35.0**	**23.9**	**37.3**	**4.9**	**16.0**	**47.9**	**30.7**	**82.87**	**16.86**
Urban 50+	975 397	27/73	30/70	55/45	5.5	33.3	26.9	34.2	3.7	13.9	43.9	38.0	79.49	20.33
Urban 50- & Rural	693 527	32/68	25/75	56/44	2.2	39.2	20.9	37.7	6.3	17.0	51.1	24.9	85.37	14.20
Luhansk GCA 10+ zone	**653 079**	**30/70**	**45/55**	**58/42**	**3.1**	**33.9**	**22.5**	**40.5**	**3.8**	**12.7**	**39.0**	**43.4**	**75.29**	**24.02**
Urban 50+	246 278	34/66	50/50	60/40	3.8	39.7	25.2	31.3	3.1	9.7	32.6	53.7	72.14	27.00
Urban 50- + Rural	381 015	28/72	42/58	58/42	3.0	32.1	20.0	44.9	3.6	13.4	42.5	39.0	76.37	23.42
Donetsk + Luhansk 0-10 km zone GCA	**151 268**	**22/78**	**34/66**	**43/57**	**0.0**	**21.7**	**21.3**	**57.0**	**7.3**	**25.2**	**56.6**	**10.9**	**92.18**	**6.89**
GCA City	1 613 725	31/69	47/53	55/45	4.4	38.5	24.1	33.0	3.7	13.6	43.7	38.2	78.17	21.39
GCA Urban-Type Settlements (UTS)	408 060	25/75	40/60	57/43	3.1	31.9	21.4	43.7	6.0	20.9	46.8	26.0	87.61	12.07
GCA Village (Rural)	425 701	27/73	39/61	56/44	1.3	23.1	23.6	52.0	6.4	14.6	50.8	27.1	83.88	15.93
Total sample size GCA	***2 447 487***	***29/71***	***45/55***	***56/44***	***3.6***	***34.7***	***23.6***	***38.1***	***4.6***	***15.1***	***45.5***	***34.1***	***80.83***	***18.80***

* a: primary education. b: secondary education. c: secondary special/technical school. d: completed higher education/graduate school

Source: FAO analysis of Ukraine FIES data

Figure 1. Households' main sources of income



The frequency with which pensions and humanitarian and social assistance are mentioned among the main sources of income, clearly presents the picture of a highly vulnerable community.

Diversification of income sources

Diversity of income sources is an important determinant of resilience against possible economic shocks and low diversity can be interpreted as an indicator of economic vulnerability. Figure 2 below shows that slightly more than half of the households in the surveyed areas (56%) have declared to depend on just one "main" source of income. While some degree of diversification on income sources is notable (around 40% of the households have 2 to 3 main sources of income), very few households (only 4.9%), instead, have declared to rely on four or more "main" income sources.

Relevance of the different sources of income

To explore the real importance of the reported main sources of incomes, respondents were asked to indicate the approximate share of total income provided by the main source. Analysis of the responses reveals that "Pensions", and "Non-agricultural wages" are often major contributors (providing 75% or more of the total household income). Figure 3 shows that, overall, 32.2% of the households in the represented population receive more than 75% of their income from pensions, while 22.3% of them receive 75% or more of their income from non-agricultural wages. The "Own non-agricultural" source of income has been declared as a "major" one by only 5% of the HHs. Notably, income sources linked to agriculture have been reported as only marginally contributing (2.9%) to the households' major incomes.

Figure 2. Income sources diversification: distribution of housholds by reported number of sources

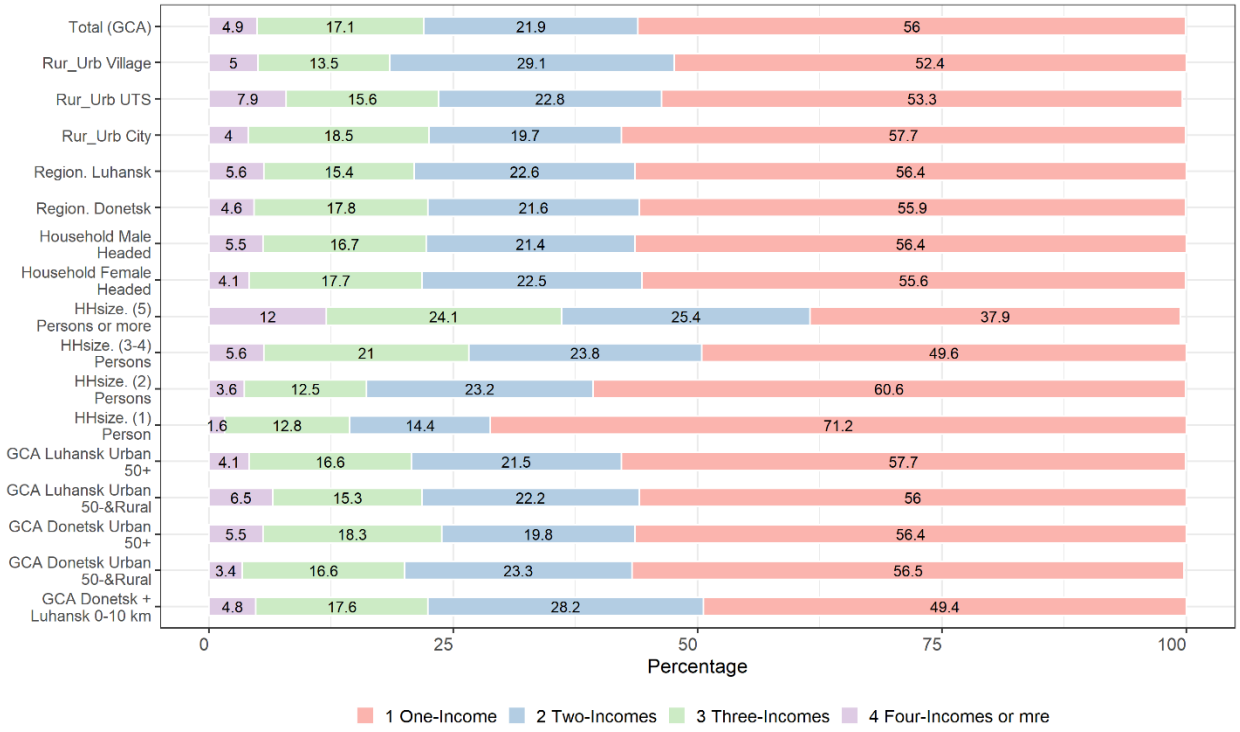


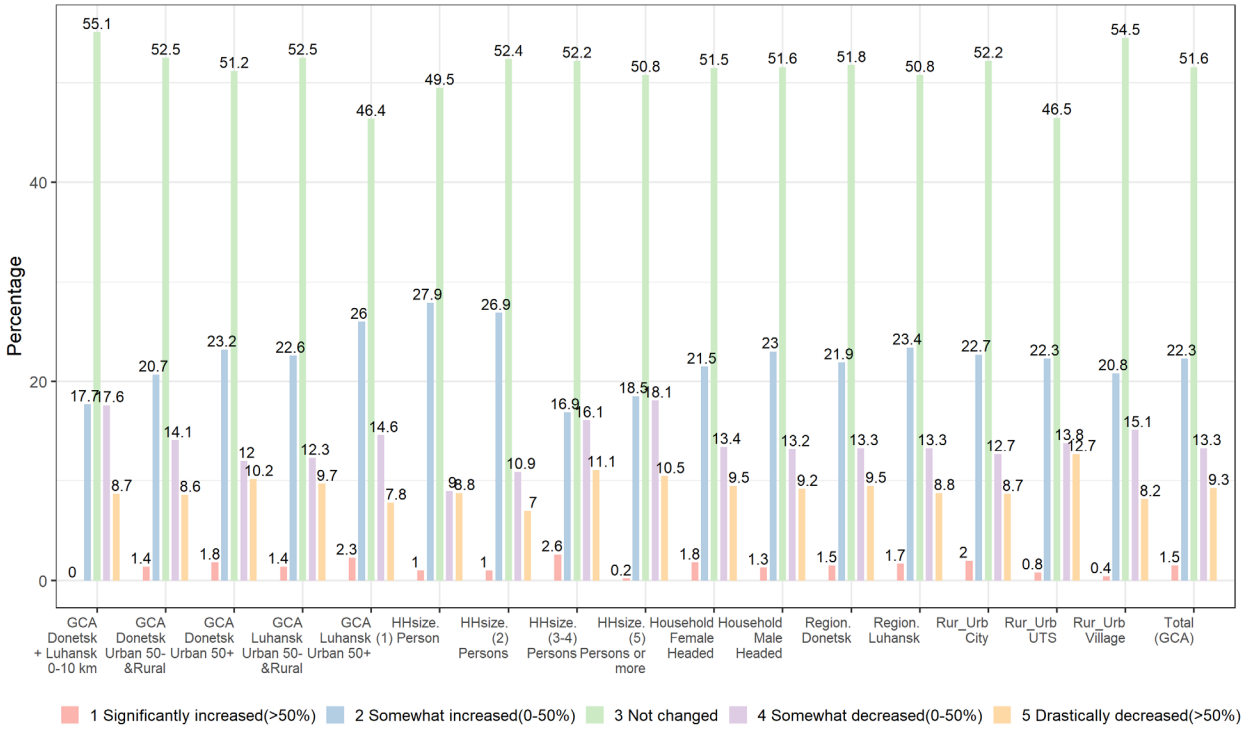
Figure 3. Relevance of main sources of income (75% or more of HH income)

"Pensions" and "Humanitarian and social assistance" are also the two categories most frequently reported among those that provide a decent share (50-75%) of total income (data not shown), which confirms the relevance, in addition to the frequency, of these forms of subsistence in the study area.

Income stability

Self-reported income changes relative to the same period (July-September) of the previous year, as shown in Figure 4, reveal that for most households (75.4% of the total in GCA) income levels were stable or increased compared to last year. Income stability is more pronounced in "GCA Donetsk & Luhansk 0-10 km" where 55.1% reported no income change. Only a small share of the households (1.5%) in GCA area declared having experienced a "more than 50% increase" in their income, compared to 9.3% who declared a "more than 50% decrease". While a significant share of the households (22.3%) reported a moderate increase (up to 50%) of their income a smaller share (13.3%) reported a moderate decrease (up to 50%), revealing a certain heterogeneity in the income dynamics that seem more oriented toward moderate income increase. In general, while 22.6% reported experiencing income deterioration, 23.8% reported income increase and the rest of GCA households (51.6%) have their income not changed. This is not specific to certain locations or population groups but similarly distributed across different categories.

Figure 4. Income stability

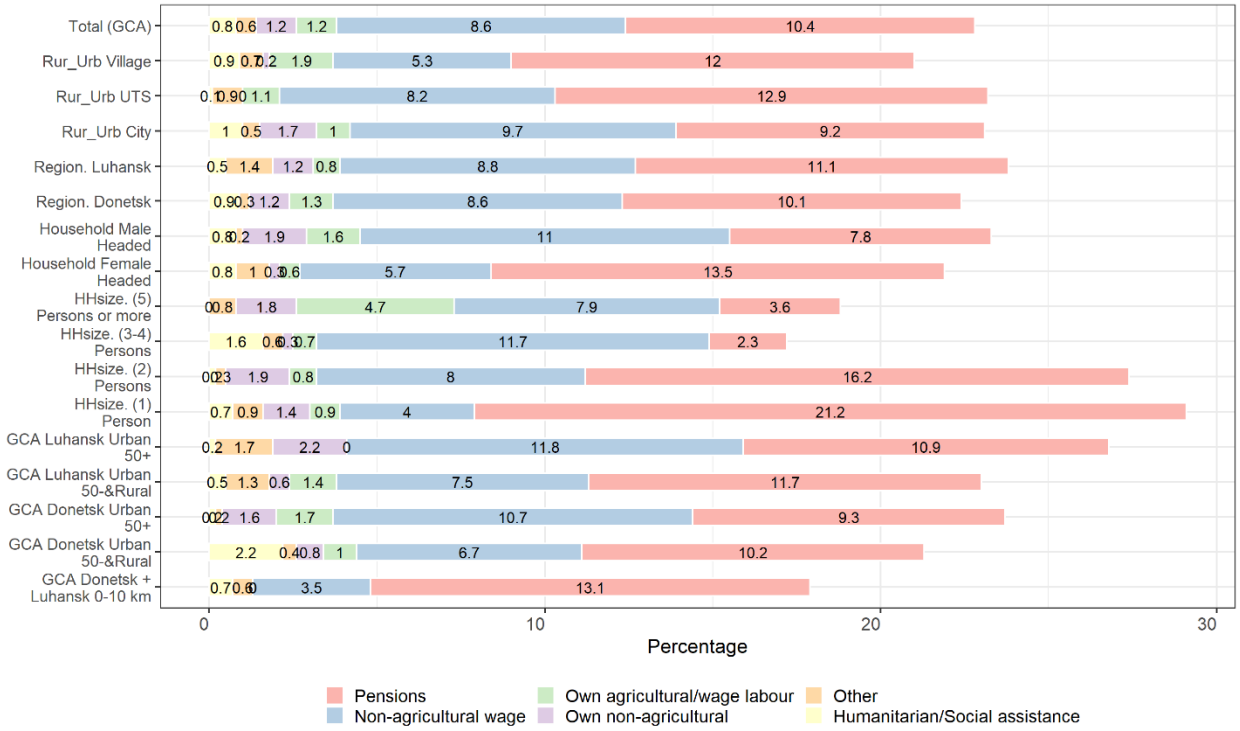


The above findings call for a deeper analysis of the characteristics of sources of income for the households that reported different income change dynamics.

Analysis of the households' sources of income for those that show a moderate increase (plus 0-50% of their main income), reveals that pension is the main sources of income for them that has moderately increased as declared by 10.4%, Figure 5. The "non-agriculture wages" comes in the second place by 8.6%

followed by “own non-agricultural/wage labour” and “own non-agricultural” by 1.2%. The remaining main sources of income have hardly changed, instead.

Figure 5. Income Change (Plus 0-50%) of Main first Income

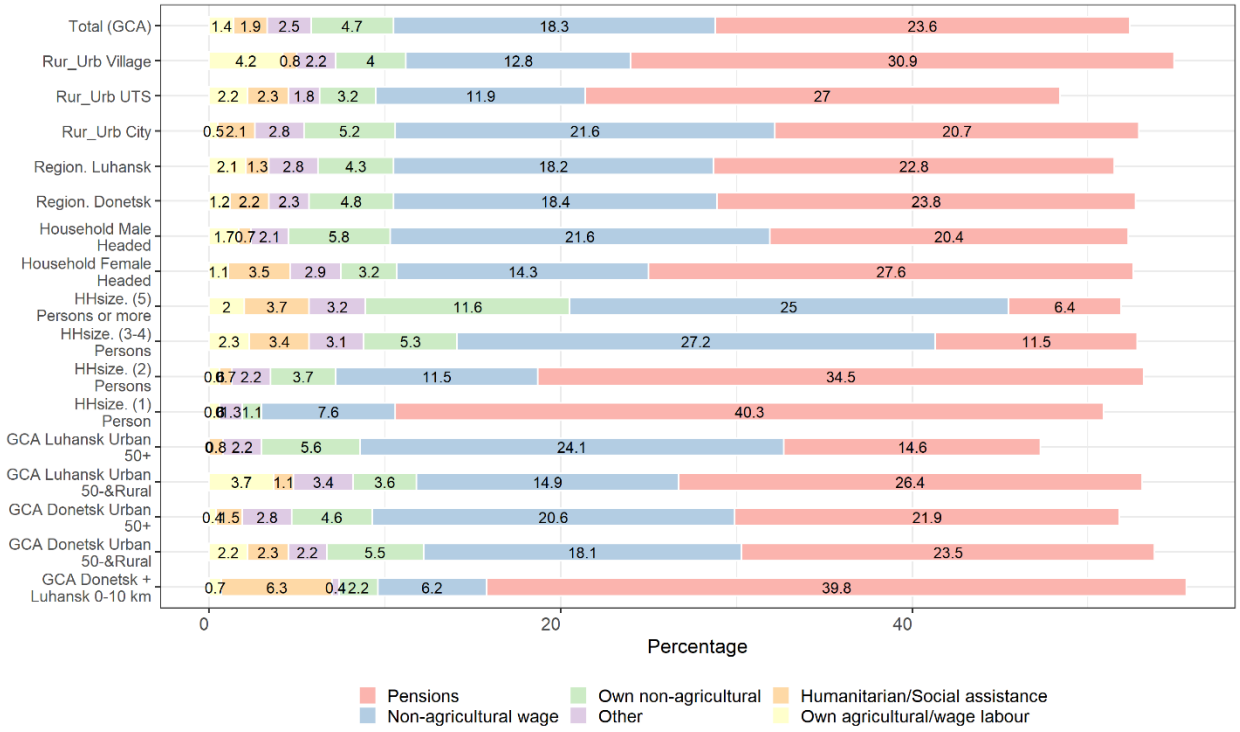


The other main category of households’ income change is the “No Change” category shows a slightly more stable behaviour than the previous one, including slightly bigger shares of households declaring not having experienced changes of their various income sources. Figure 6 below shows that all main first income categories have been declared by households not to be changed over the last year at different degrees. Big families show a slightly different picture than other population groups with higher shares of “non-agricultural wages” (27.2% and 25% for 3-4 and 5 persons families) and “own non-agricultural” (5.3% and 11.6 respectively), which reveals a kind of income stability for the bigger households. The small families, instead, seem to have the stability of their income comes mainly form “Pension” by 40.3%.

The number of people engaged in paid work in a household is also a good indication of the household’s income stability. Households that depend on only one member engaged in paid work are likely to be more vulnerable to various shocks. Figure 7 shows very clearly that income vulnerability is an issue in GCA area, as the vast majority of respondent reported relying on either no paid work at all (36.6%) or on only one paid work (35.1%). It is required, however, to clarify that households that observe a high share of no paid work, like the one-person households, still have different sources of income including pension, for example.

23.5 %, of the respondent, however, reported relying on 2 paid work but only 4.3% declared that three or more members engaged in paid work.

Figure 6. Income Change (No Change) of Main first Income



Contrary to other statistics on income reported thus far, the distributions in terms of number of units engaged in paid work seems quite different across areas. Households in villages, the 0-10 Km buffer zone, smaller family sizes and those headed by female appear to be much more vulnerable in terms of paid work, with distributions skewed towards no sources of paid work and lower shares of households relying on two and more sources of paid work.

To make better sense of the information provided on the number of the household's members engaged in paid work, it is analysed with regards to the household demographic characteristics to generate its economic dependency ratio. This is the ratio between the number of household members who are not in working age to the number of members who work (pensioners, unemployed, children or minors relative to member in employment).

The age dependency ratio for Ukraine, calculated as the ration of people younger than 15 and older than 64 over people working ages (15-64) was equal to 49.12% in 2020[24].The higher the value of age dependency ratio means that employed people need to support extra non-working household's members indicating to higher vulnerability levels.

Figure 8 below shows that the economic dependency ratio of over 100 in GCA (54.8%) is a bit over the age dependency ration of Ukraine that indicates further economic burdens for families in the study area compared to the whole country. Overall, 36.9% of households suffer from higher levels of economic

[24] https://www.theglobaleconomy.com/Ukraine/Age_dependency_ratio/ 49.12 in 2020

dependency ration (>150), that is where two household members has to sustain three or more non-employed members. This category is more pronounced in big families (80.5%).

Figure 7. Income from paid work

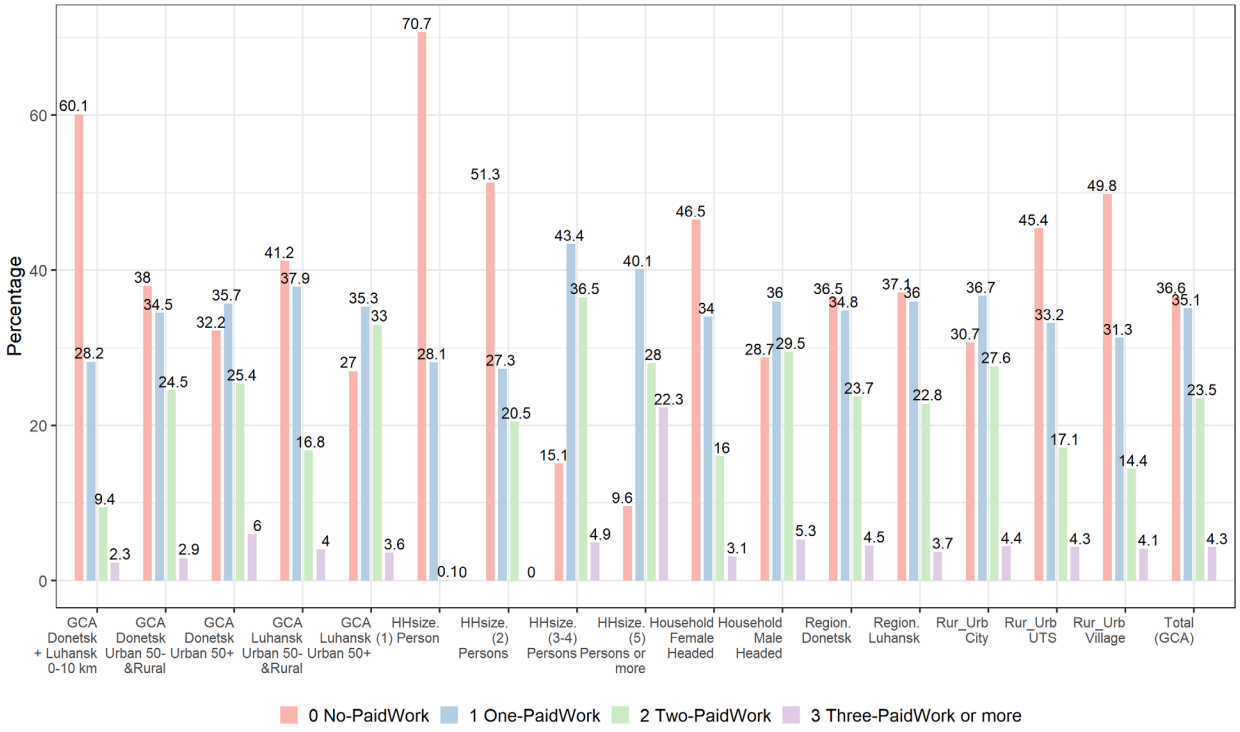
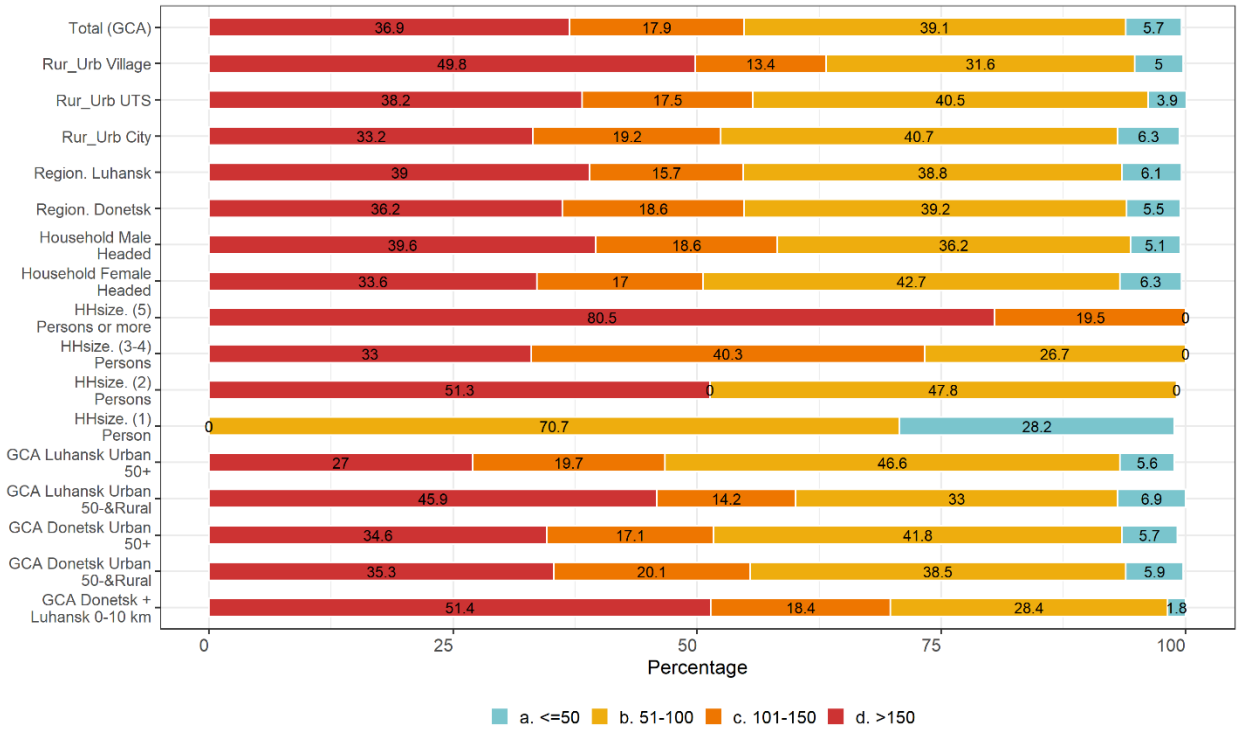


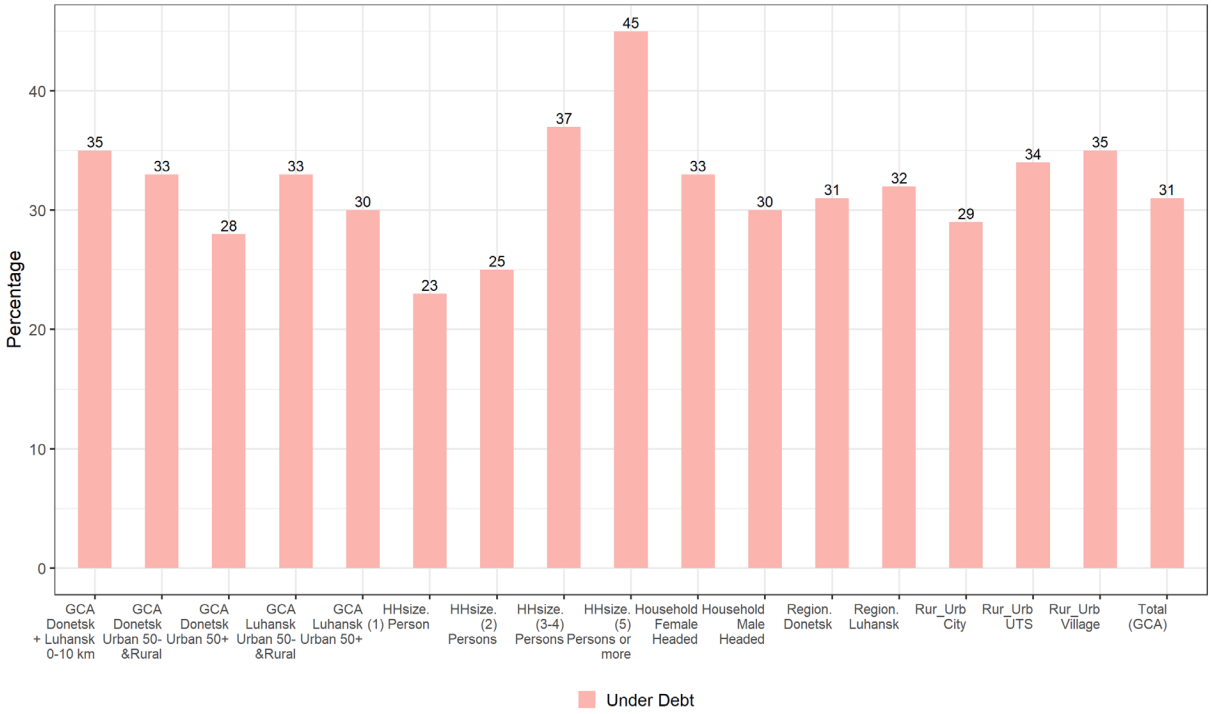
Figure 8. Economic Dependency Ratio



Indebtedness

In general, indebted households are arguably economically vulnerable ones. Figure 9 reveals that 31% of the households in GCA took debts during the three months preceding the interview. Relatively similar portions of HHs suffering under debt in different locations and population groups. Nevertheless, relying on debts were further adopted in the relatively big families (3-5 and 5-or-more members), female headed households, the 0-10 km buffer zone and the villages.

Figure 9. Indebtedness



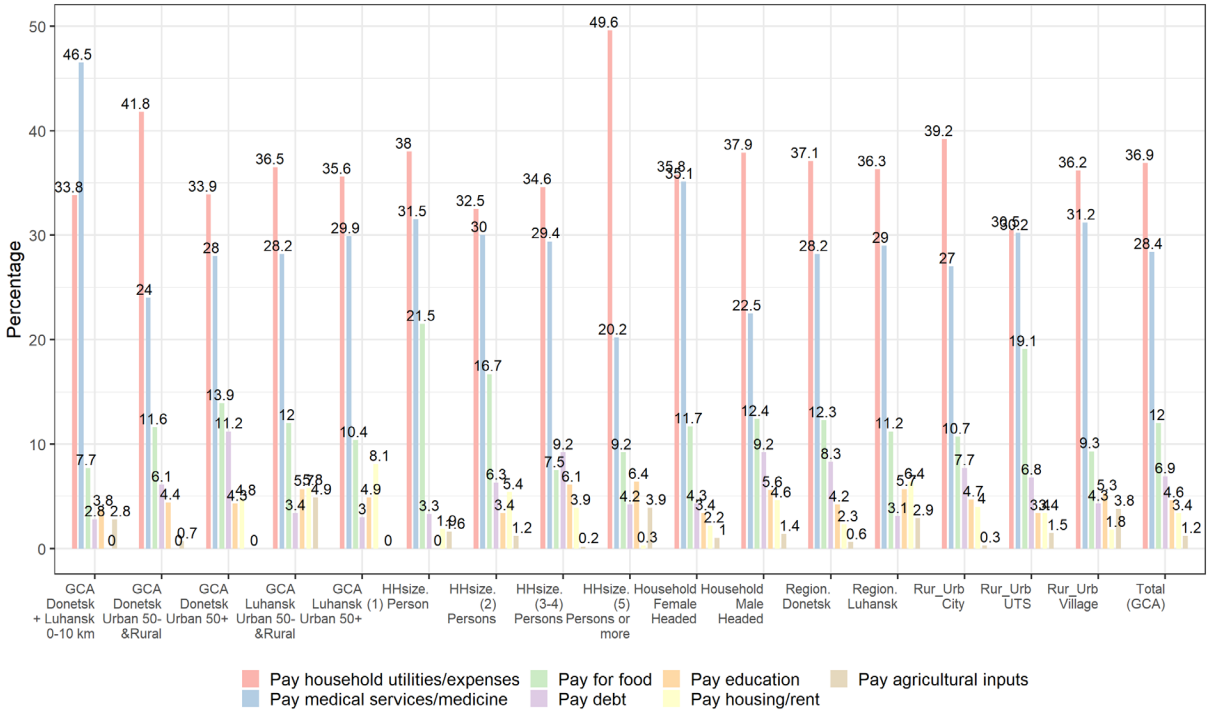
The main reasons for the households to take out debts are explored highlighting the most urgent financial needs of the households as shown in Figure 10 below. The graph reveals that a significant share of households in GCA (36.9%) took loans in order to fill in monetary gaps to pay for housing utilities or other relevant expenses. To pay the housing rent is another similarly related reason for people taking loans as it was confirmed by 3.4% of the households in GCA. The second important reason for households taking loans (28.4%) is because they needed to pay for medical services and/or medicines. This reason is more pronounced in the 0-10km buffer zone by 46.5%, probably because they are mainly elderly persons who extremely need health caring. Other less important reasons to take loans are to pay outstanding debt (6.9%), to pay for education (4.6%) and to pay for agricultural inputs that was affirmed only by 1.2% of households.

Taking debts to pay for food is reported by non-negligible share of households (12%) indicating the need for money in order to acquire food in the study area, especially in UTS area by 19.1% and the one-person families (21.5%). Incurring debt to pay for food is more prevalent in “GCA Donetsk Urban 50+” by 13.9%. Fairly heterogeneous percentages for debt reasons are shown across locations and population groups.

The 65.1% of the households that took debts during the last three months still need to pay them back. This problem is more intense in “GCA Luhansk Urban 50+” and the biggest families where 73.7% and 72%

of the debts are still outstanding indicating the difficulties faced by households to repay loans that were requested for different purposes. Quite varied parentages are revealed by different locations and population groups as seen in Figure 11 below. It also shows a slightly higher shares for female headed compared to male headed households and big size households compared to smaller ones.

Figure 10. Main reasons for indebtedness



Exposure to shocks

Given the conditions prevailing in the study area during the reference period (the post-harvest) of the survey, it is unsurprising that households have been exposed to shocks that may imply risks for their livelihoods. Figure 12 shows that some 76% of the households have been exposed to at least one shock during the previous three months: 41.2% reports one shock. 27.4% of the households has been exposed to two different shocks and 7.5% reported have been exposed to three shocks or more. The distribution is quite similar across locations and population groups, with relatively higher incidence in the 0-10 km buffer zone, the villages and the big families.

By far the most frequently reported among the shocks observed in the studied areas are related to inflation and increasing prices of basic commodities that was reported by 56.1% (Figure 13). This is consistent with the 2020 high consumer price index in Ukraine (289.4) as reported by the World Bank[25].Other shock that is less frequently reported is the incidence of sickness and related health expenditures (35.8%) and the loss of employment and salaries (10.7%). The last group of reported shocks includes the poor harvest (3.8%), the asset damage caused by the on-going military operations (3.3%) and the death of a household member (3.2%).

[25] https://data.worldbank.org/indicator/FP.CPI.TOTL?locations=UA&view=chart

Figure 11. The difficulty to repay debts

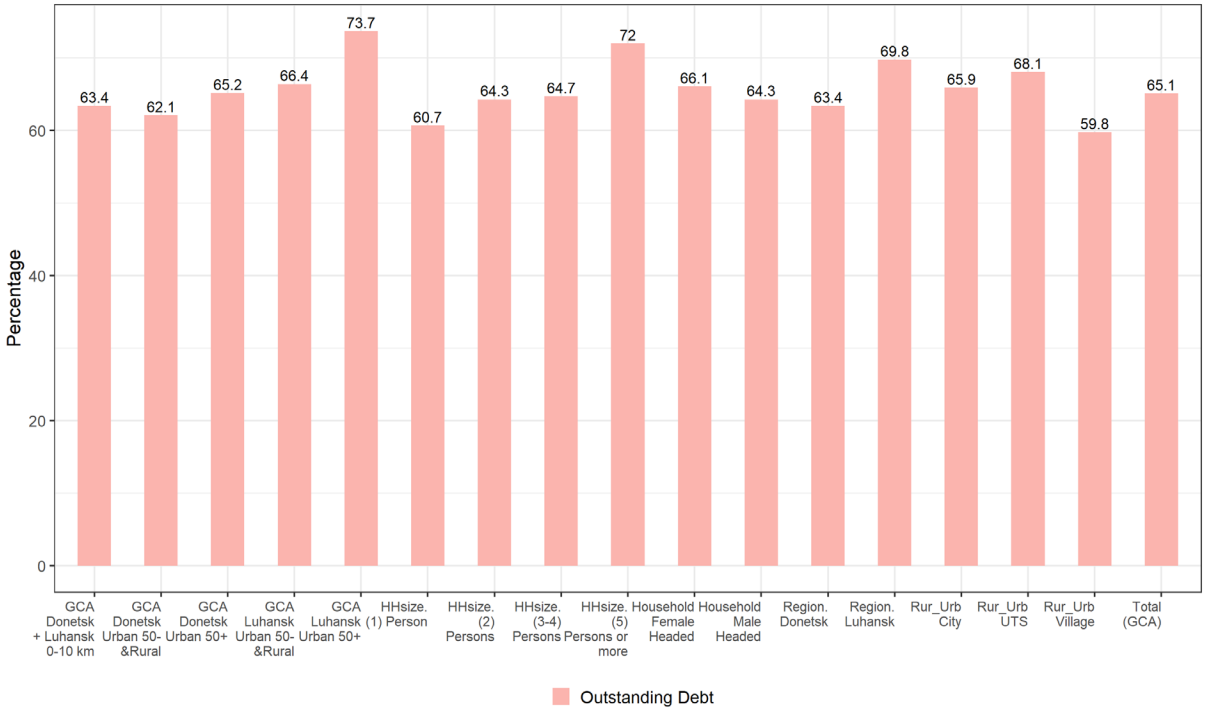


Figure 12. Exposure to shocks

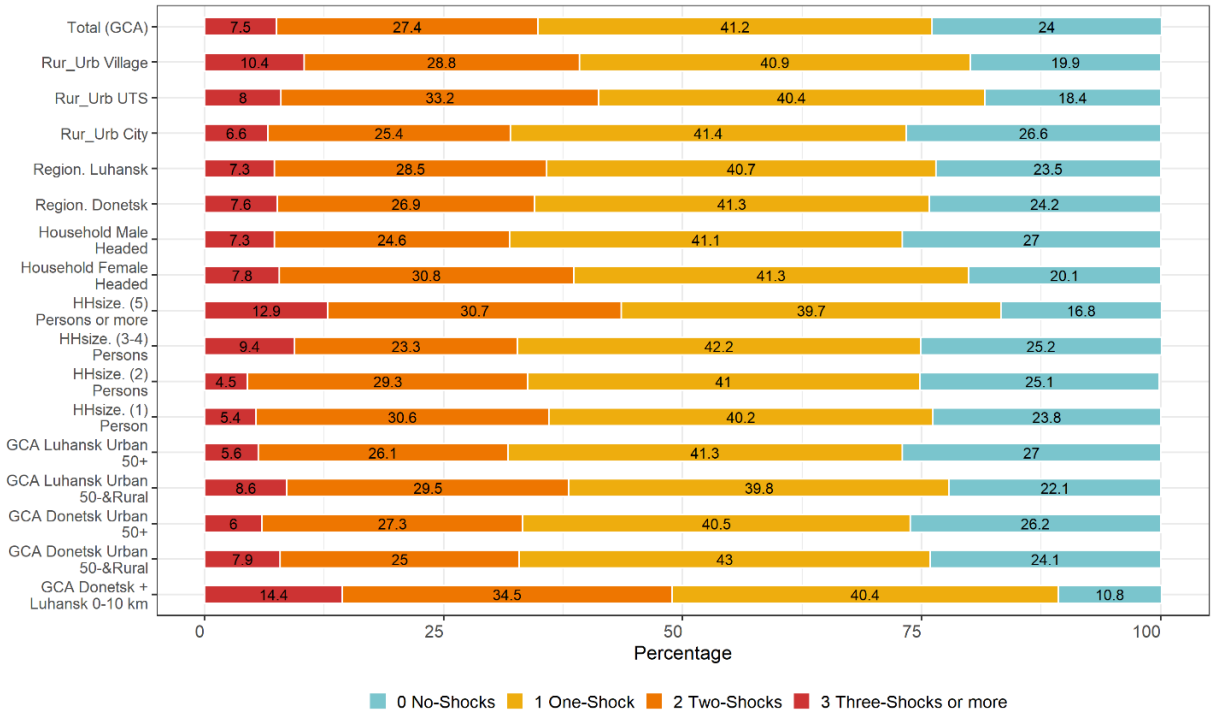
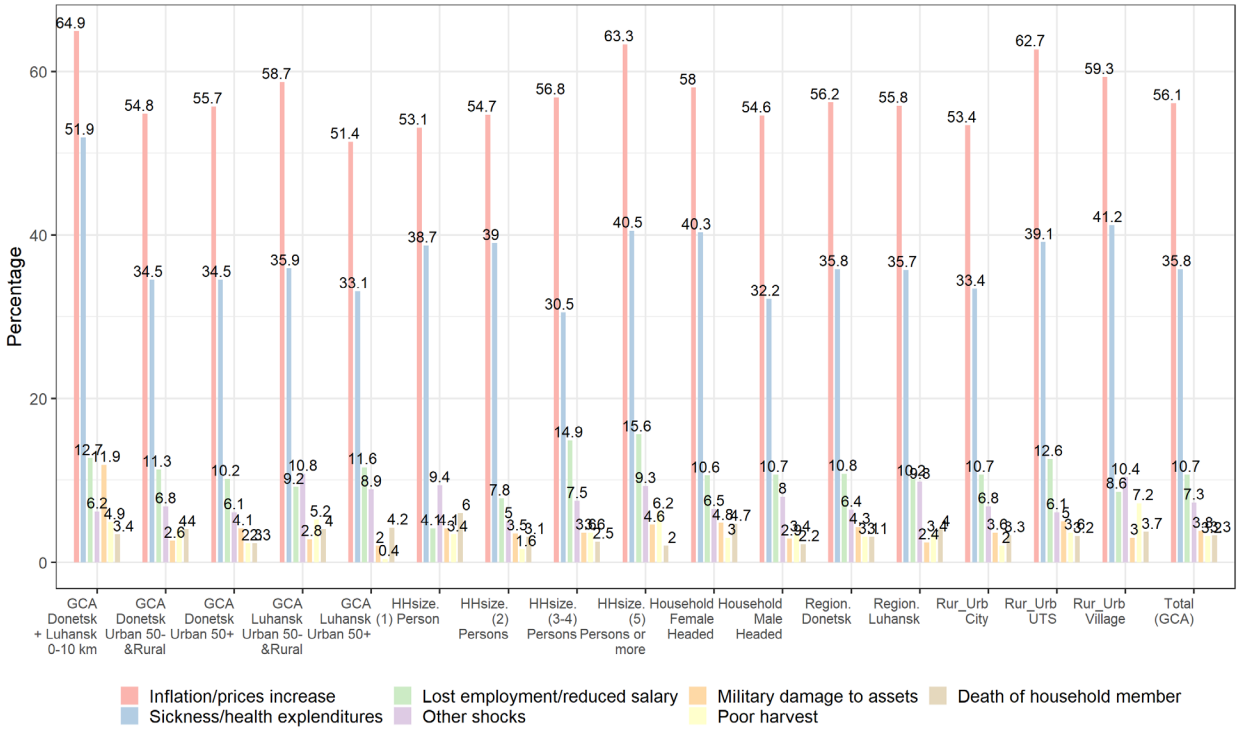


Figure 13. Frequency of main shocks reported



III. Food Security

Food security levels of the households have been measured mainly the food insecurity experience scale (FIES). This allows estimating the prevalence of food insecurity at different levels of severity and classifying households into food security categories.

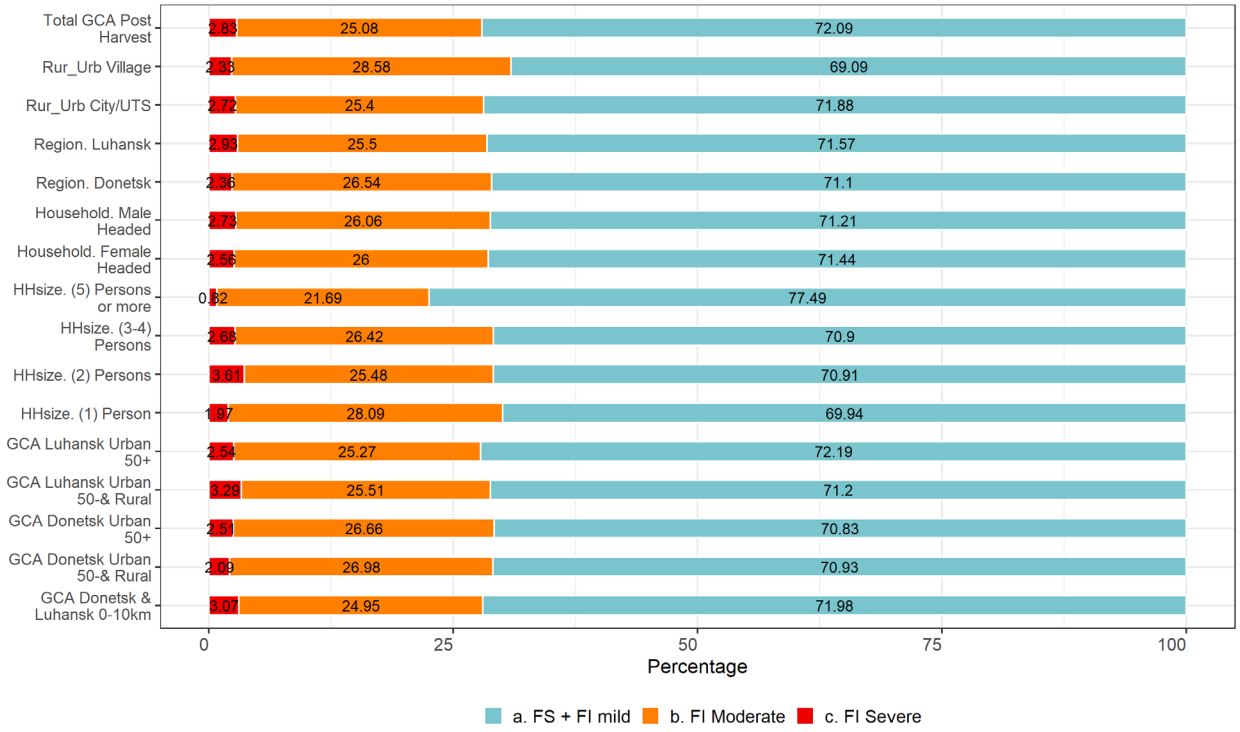
After presenting the results in terms of prevalence of food insecurity, the association between food insecurity status, share of total income spent on food, and livelihood coping strategies will be also explored.

FIES-based measures of food insecurity

To assess the extent and severity of food insecurity levels experienced in the study area in the post-harvest season, data collected with the Food Insecurity Experience Scale module referenced to the previous month (i.e., over August and/or September) have been used and analysed (within the pooled FIES data from the two data collection rounds)[26] to compute the prevalence of food insecurity at different levels of severity. The results (Figure 14) show that a total of 27.91% of the households in the reference population have experienced food insecurity at either "moderate" or "severe" levels during one month period over July – September. The 2.83% of the households that experienced food insecurity at "severe" level has characterised by a non-negligible chance of going for a whole day without eating, at least once over the reference period.

[26] By conducting the statistical validation analysis on the pooled sample that allows to obtain a more robust comparison of the prevalence measured in each region and in each separate survey and that guarantees the stability of FIES scale in the studied areas based on a bigger sample.

Figure 14. FIES-based prevalence of food insecurity categories by area and population group



These are quite high levels of overall food insecurity, if compared to current assessments in Ukraine. As a reference, consider for example that unpublished results from FAO, based on data collected through the Gallup World Poll since 2014, point to a prevalence of annual combined moderate or severe food insecurity of only about 20% in the overall population of Ukraine, as an average over the 2018-20, a prevalence that increases to about 24% in 2020, with a likely increase due to impact of the COVID-19 pandemic. In comparing those results, which refer to prevalence of food insecurity experienced at any moment during the year, with the one reported here, one must consider that, depending on the extent of seasonality and persistence of food insecurity, the prevalence of food insecurity measured with reference to a single month, as in this study, is expected to be significantly lower than the annual prevalence of food insecurity. This implies that the population in the studied area of Easter Ukraine, in the post-harvest of 2021, has been significantly more food insecure than in the rest of the country.

Another useful reference is provided by a recent FAO report on access to food in 2020[27], which presents estimates of the prevalence of recent moderate or severe food insecurity in twenty food crisis countries, measured with reference to the four weeks preceding the surveys that range from a minimum of 13.3% to a maximum of 61.9%. The values we record in the study population of Eastern Ukraine are higher than those found, for example, in Myanmar, Iraq, El Salvador and Cameroon and similar to levels experienced in the general population of Ethiopia.

To put the reported FIES-based estimates for Eastern Ukraine in the context of typical assessments conducted to inform humanitarian response, an important reference is the benchmark provided by the

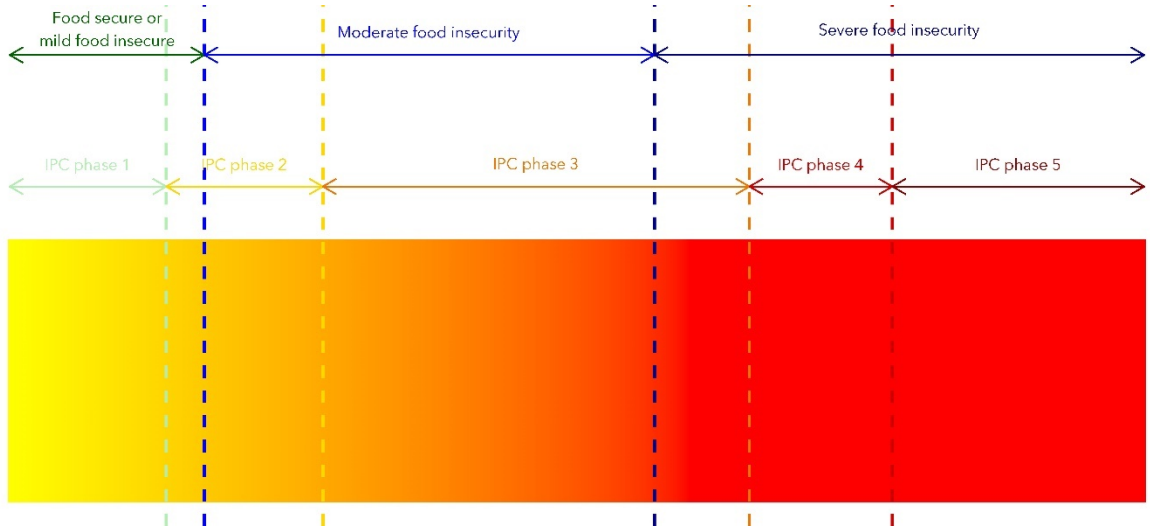
[27] http://www.fao.org/3/cb5623en/cb5623en.pdf

Integrated Food Security Phase Classification (IPC) acute food insecurity assessments. To make a correct comparison, consider the chart in Figure 15.

When properly considering the differences in severity levels used as thresholds, the class described as "moderate or severe food insecurity" in the context of SDG global monitoring includes all cases classified in IPC acute food insecurity Phase 3 or more and some of those that would be classified in Phase 2. The results presented in this report for the GCA of Donetsk and Luhansk (with moderate or severe combined amounting to almost 28% of the population) would therefore likely support the classification of these areas under "Phase 3 or worse" of the IPC, a benchmark often used by the international community to flag the need for activating emergency response.[28]

To the extent that the sample size allows, food insecurity levels can be separately assessed and compared across different locations and population groups. (Table 3 below.)

Figure 15. Comparison between FIES-based and IPC thresholds



Source: Boero et al. (2021, p.7)

Donetsk region observes slightly higher level of moderate or severe food insecurity [28.91(± 4.89)] compared to Luhansk region [28.43(± 4.96)]. The area overlapping between both regions and labelled as "GCA Donetsk & Luhansk 0-10 km" reveals similar levels of prevalence of recent moderate or severe food insecurity [28.02(± 13.11)]. The rural areas in Donetsk labelled as "GCA Donetsk Urban 50-& Rural" shows higher food insecurity levels than their counterpart in Luhansk "GCA Luhansk Urban 50- &Rural" with prevalence of 29.07% (±7.32) and 28.8 (±7.13) respectively. A similar food insecurity levels are found in households when classified based on the gender of the household's head, with female headed households slightly more food insecure [28.79% (±5.11)] than male-headed ones [28.56% (±4.75)].

Overall, prevalence of recent *severe* food insecurity, at 2.83% is relatively high when compared for example to the indicator published by FAO for Ukraine in the 2021 State of Food Security and Nutrition report (2.5%, as an average over 2018-20) even though, once again, it must be considered that the latter refers to the *annual*, rather than recent food insecurity.

[28] The IPC acute food insecurity classification follows a "20% rule" according to which an area is classified in the most severe category that includes at least 20% of the households.

Table 3. Disaggregated Food Insecurity Levels Based on FIES data

	N of households	FI_mod.sev	MoE_mod.sev	FI_sev	MoE_sev
Overall GCA	1680	27.91	3.64	2.83	0.96
City /Urban-Type Settlement	1367	28.12	3.85	2.72	1.04
Village	313	30.91	8.14	2.33	2.18
Region. Donetsk	860	28.9	4.89	2.36	1.16
Region. Luhansk	820	28.43	4.96	2.93	1.48
Household. Male Headed	777	28.79	5.11	2.73	1.34
Household. Female Headed	903	28.56	4.75	2.56	1.31
GCA Donetsk Urban 50+	400	29.17	7.25	2.51	1.76
GCA Donetsk Urban 50-& Rural	380	29.07	7.32	2.09	1.56
GCA Luhansk Urban 50+	380	27.81	7.21	2.54	2.01
GCA Luhansk Urban 50-& Rural	400	28.8	7.13	3.29	2.28
GCA Donetsk + Luhansk 0-10 km	120	28.02	13.11	3.07	3.94
HHsize. (1) Person	379	30.06	7.4	1.97	1.38
HHsize. (2) Persons	531	29.09	6.29	3.61	2.12
HHsize. (3-4) Persons	619	29.1	5.8	2.68	1.54
HHsize. (5) Persons or more	151	22.51	10	0.82	1.05

Source: FAO analysis of Ukraine FIES data

The highest prevalence of recent *severe* food insecurity is found in "GCA Luhansk Urban 50-& Rural" by 3.29% followed by the 0-10 km buffer zone where it reaches 3.07%. These differences among different locations must, however, be interpreted with caution, due to relatively wide margins of error associated with samples of the size used in this assessment.

A direct comparison of the post-winter versus the post-harvest season in GCA based on the analysis of the pooled FIES data, which allows for better use of the FIES methodology and analysis, reveals a slight non-significant deterioration of the food security at only the severe level between the two reference periods as you can see in Figure 16.

Convergence of FIES-based measures with evidence from other indirect measures

To explore the robustness of the FIES-based assessments of food insecurity, we present the result of the association between the FIES raw score, which has proven to be a valid ordinal measure of severity, and two commonly used proxy indicators of food insecurity.

Table 4 shows the cross-tabulation of the 1680 cases in terms of FIES raw score (from 0, corresponding to the least food insecure category, to 8, the most food insecure one) against the reported share of income spent on food, on average, over the previous three months. Household expenditure on food is a measure of household food access whereby households with a larger share of expenditure on food are considered more food insecure.

Households are classified by food insecurity severity according to generally accepted thresholds of food expenditure share: 80% or above expenditure on food = "Very high" food insecurity; 70-79% = "high"; 50-69% = "medium", and <50% = "low".

The results (also presented in the chart of Figure 17) clearly show a gradient in the expected direction, revealing that households with raw scores 7 or 8 are significantly more likely to be spending considerable shares (+> 70%) of their income on food, when compared to other groups. Equally significant the observation that reporting a raw score of zero implies spending relatively lower shares on food.

Figure 16. FIES-based food insecurity levels for post-winter and post-harvest seasons

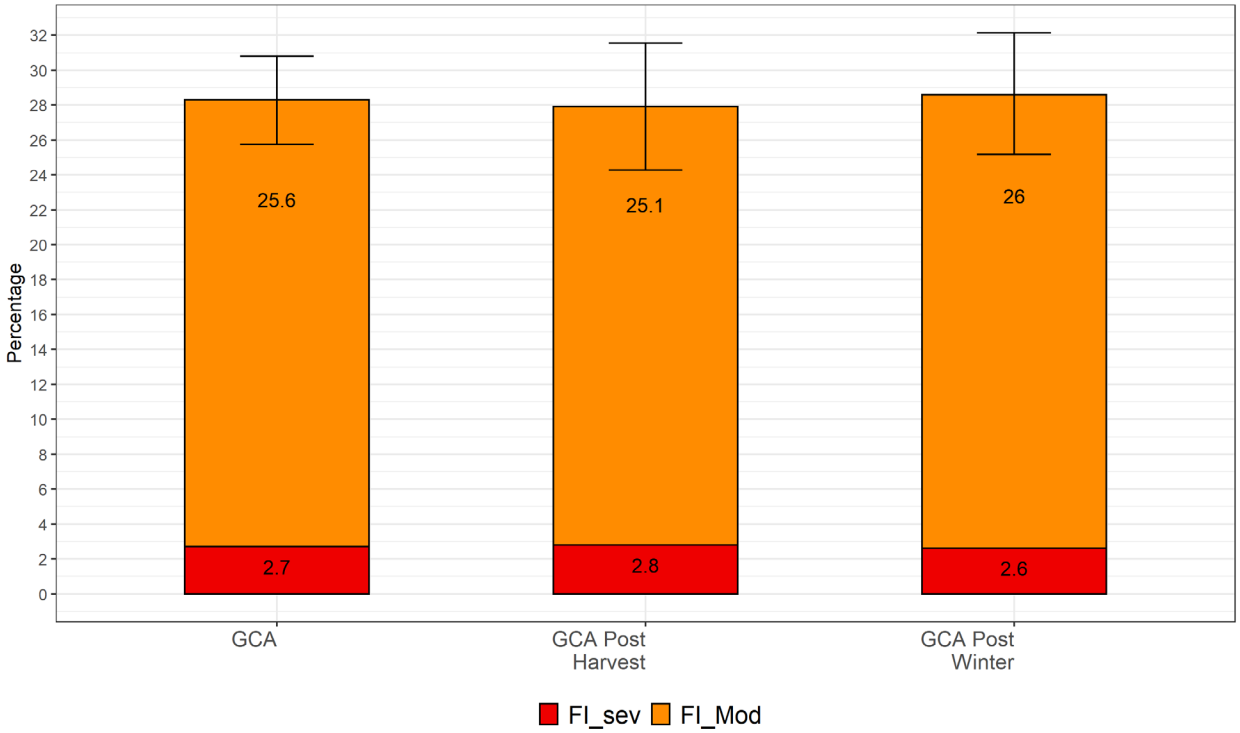


Table 4. Association between food insecurity and share of income spent on food

Share of income spent on food	Number of households by FIES raw score									Total
	0	1	2	3	4	5	6	7	8	
<50%	277.6	68.4	54.2	47.0	41.9	39.7	31.0	27.7	6.1	593.6
50-69%	211.4	76.3	88.1	77.7	49.5	45.5	29.6	24.8	9.2	612.2
70-79%	54.8	27.4	19.2	35.3	40.4	17.1	7.0	9.0	4.0	214.2
=>80%	21.2	17.9	9.5	18.9	13.3	18.5	17.0	20.9	10.0	147.2
#N/A	33.2	14.1	13.5	5.4	7.2	16.7	10.4	6.4	5.9	112.8
Grand Total	598.2	204.1	184.6	184.3	152.3	137.5	95.1	88.8	35.1	1680.0

Another interesting analysis compares The FIES raw score with the reported coping strategies. Respondents who affirmed any of the FIES items (and therefore report a raw score greater than zero) were asked to indicate if they resorted to one or more from a list of possible strategies, to cope with their difficulty in accessing food.

In similar analyses, coping strategy are typically classified by the researchers in three different categories ("stress", "crisis", and "emergency") following the implied increasing level of severity. For example, "buying food on credit" or "borrowing food" would be considered relatively mild, and then included in the group of "stress" level strategies, "selling productive assets", or "withdrawing children from school" would be considered "stress level", while very serious, and therefore indicative of an "emergency" level.

Based on which strategy was reported, the households are classified in one of four groups, and the results contrasted with the reported FIES raw score. Table 5 and Figure 18 show the results.

The strong association and the gradient in the expected direction is strikingly evident: the frequency in which more severe coping strategies are reported increases with the reported raw score, to the point that reporting raw score 6, 7 or 8 is pretty much indicative of having had to recur to "crisis" or "emergency level", and therefore indicative of very severe food insecurity.

Figure 17. Distribution of households by FIES raw score and share of income spent on food

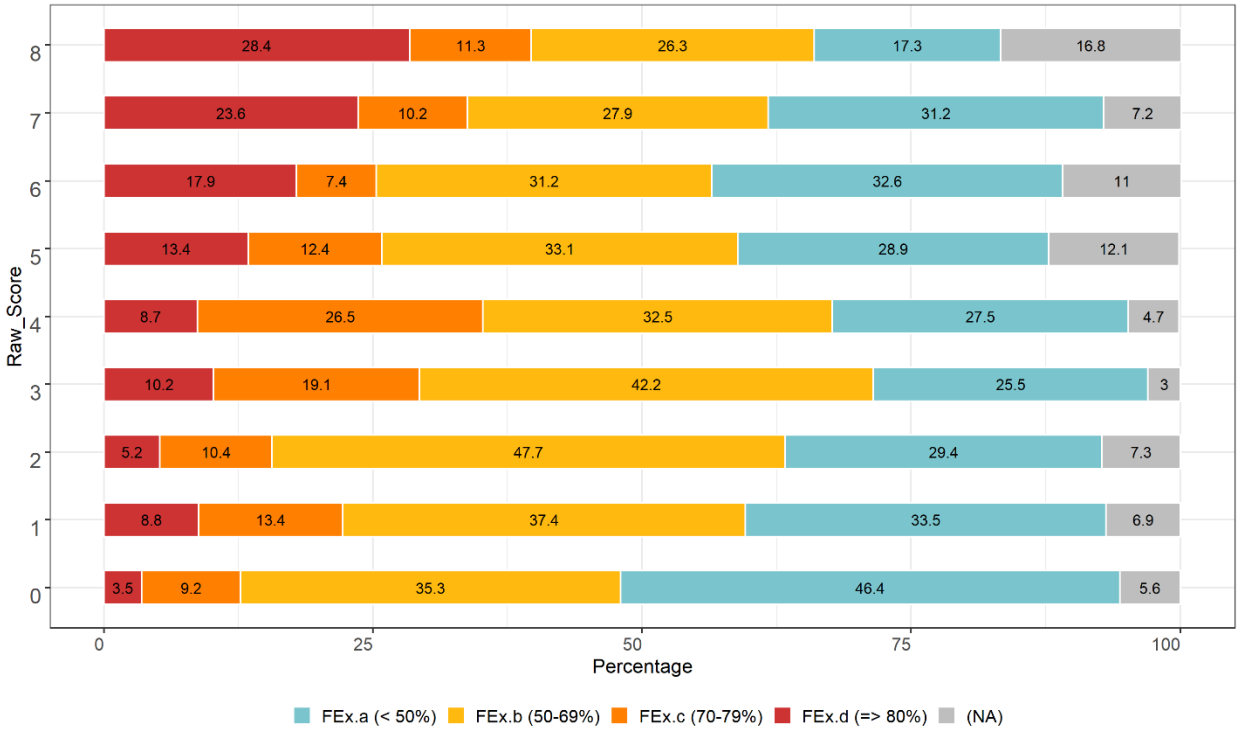
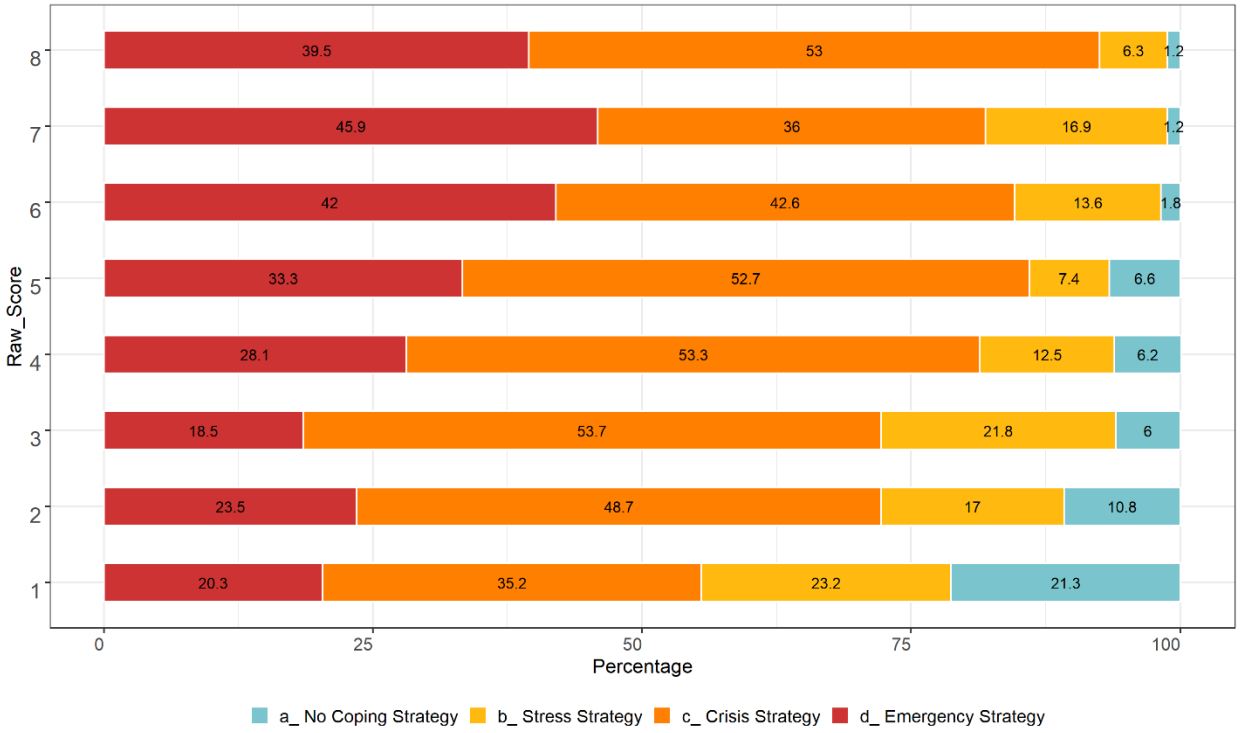


Table 5. Association between food insecurity and Livelihood Coping Strategies

Type of coping strategy adopted	Weighted number of households by FIES raw score								Total
	1	2	3	4	5	6	7	8	
No Coping Strategy	43.5	20.0	11.1	9.4	9.1	1.7	1.1	0.4	96.3
Stress Strategy	47.4	31.3	40.2	19.0	10.1	13.0	15.0	2.2	178.2
Crisis Strategy	71.8	89.8	98.9	81.1	72.5	40.5	31.9	18.6	505.2
Emergency Strategy	41.4	43.4	34.2	42.8	45.7	39.9	40.8	13.9	302.1
Grand Total	204.1	184.6	184.3	152.3	137.5	95.1	88.8	35.1	1081.8

It is important to note that even households who report a low FIES raw score demonstrate fairly high levels of coping behaviour. More than 50% of households with a FIES raw score of 1, indicating a low or mild actual experience of food insecurity, report having used emergency or crisis coping mechanisms, suggesting that their food security status would likely have been worse had the household not been able to employ coping strategies to mitigate food insecurity.

Figure 18. Distribution of households by FIES raw score and type of reported coping strategy



Overall, these results give strong credibility to the assessment based on the FIES. This is a remarkable result, considering that this was the first time the FIES had been used in the emergency context of a country in Europe.

IV. Assistance

The occurrence that the households received assistance over the reference period and the kinds of assistance received by them are important aspects for households' food security and livelihoods

The extent and impact of the received assistance

Figure 19 shows that only 19% of the households in the study areas report receiving any kind of assistance over the last three months. This percentage is quite homogenous across different locations and population groups with a bias towards the city areas (20.5%) compared to pure rural (14.3%). Notably, the single person and the female headed ones report receiving more assistance than bigger or males headed households. People in Luhansk report receiving slightly more assistance than their neighbours in Donetsk (19.7% vs 18.8%).

Highlighting on the impact of receiving any kind of assistance, the assisted and non-assisted households in GCA are analysed in terms of their food security situation. Figure 20 clearly shows the divergence of assisted and non-assisted households' "severe" and "moderate" FIES-based food insecurity levels. The "sever food insecurity" level is not significantly different between households that have been assisted (2.2%) compared to those that have not been assisted (2.1%), indicating a probably positive impact of the assistance on food security for those who needed it. The level of the "moderate food insecurity", however, point to higher shares in the assisted households (30%) compared with non-assisted ones (27.8%), which

indicates that the assistance received was not equally sufficient to reduce the moderate food insecurity, but more efforts are needed to combat the moderate food insecurity in GCA area.

Figure 19. Assistance: percentages of households receiving assistance

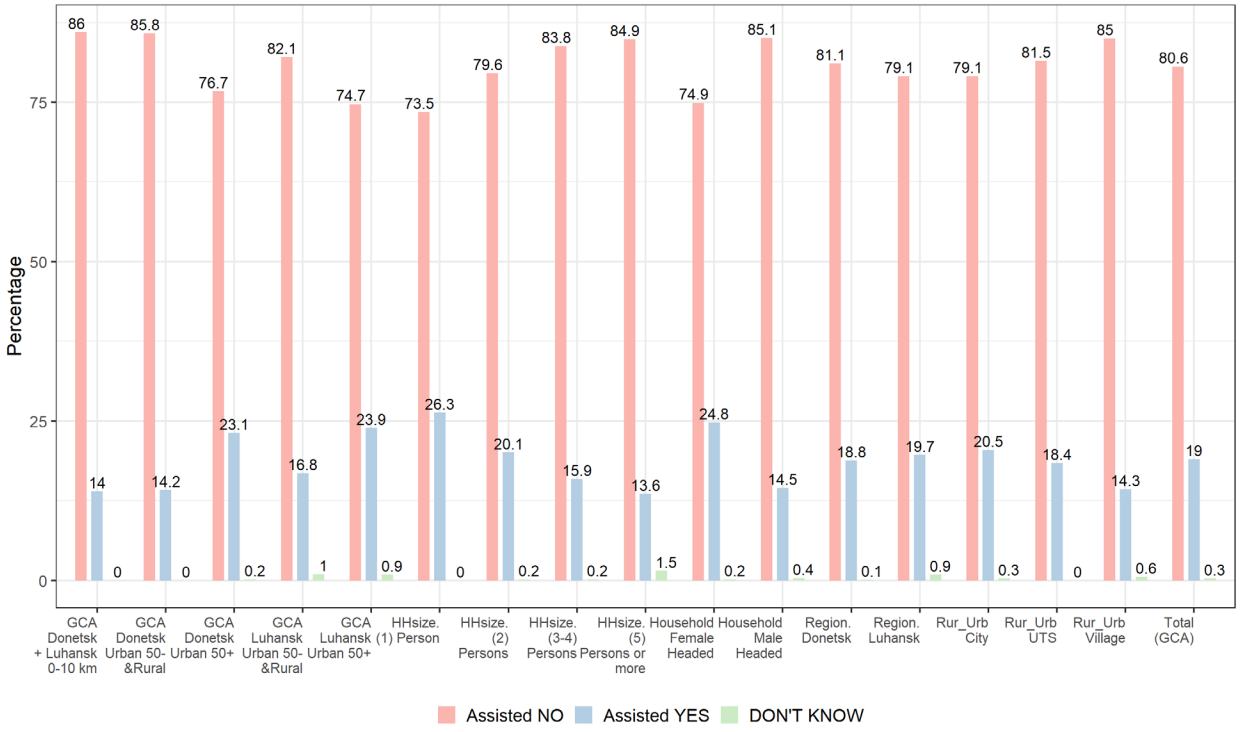
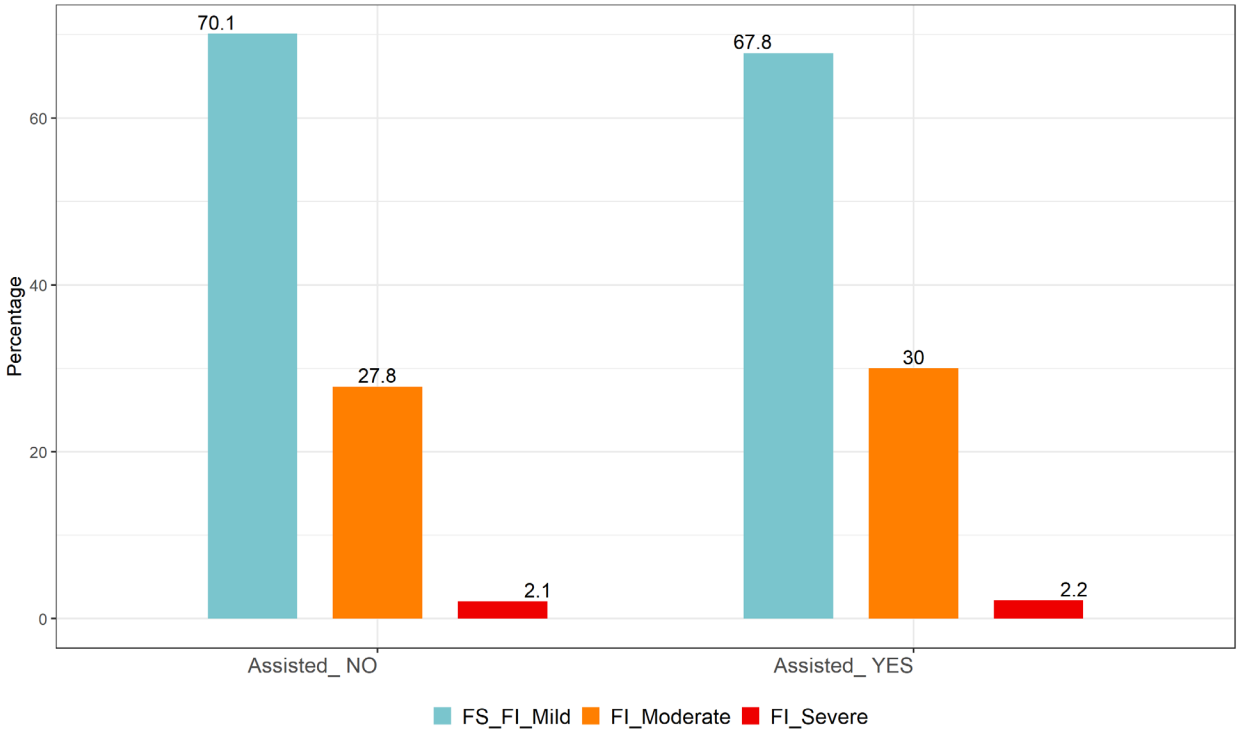


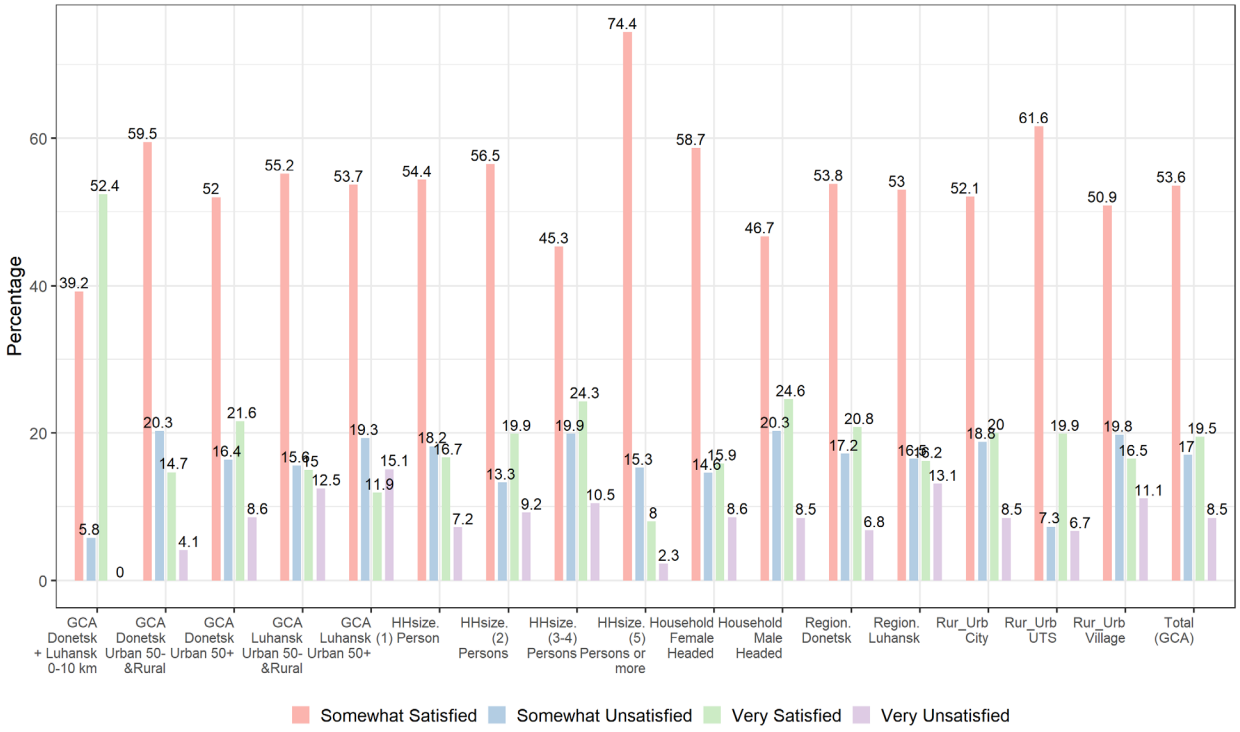
Figure 20. FIES-based food insecurity categories among assisted and non-assisted households



The extent of satisfaction with the received assistance

While a high share of the households (53.6%) expressed moderate satisfaction with the assistance they received, 8.5% were very unsatisfied with theirs, pointing to the possible need for more or different kinds of assistance demanded by those households. 19.5% of the households, however, reported being very satisfied with the assistance received. Detailed assistance satisfaction percentages by different locations and population groups are shown in Figure 21 below.

Figure 21. Degree of satifaction with the assitance received



Households perceived needs

The main assistance needs envisaged by the households in the study area for the next period (the coming three months) are categorized as shown in Figure 22. Access to fuel seems to be the first households' needed assistance (40%) probably for its important for the coming winter season. It is followed by the need to access drinking water by 25% and the need for housing repair and housing utility services by 15%. The needs for healthcare and medicines comes then as expressed by 11% of the households followed by the need for agricultural and livestock inputs (9%). The need for cash and loans (5%) comes next followed by the need for food that was claimed by 3% of the households.

Analysing the households' perceived needs against their food insecurity classes does make sense by looking to the moderate/severe food insecurity classes where the 35.9%/6% of those who expressed the **need to food** fall into these classes followed by 39%/2.6% of households that expressed their needs to **cash money,** Figure 23. The distribution of the *moderately* food insecure households against their expressed future needs in terms of **cash**, **healthcare/medicine** or **food** seem to be consistent as well.

Figure 22. Reported needs for future assistance

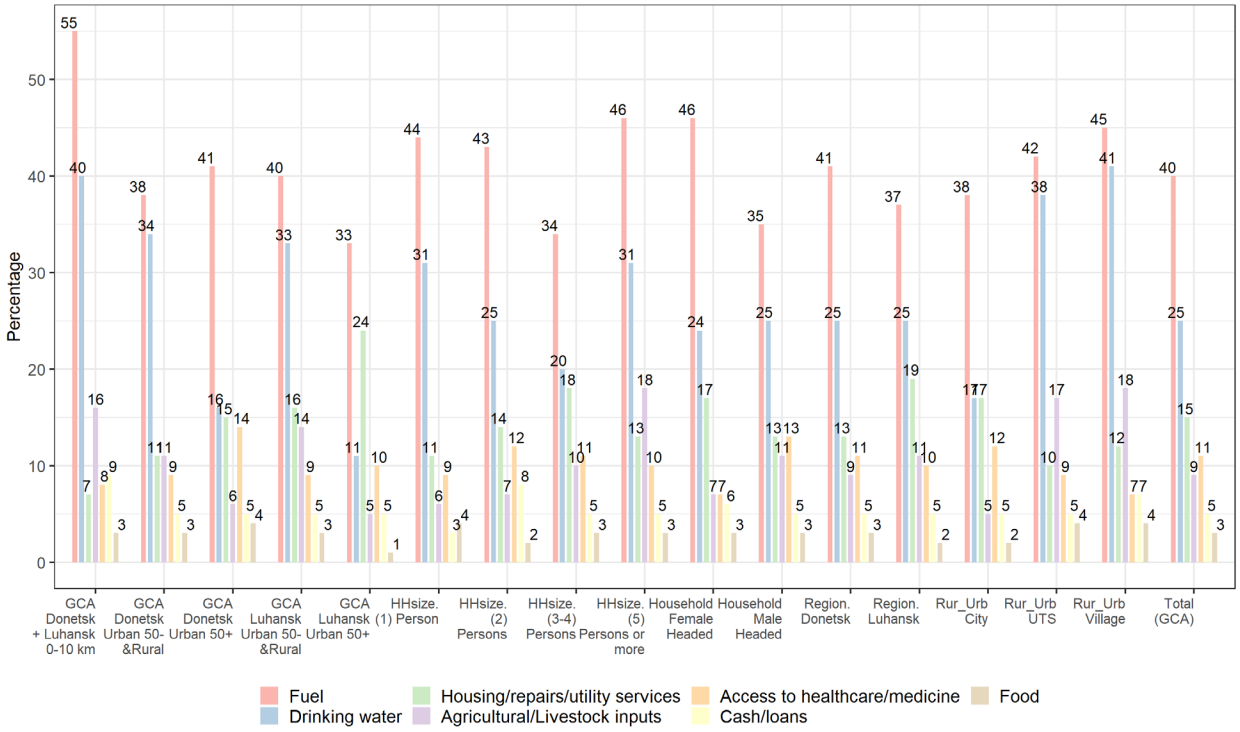
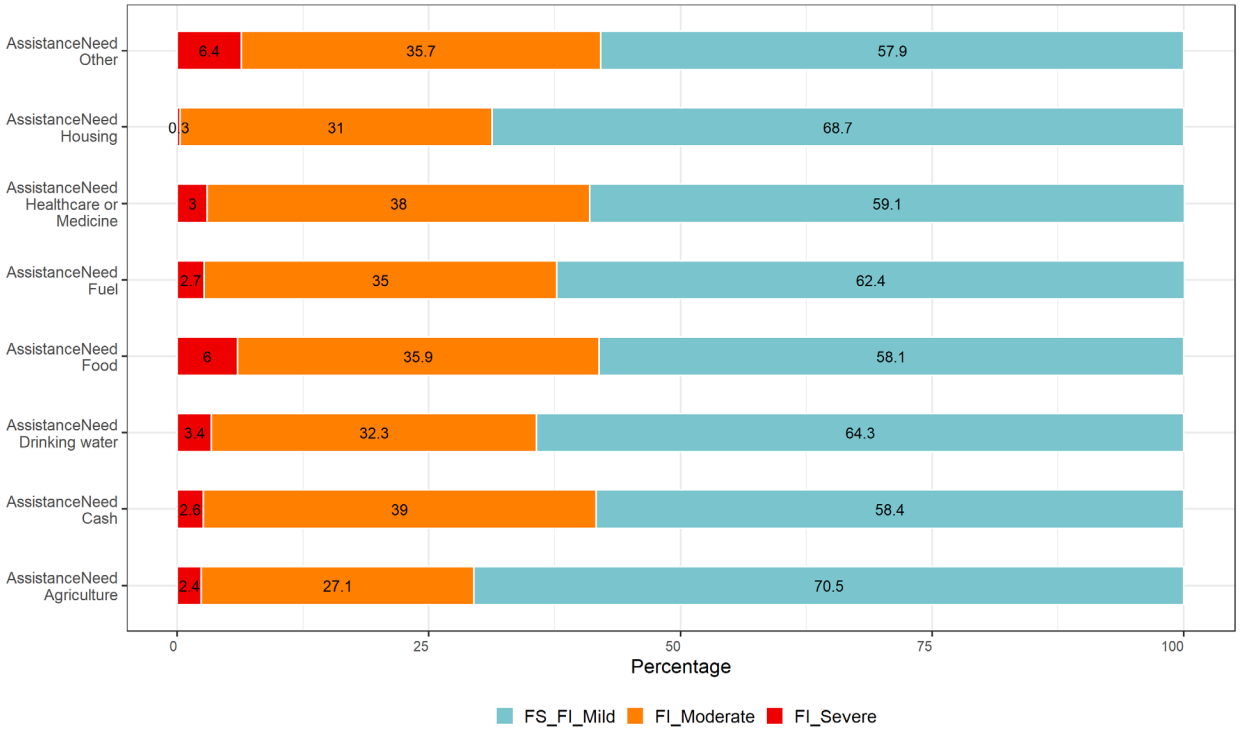


Figure 23. The distribution of food insecurity levels within people's different perceived needs



V. Agriculture

Although engagement in some form of agriculture is declared by a fair share of households in GCA, the agriculture sector seems to be only marginally relevant from the economic point of view as for the majority of respondents (on average 98.7%) it consists mainly of vegetable fruits, field crops and livestock for the household's own consumption. The general aspects of both crop and livestock productions are highlighted in the subsequent sections.

The households that are involved in any kind of agriculture activities forms 44.9% of all surveyed households (Figure 24). Different regions and locations show relatively different levels of involvement in the sector. In general, households in Luhansk appear to have been engaged more in agriculture activities (53.6%) compared to Donetsk's households (41.7%). Not surprising, the location most engaged in agriculture is the villages by 79.7% followed by "GCA Luhansk Urban 50- &Rural", with 69.1% of the households reporting agricultural activities, compared to the lowest share by only 28.6% of households reporting such engagement in "GCA Luhansk Urban 50+" area.

Figure 24. Frequency of households' engagement in agriculture

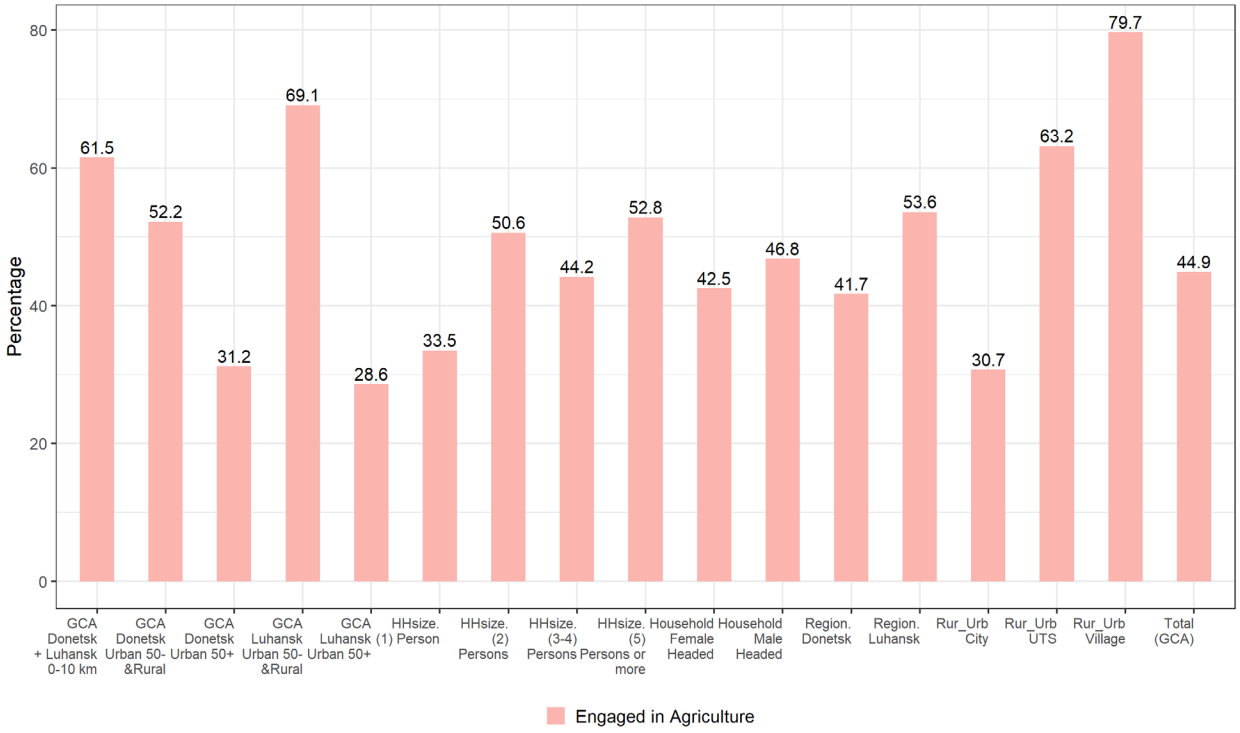


Figure 25 shows the households' relative engagement in different types of agricultural activities. The importance of producing fresh food is quite evident, as 90.1% of these households are engaged mainly in vegetable production. The second important set of agricultural activities includes those pertaining to fruits (43.1%), livestock (30.4%) and crop production (23%). Bee keeping (4.7%) and fisheries (3.1%) appear to be marginal. The percentages of the households' engagement in different agricultural activities are somewhat consistent across locations and population groups.

Figure 25. Main agricultural activities reported by those engaged in agriculture

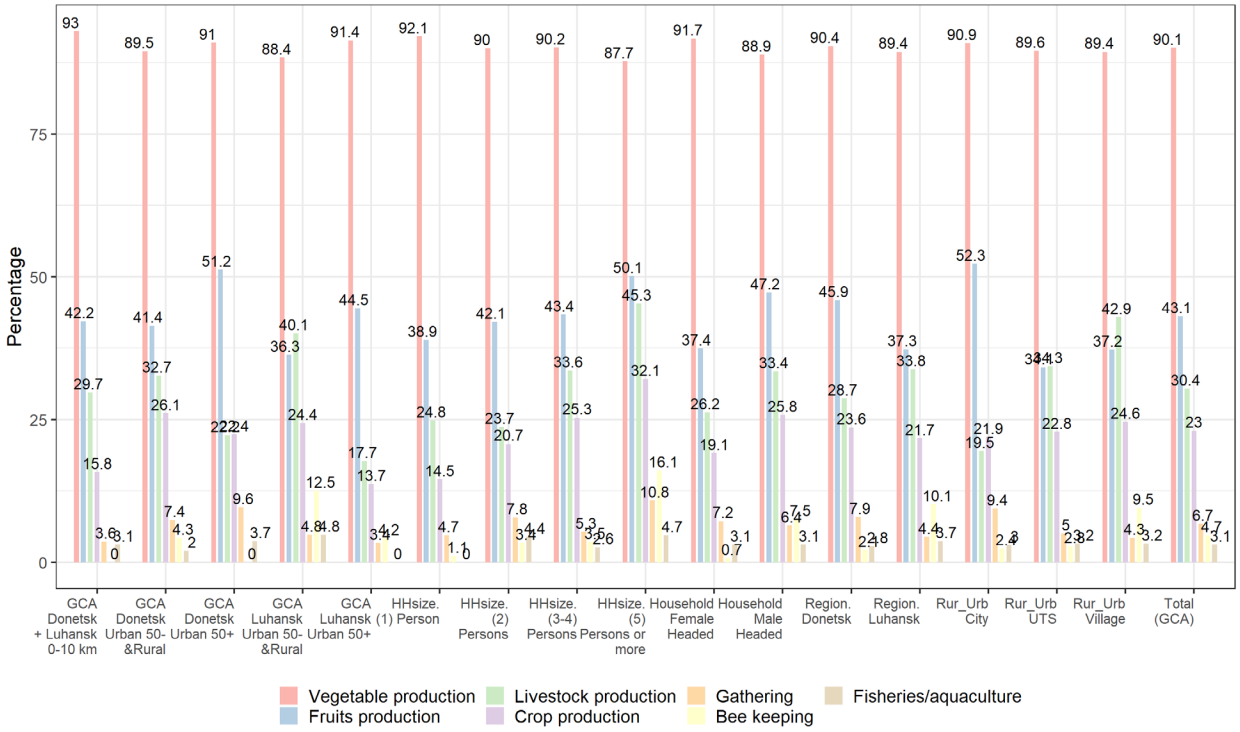
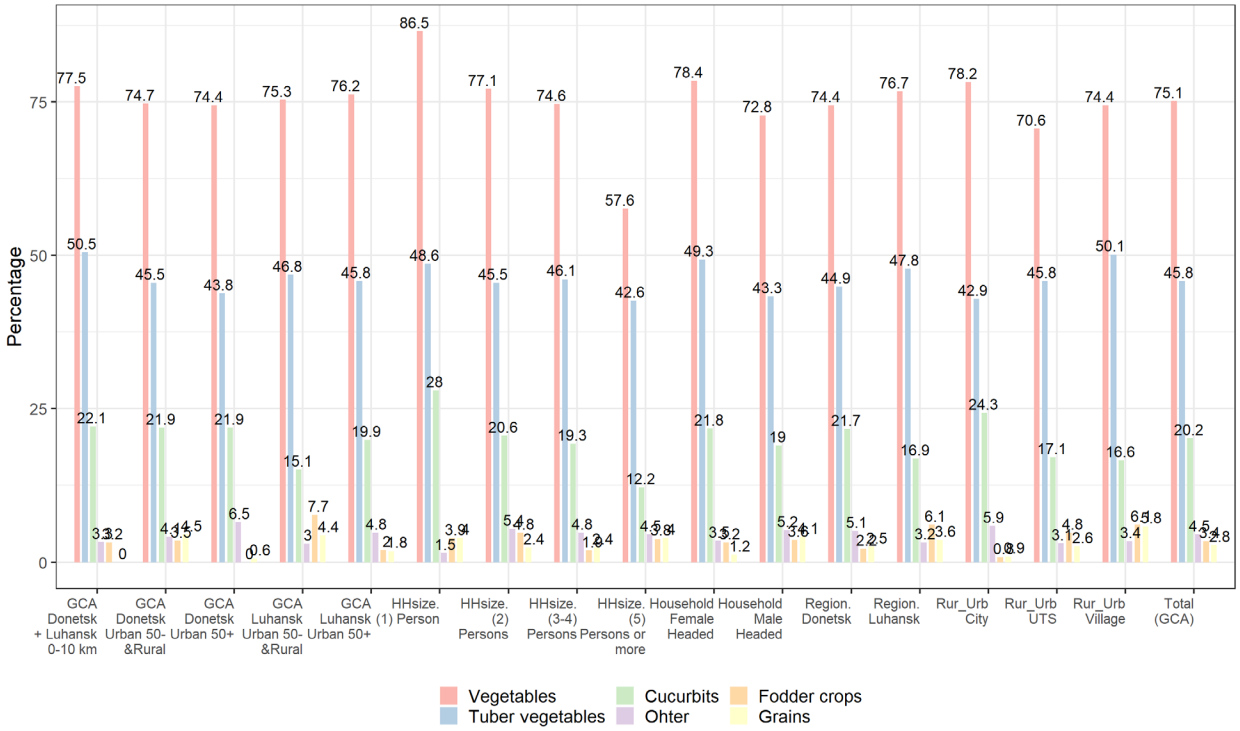


Figure 26. Agricultural activities: Crops reported as the main crop

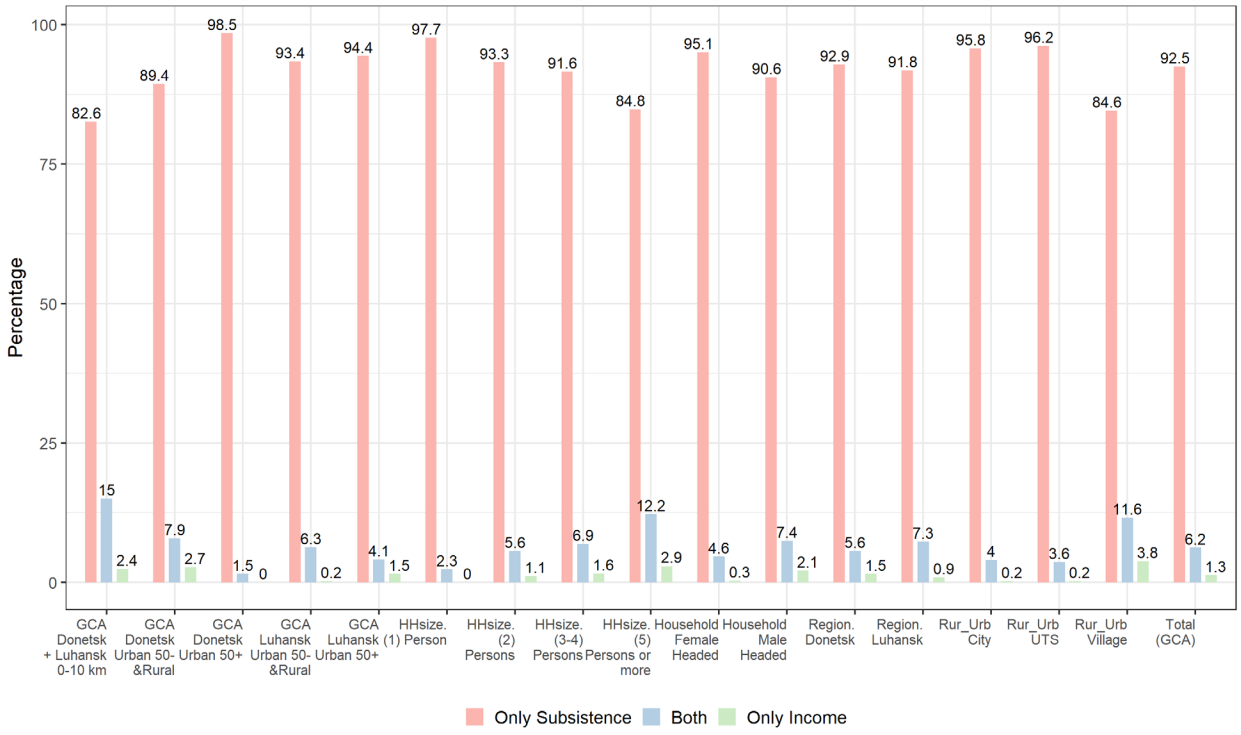


Crop Production

Vegetables are the most frequently grown crop by households involved in any agricultural activities in the study areas as 75.1% of them declared to produce vegetables. Figure 26 shows that the households' involvement in tuber vegetable production comes secondly but considerably with lower rates (45.8%). To a rather lower extent, 2.8% of the households reported being engaged in the production of grains. A considerable share (20.2%) of households are growing cucurbits compared to 3.4% who grow fodder. Others crops including oilseed production are declared by 4.5% of households. Similar percentages are observed in different locations and population groups.

It is evident that the main purpose of the households' engagement in crop production is to complement their own consumption needs and not as an economic activity. Figure 27 reveals that almost all households (92.5%) declare growing crops only for own consumption. However, a small proportion (6.2%) of those households are growing crops for income as well. Only a tiny share (1.3%) of the households declared to be growing crops only for income generating purposes. Consistent percentages are shown across different locations and population groups confirming the homogeneity of crop production's purposes within different locations and population groups.

Figure 27. Reasons for growing crops



The crop producers faced various difficulties in growing their crops as revealed by the households in the studied areas. Drought comes in the first place as the main difficulty faced by crop producers, being reported by 22.4% of respondents. Figure 28 also shows the second reported difficulties is the outbreak of pests and diseases (17.2%) followed by the environmental adversaries of the form of heavy rain, wind or flood (12.8%). The lower irrigation water services comes next by 11.7% followed by the unavailability or costly labour (11.3%). The sickness of household member manifests itself as common difficulties to

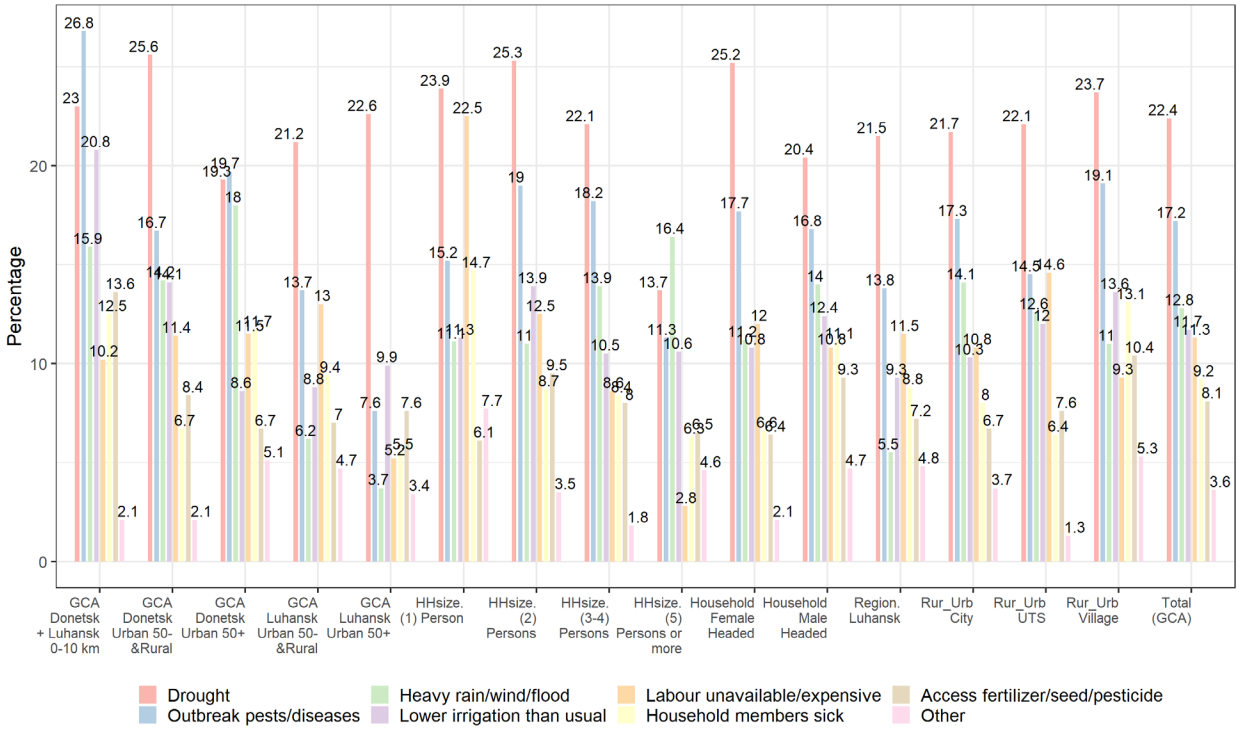
crop producers, reported by 9.2% of the households. To a lesser extent, comes the difficulties accessing fertilizers, seeds and pesticides 8.1% each. Similar rates of crop producers' difficulties are common across locations except for "GCA Donetsk + Luhansk 0-10 km" that is characterised by excess share of outbreak of pests and diseases (26.8%).

Livestock Production

The main aspect of livestock production in the surveyed areas is its very low relevance. Engagement in livestock activities was declared by 244 households, forming only 12% of the overall population and 30.4% of those who are involved in agriculture.

The main animals raised by agricultural households are poultry, cattle, pigs and others. Figure 29 shows that poultry producers come in the first place (1.2%) of households that declared raising livestock followed by cattle producers by 11.7%. Then comes pigs producers (10.3%) and households who keep small ruminants (3.6%). The rest of livestock producers, however, failed to inform on the main animals they raise.

Figure 28. Main reported problems in growing crops



As for the crops, households' engagement in animal production in this area is essentially a way to complement their own food consumption, contributing to their food security. Figure 30 reveals that the majority of the households (58%) raise animals only for self-consumption. In addition, 27% of those households are raising animals for both income as well as for their own consumption. However, only a small share (14%) of the households declared to keep animals only for the income generating purpose. Consistent percentages are shown across different regions and locations.

Figure 29. Relevance of livestock raising activities by type of animal

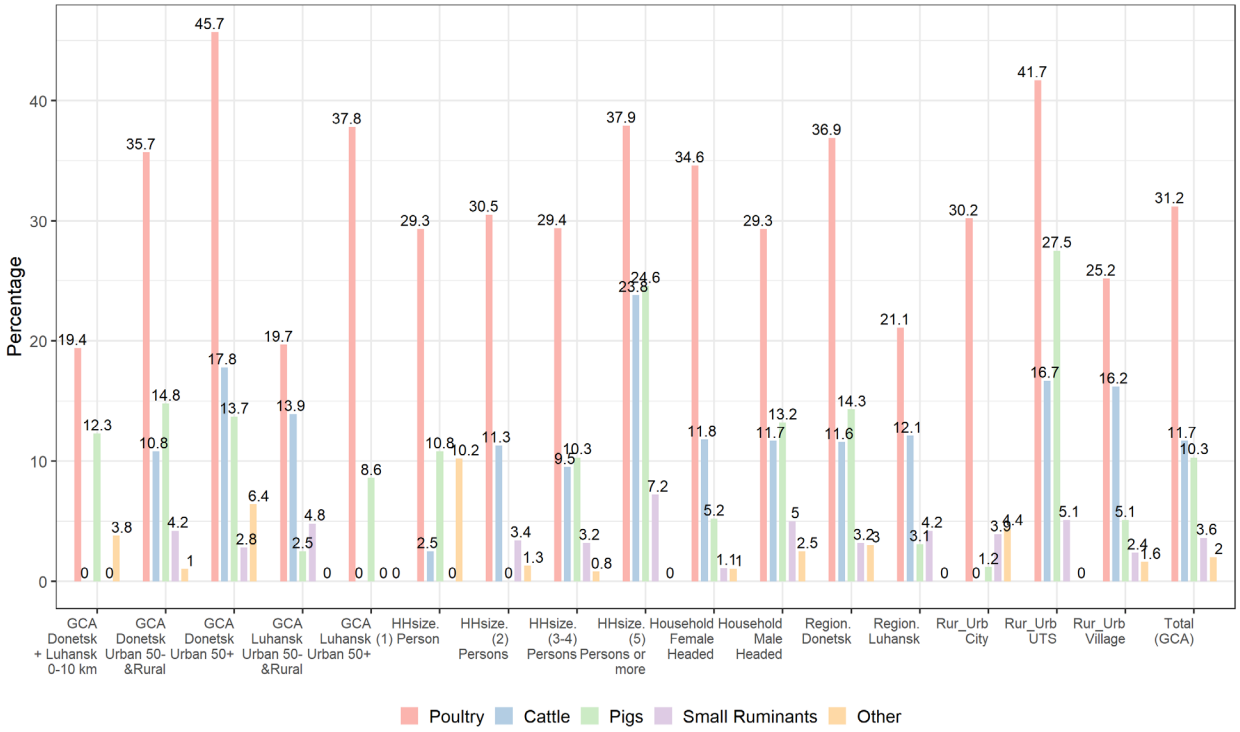
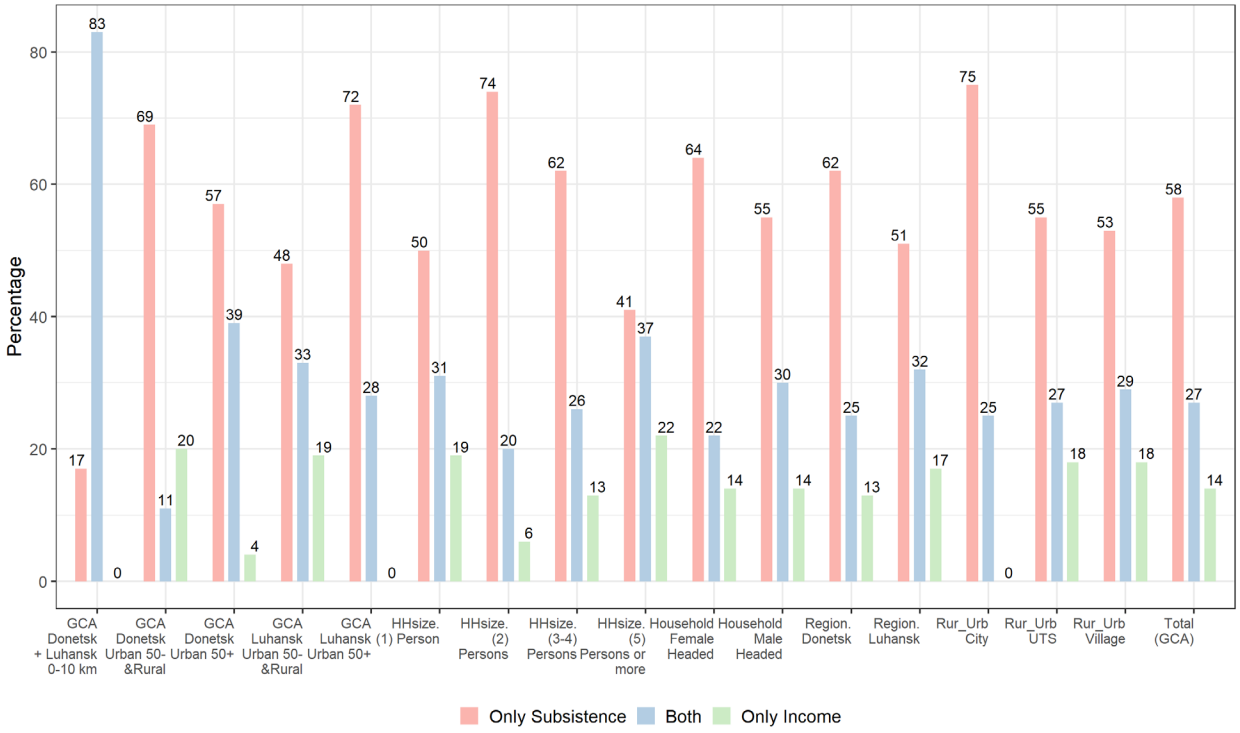


Figure 30. Reasons for raising livestock



Conclusion

In the conflict-affected regions of Eastern Ukraine, the Food Insecurity Experience Scale (FIES) offered a comprehensive overview of households' food security and livelihood. FIES contains a small set of questions that inquire about the occurrence of conditions that are typically associated with food insecurity. Based on the interview, the module develops a quantitative scale of severity in order to estimate the probability of food insecurity, based on the severity level, for each person/household and with two distinct classes of food security severity defined as "moderate" and "severe."

41.7% of households derive income from pensions, followed by 23.9% from non-agricultural wages, and 20.9% from humanitarian/social assistance. In terms of income sources, the high reliance on pensions (62.2% of single-person households) is indicative of the region's vulnerability. There were fewer households (4.9%) who reported more than four sources of income, indicating a high degree of economic vulnerability. The majority of households receive 75% of their income from pensions and non-agricultural wages. Debt-ridden households are arguably economically vulnerable, especially for larger families and families headed by women in the buffer zone and villages within the 0–10 km distance from the line of contact. Despite its fertile land, GCA reported an agriculture income to be the main source for only 2.9% of respondents.

A substantial share of households in GCA (36.9%) used loans to cover monetary gaps for utilities, medical services, outstanding bills, education, agriculture inputs, and food. 65.1% of the households that took debts during the last three months still need to pay them back, and this problem is more intense in small urban settlements of GCA Luhansk and large households with 5 members or more.

It is no surprise that households were exposed to shocks that may imply risks for their livelihoods. About 76% of the households have been exposed to different types of shock during the previous three months: 41.2% reported one shock, 27.4% of the households have been exposed to two different shocks and 7.5% of them reported three shocks or more, with a higher incidence reported in the 0–10 km buffer zone, villages, and large households. In addition, inflation and increasing prices of basic commodities were frequently reported, which is consistent with the high consumer price index in 2021.

In the reference population, 27.91% of households faced food insecurity at a "moderate" or "severe" level—a decrease of less than one percentage point from the post-winter assessment findings is not statistically significant. The report shows also that the percentage of households that experienced food insecurity at the "severe" level slightly increased, however, this change is statistically non-significant: 2.7% during the post-winter assessment compared to 2.83% in the post-harvest, with a non-negligible chance of going without food once during the study period. Although no significant changes in the food insecurity prevalence were detected, the humanitarian community should remain vigilant as some drivers of potential deterioration are being observed: augmented food prices, consequences of COVID-19 restrictive measures, and deterioration of the macroeconomic situation. There is slightly more food insecurity among households in villages (30.9%). Across the regions, food insecurity is more common in Donetsk (28.9%) than in Luhansk (28.4%). The GCA Donetsk rural area has a higher prevalence of food insecurity than the Luhansk rural area (29.07%).

Overall, the prevalence of recent severe food insecurity, at 2.83%, is slightly higher compared to the indicator published by FAO for Ukraine in the 2021 State of Food Security and Nutrition report (2.5%, as

an average over 2018–20). However, higher recent food insecurity has been observed in the 0–10 km buffer zone, 3.07%. These differences need to be interpreted carefully, as there are relatively wide margins of error associated with the sample size used.

People in Luhansk received slightly more assistance than those in Donetsk, while single persons and women-headed households received more assistance than men. Neither moderate nor severe households received significantly more assistance. The assistance received was moderately approved by 53% of households. 8.5% of households were very unsatisfied, and 19% were very satisfied. “Severe” households expressed the need for food and cash but emphasized cash, health care, and food.

44.9% of households interviewed are engaged in some agriculture activity, with households in Luhansk engaging in the activity at a greater rate (53.6%) compared to Donetsk (41.7%), especially households in rural areas (79.7%). 90.1% of households are engaged in vegetable production, followed by fruits (43.1%), livestock (30.4%), crop projection (23%), beekeeping (4.7%), and fishing (4.7%). In addition, 2.8% of households report growing grains, and 3.4% produce fodder; other crops, such as oilseed, account for 4.5% of household production. Drought, pests and diseases, heavy rain, wind, and floods are constraints that farmers face in agricultural production. Low irrigation water service was cited as an issue, as were lack of labor, higher labor cost, and difficulty of obtaining fertilizers, seeds, and pesticides. Both the GCA in the Donetsk and Luhansk 0–10 km buffer zone experience similar challenges.

12% (244 households surveyed) interviewed are involved in animal production such as poultry, cattle, pigs, and others.

Recommendations

The recommendations are consistent and similar to those made in the post-winter assessment, with a larger focus on agricultural and non-agricultural livelihoods interventions to strengthen the resilience of vulnerable households to meet their food and livelihood needs. Despite the need to provide immediate access to food to the most vulnerable, especially those classified as severe and moderately food insecure, evidence has shown that providing food alone will not build resilience in the long term but must be complemented with livelihood activities.

The “severe” and “moderate” food-insecure households are still within the buffer zone and villages within the 0–10 km distance. Single and women-headed households remain the most food insecure within the conflict area.

The below recommendations should inform programming and ways to improve the overall food security situation.

- Scale up the cash-based transfers for food and multi-purpose cash (MPC) for non-food needs. Consequently, the food consumption score (FCS) and expenditure share on non-food items will be improved, particularly during periods of rising inflation and food prices. The food transfer value is determined based on the cash-based transfer (CBT) value recommended by the cluster, and the MPC is determined based on the recommendation of the cash working group. The FSLC recommends providing food assistance to cover 100% of the daily ration of severely food-insecure households and 75% coverage of moderately food-insecure households.

- Provide tailor-made agricultural livelihood support to "severe" and "moderate" households to reduce their dependence on humanitarian assistance. In addition to improving nutrition and income, diversifying their livelihoods will also improve self-reliance. Therefore, significantly scaling up agricultural livelihoods interventions is highly recommended.

- Facilitating access to the market, particularly in rural, isolated communities, through grant access, entrepreneurship training, or business skills development has been shown to be an effective means for improving food security, income, and access to services. It is therefore strongly recommended to use niche targeting.

- Increase efforts to diversify livelihoods for households who have lost their primary livelihoods by investing in agriculture (including animals), skill training, business training, and investing in initiatives that would employ vulnerable households.

Based on the evidence of a close relationship between coping strategies used and food insecurity status, a “food+ approach” (direct food assistance together with livelihood support) is recommended mainly for severely food-insecure households, which would ensure immediate access to food and promote their self-sustenance.

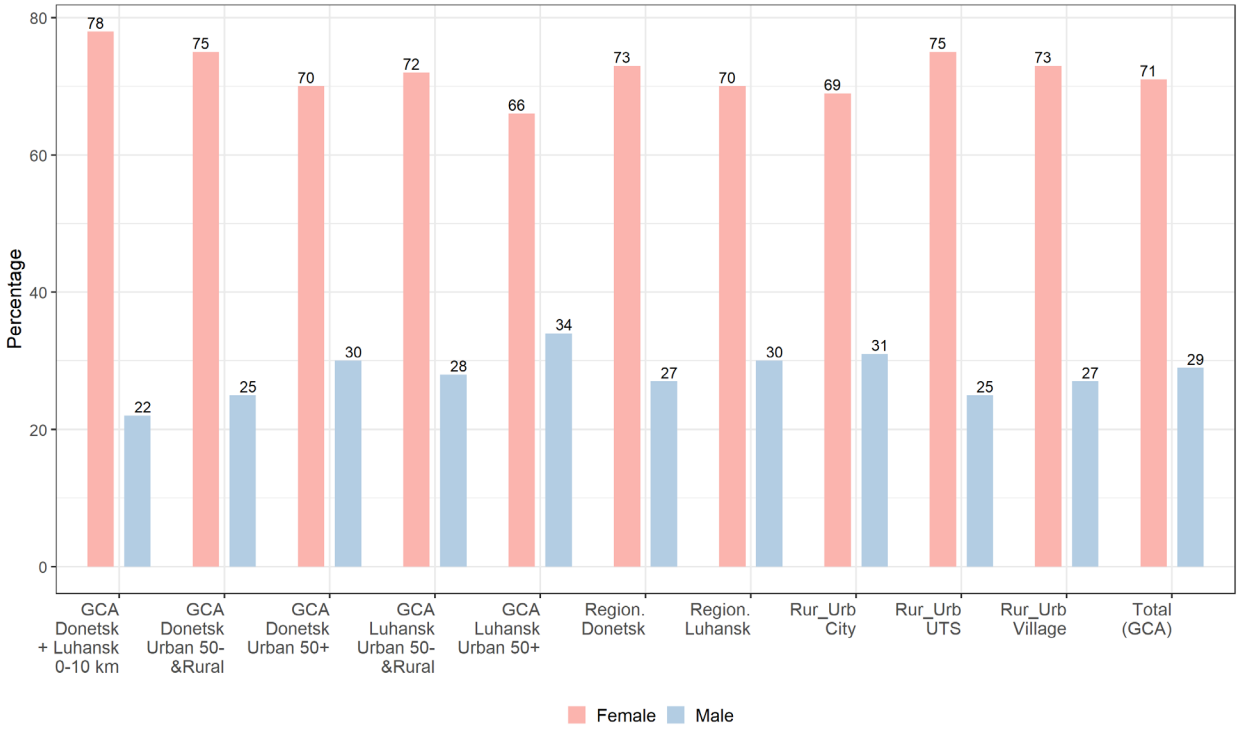
Annexes

Annex 1. Sample and household characteristics

The share of respondents' sex

The random sample favours female 71 percent compared to 39 percent of male respondents who generally answered the call in GCA zone. Figure A1.1 shows that this percentages are quite consistent through different locations with the highest percentage of female respondent (78%) in "GCA Donetsk & Luhansk 0-10 km" area. The lower percentage of female respondents (66%) is in "GCA Luhansk Urban 50+".

Figure A1.1 Distribution of respondent sex



Households Characteristics:

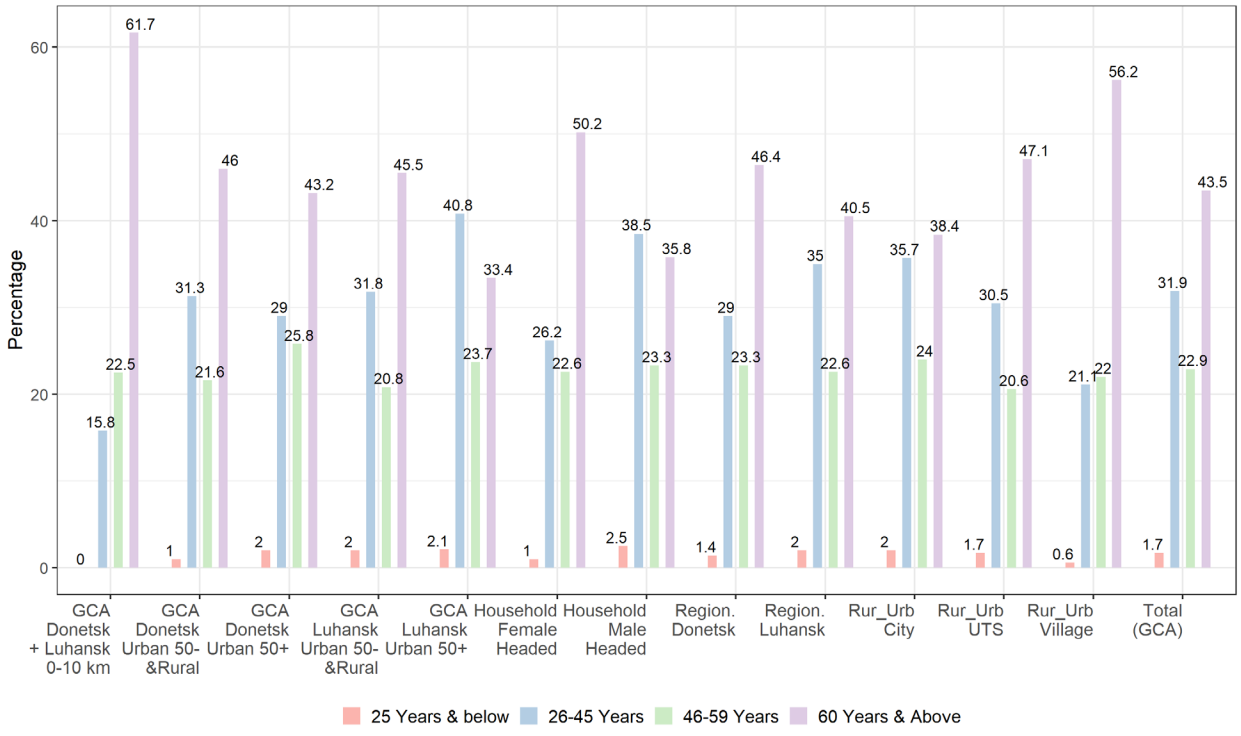
This section is devoted to present the main characteristics of the surveyed households at the whole studied area and disaggregated to the level of each single region (Oblast) and to the target locations across those Oblasts.

The share of the households' head sex

Consistent with the share of the respondents' sex, the sex of the households' head is dominant by females. Figure A1.2 shows that 54% of households are led by females over the whole surveyed areas. However, the most characterised area by male headed households is "GCA Luhansk Urban 50+" (51%).

Figure A1.2 Distribution of the household head sex

Figure A1.3 Distribution of the household head age category



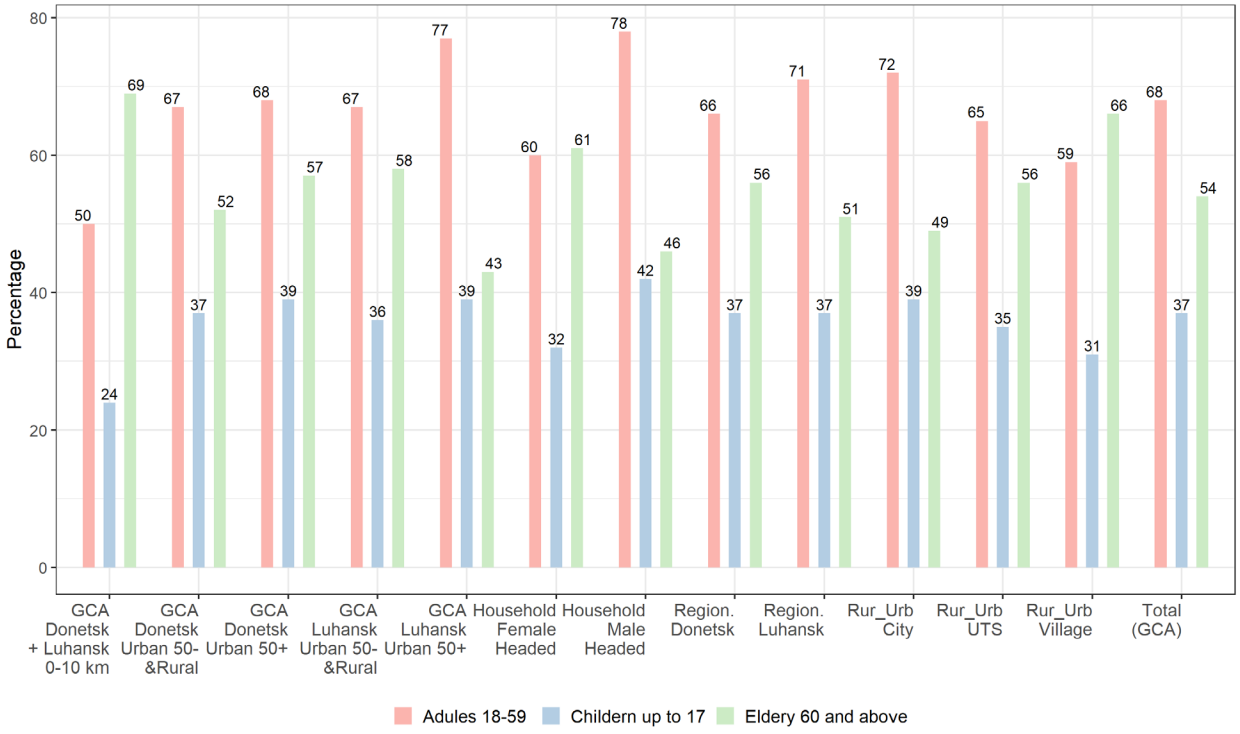
The share of households' head age group

The average age of the household head is an important indicator that could be related to the households' different socioeconomic aspects and their food insecurity levels and coping strategy eventually. Figure A1.3 generally shows that the age category "60 years and above" is the most frequent age group (43.5%) within the surveyed households followed by the middle age group that covers 31.9%. The less frequent age group, instead, is the youngest group (25 years and below (1.7%). The only location that observes a kind of extreme characteristics is "GCA Donetsk & Luhansk 0-10 km", which is clearly dominated by (61.7%) of households head age group of elderly (60 and above).

The share of the households' members' age group

The composition of the households explicitly reveals that the adult category (18-59) is the dominant one within families as it was presented in 68% of the surveyed households. Figure A1.4 shows that older population seems to be dominant in "GCA Donetsk & Luhansk 0-10 km", where 69% of people were belonging to elderly group above 60 years old. Although they have homogenous distribution, the locations that characterised by the highest presence of children below 18 are "GCA Donetsk Urban 50+" "GCA Luhansk Urban 50+" by 39%.

Figure A1.4 Distribution of the household members by age categories

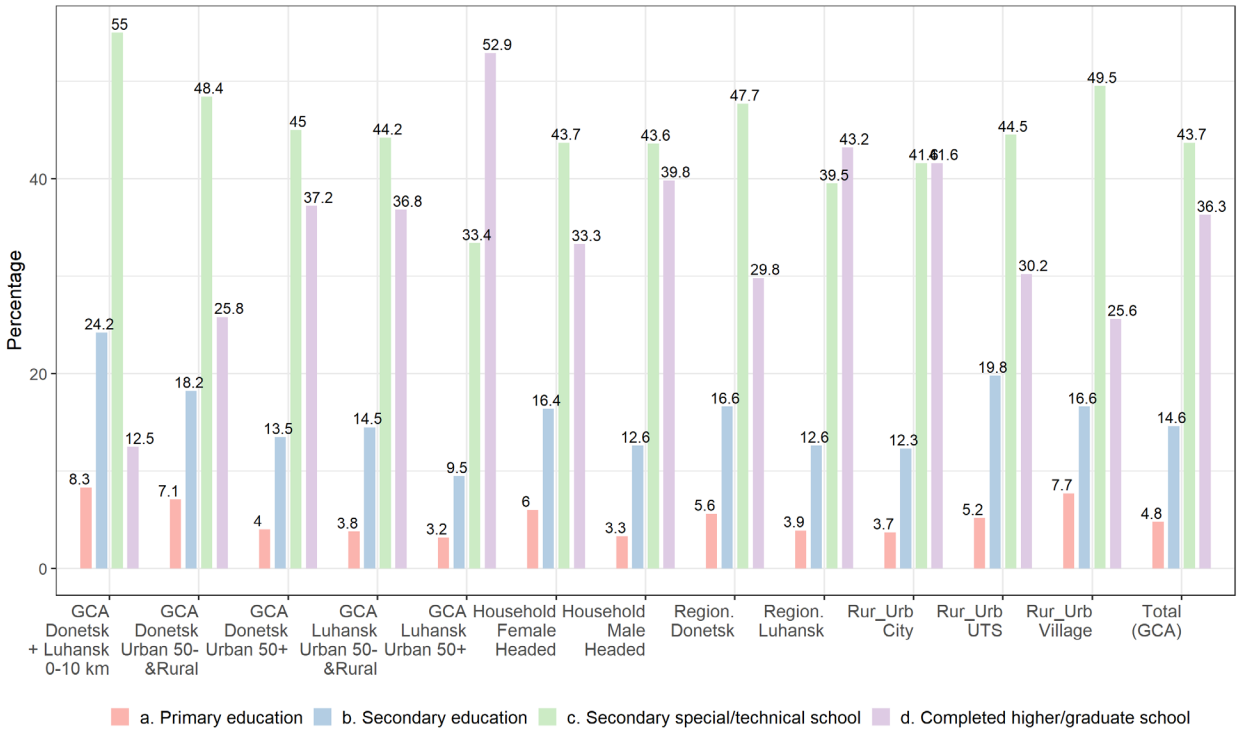


The higher education level of the head of the households

An important characteristic of the households that would shape their economic and social conditions is the education level of the household member in general and of the head of the household in specific. Figure A1.5 reveals that generally the most dominant education category is the "Secondary Specialised/technical school" category (43.7%) followed by the "Complete higher/graduate school" education (36.3%) and the complete secondary education by (14.6%). The distribution of these education

levels of the head of the household seems to be fairly consistent in both oblasts Donetsk and Luhansk, with minor difference. However, Luhansk seems to have more of the higher education category than Donetsk, 43.2% and 29.8% respectively. "GCA Luhansk Urban 50-&Rural" area, instead, has the highest completed higher education by 52.9%.

Figure A1.5 Distribution of the household head education categories



The higher education level of the households' members

Acknowledging the impact of including different generations, the education level categories of households' member show different distribution than those of the head of the household, putting the higher education category at the top of the rank (41.5%) as shown by Figure A1.6 below. It is notable the presence of all categories but with different levels as the "primary education" seems almost to be missing (2.8%) indicating the presence of high minimum education levels in the surveyed areas. The distribution of these education levels seems to be quite different across locations and population groups. While the "Secondary special/technical school" category in Donetsk (39.4%) slightly exceeds the level in Luhansk with 34.6%, the higher education category in Luhansk (48.4%) exceeds its level in Donetsk (34.9%). Other notable differences are the dominance of higher education in "GCA Luhansk Urban 50-&Rural" (57.9%).

Employment of the head of the households

The employment status of the head of the household is another important determinant of the economic conditions and those HHs and their food security levels consequently. The majority of the households' head (46.5%) are "Retired", Figure A1.7. The second and third employment categories are "non-government employee" (19.2%) and "government employee" (16.6%). The distribution of these categories is consistent in both oblasts, with a complete dominance of the "Retired" category in "GCA Donetsk & Luhansk 0-10 km" area by (62.5%). Notably, the slight share of household head (5.4%) that is

belonging to the "self-employed" category indicate a limited self-employment opportunities especially for female headed households and in the 0-10 km buffer zone.

Figure A1.6 Distribution of the household members' education categories

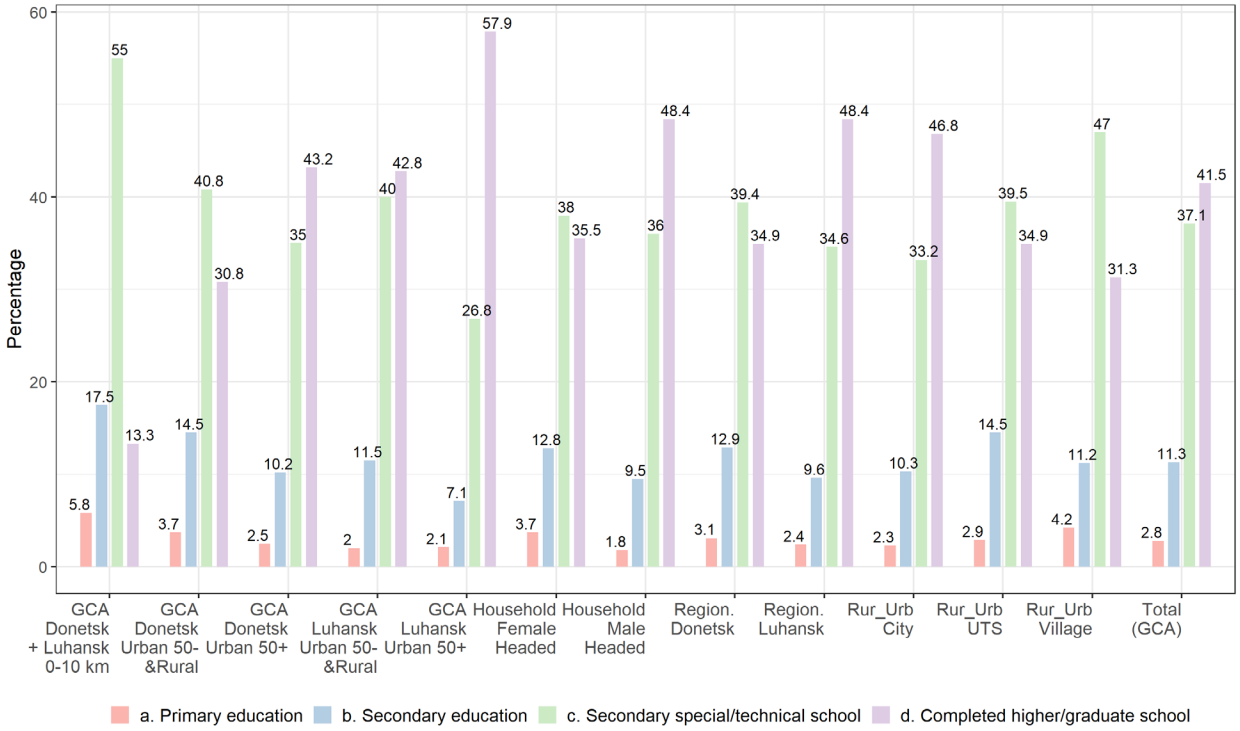
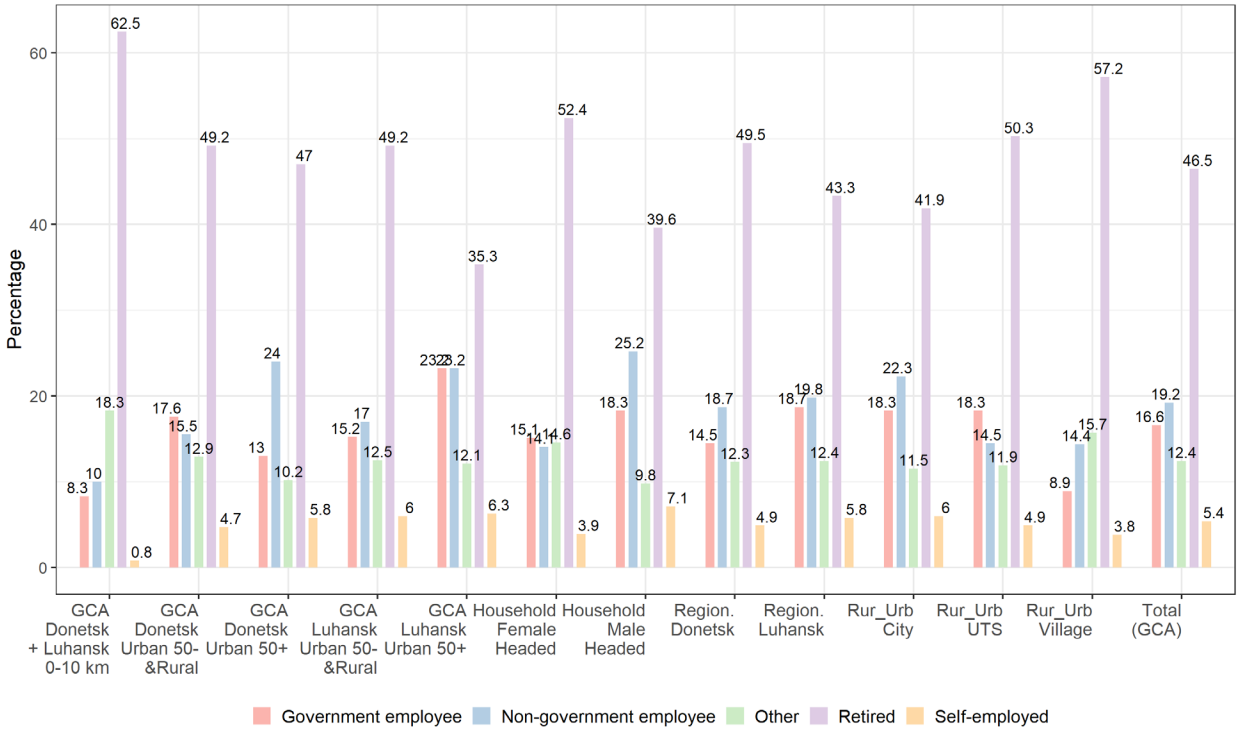


Figure A1.7 Distribution of the household head employment categories



Households' composition

The dominant household type in the surveyed areas is the middle size "3-5 Persons" households (37%). Figure A1.8 also shows that the "Two Persons" household is the second frequent HH's size (32%) followed by the "One-person" HHs are relatively high (23%). The big households "5 Persons and above" seem to be less frequent instead (9%). More details on the distribution of the household size across locations and population groups in the graph below.

Households' residency status

The residency structure of the surveyed populations reveals the existence of mainly two categories as shown in Figure A1.9 below. While the "Ukrainian citizen" category is the dominant residency type that constitutes 78.4% of total households, the rest are mainly IDPS (21%) and merely 0.5% of non-Ukrainian citizen. This structure is quite homogenous among different locations. Notably, the Ukrainian citizens are the majority in "GCA Donetsk & Luhansk 0-10 km" area of about 90.8%. The majority of IDPs are, instead, located in "GCA Luhansk Urban 50+" area (27.1%).

The share of households with vulnerabilities

The households' vulnerability situation is another determinant factor that would impact their food security and livelihoods situation. Figure A1.10 shows the presence of different vulnerabilities that are dominated by "Affected by chronic illness" type (57.1%) that reveals a health problem and/or health care issue in the study areas. While the presence of this kind of vulnerability is more or less consistent among different locations, it is more pronounced in "GCA Donetsk & Luhansk 0-10 km" area (75.8%). The second group of vulnerabilities is the "Unemployed" and the presence of physical or mental disability "Physically/mentally disability" types of vulnerability that constitute 31.8% and 19.3% respectively. The third important group of vulnerabilities is the "Single Parent" (0.5%) and the "Veteran of war/ATO" by 6.4%. Almost all these kind of vulnerability categories reveal the effect of the conflict on the households that leaving in the dispute areas.

Figure A1.8 Distribution of the household size categories

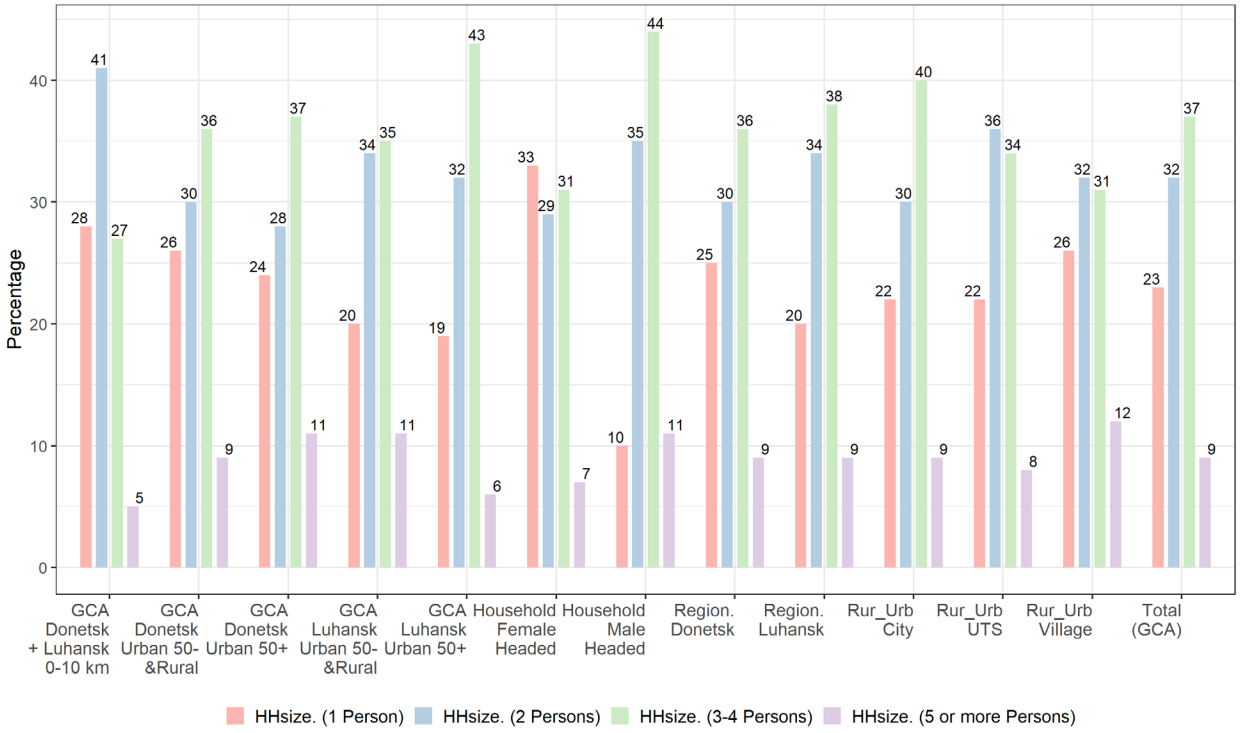


Figure A1.9 Distribution of the household residency categories

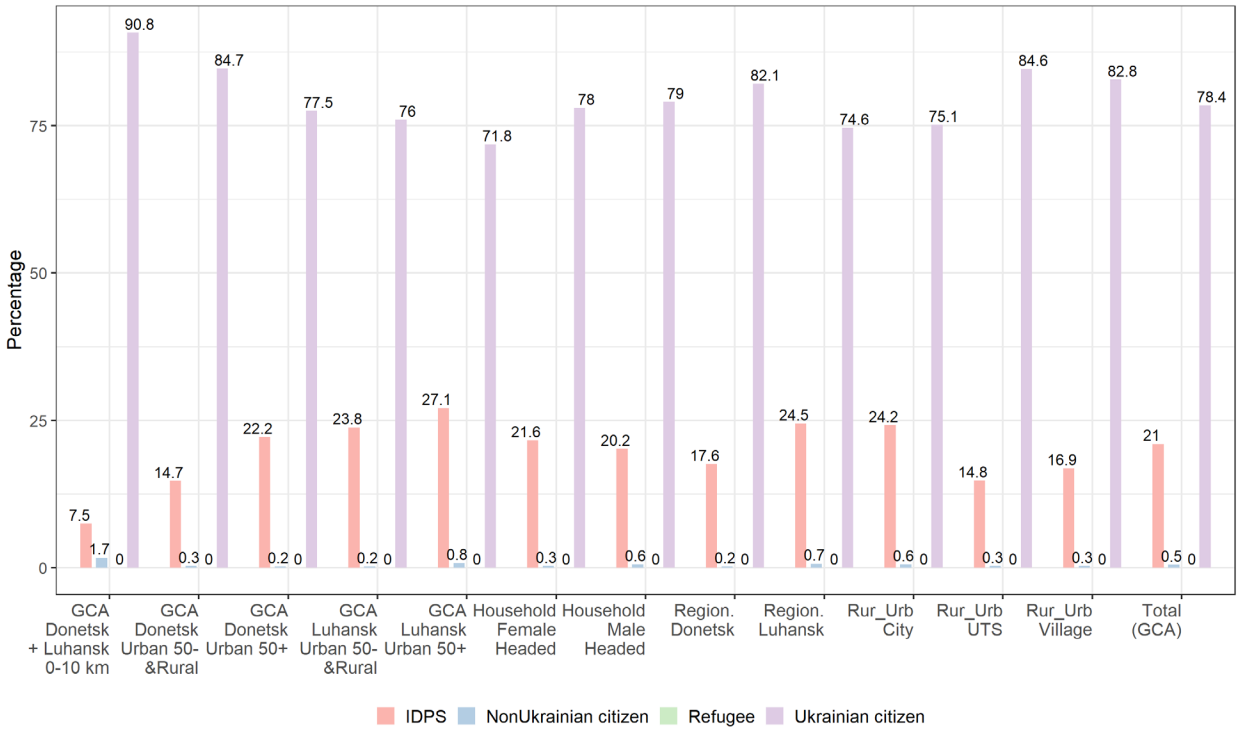
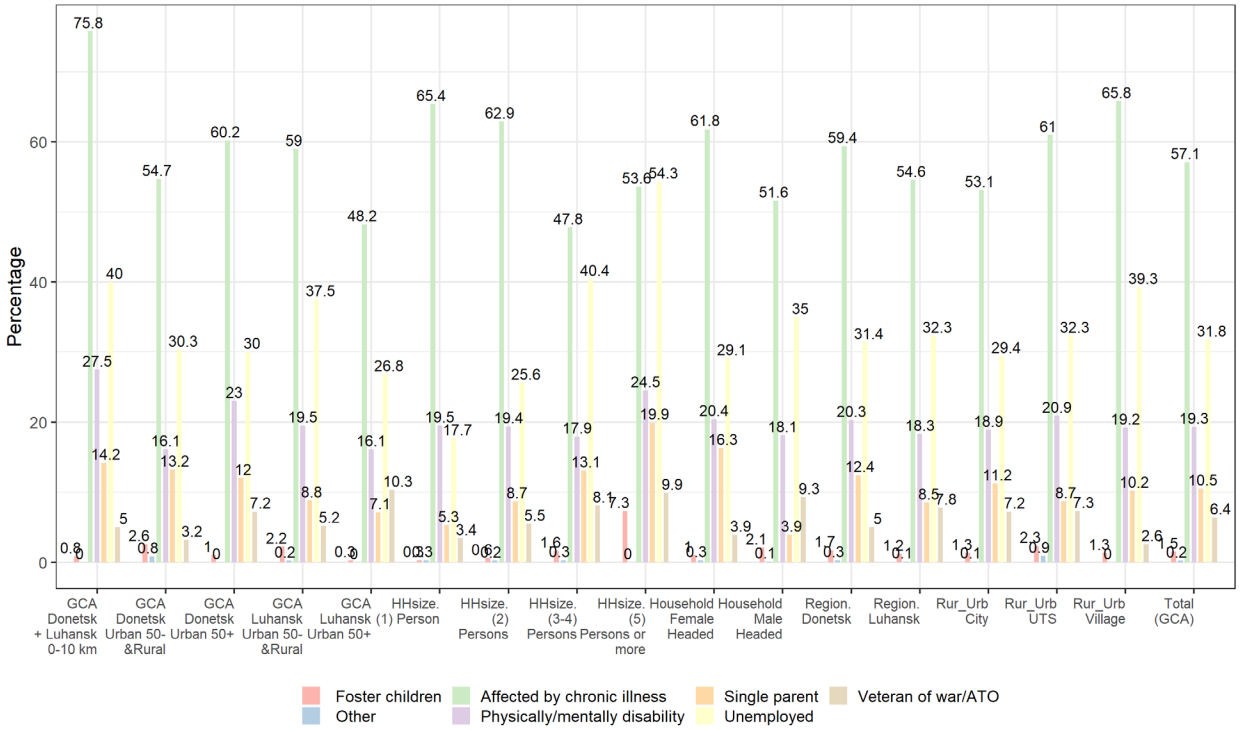


Figure A1.10 Distribution of the household vulnerability categories



Annex 2. FSLA Questionnaire

FAO Ukraine
Food Security and Livelihood Assessment
Eastern Ukraine

Q#	Q Name	English	Question Type	Skip Pattern
A. INTRODUCTION AND ELIGIBILITY				
A1	Opting	Opting		Any Response = Call Dispo
A2	Call Dispo	Phone number: #CATI_MOBILENUMBER# 1) Someone answers 2) Answering machine 3) No Answer 4) Hang Up/Refusal 5) Call Back 6) Under Review 7) Disconnected	Single Choice	1 = Language1 2 = End Poll Answering machine 3 = End Poll No Answer 4 = End Poll Refusal 5 = When Callback 6 = End Poll Under Review 7 = End Poll Disconnected
A3	Language1	Which language do you wish to proceed with? [OPERATOR: READ ANSWER CHOICES, SINGLE RESPONSE] 1) Ukrainian 2) Russian	Single Choice	1 = Introduction [] 2 = Introduction []

Q#	Q Name	English	Question Type	Skip Pattern
A4	Introduction	Hello sir/ma'am, my name is #OPERATOR#, and I am calling on behalf of the United Nations Food and Agriculture Organization (FAO). Currently, FAO is conducting a survey in your community to understand issues related to livelihoods, food security and agriculture. Your household has been randomly selected. Should you agree to participate, all the information you provide will be strictly kept confidential and be used only for the purpose of the survey. Your decision to participate or not will in no way affect your ability to access any forms of assistance. The survey will take about 15-20 minutes of your time. 1) CONTINUE	Single Choice	1 = Agree
A5	Agree	Are you interested in participating in this survey? 1) Yes 2) Not now but another time in the week 3) No	Single Choice	1 = RESP Age 2 = When Call Back 3 = Refusal
A6	When Callback	When would it be a good time to call you back? [RECORD HH/MM/DD/MM OF CALLBACK]	Open Ended	Any Response = Callback Message
A7	Callback Message EN	Thank you, we will call you back at #WhenCallBack# you requested. Thank you again and have a great day! [OPERATOR: ENTER CALL NOTES BELOW, WHO YOU SPOKE TO AND WHAT THEY SAID]	Open Ended	End poll callback
A8	RESP. Age	How old are you? [OPERATOR: RECORD THE AGE IN YEARS – ROUND UP TO NEAREST WHOLE NUMBER. IF THE RESPONDENT GIVES BIRTH YEAR, REPEAT THE QUESTION. ENTER 00 for DON'T KNOW]	Range	0-17 = Ineligible Young 18-100 = RESP Name 00 = Ineligible
A9	Ineligible Young	[If age < 18] Is there someone else in your household whose age is 18 or above who would be willing to participate in the survey? 1) Yes 2) No	Single Choice	1 = Pass Phone 2 = Ineligible

Q#	Q Name	English	Question Type	Skip Pattern
A10	Pass Phone	[If yes] Can you please pass the phone to them? 1) Continue	Single Choice	1 = Introduction
A11	Ineligible	You are ineligible for this survey. Thank you for your time.	Single Choice	End Poll Ineligible
A12	Refusal	Thank you for your time, you will be removed from today's survey.	Single Choice	End poll declined
B. SOCIO-DEMOGRAPHIC INFORMATION				
B1	RESP. Name	What is your name? [OPERATOR: RECORD THE RESPONDENT'S NAME. ENTER 99 FOR REFUSED]	Open Ended	Any Response = ADM1
B2	ADM1	Currently, which **oblast** does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION]	Single Choice	Any Response = ADM2
B3	ADM2	Currently, which **raion** in **#ADM1#** does your household reside in? [OPERATOR: DO NOT READ THE OPTIONS. SINGLE SELECTION]	Single Choice	Any Response = Village Name
B4	Village Name	Currently, in which settlement/village in #ADM2# does your household reside in? [OPERATOR: RECORD THE RESPONDENT'S VILLAGE NAME. ENTER 88 FOR DON'T KNOW & 99 FOR REFUSED]	Open Ended	Any Response = Quota_ Reached
B5	Quota Reached	[OPERATOR: DO NOT READ. ANSWER QUESTION BELOW.] THIS RESPONDENT REPORTED THEY LIVE IN: **#ADM1#** **#ADM2#** 1) THE GOAL FOR THIS LOCATION HAS BEEN ACHIEVED - END SURVEY 2) THE GOAL FOR THIS LOCATION IS OPEN - CONTINUE SURVEY	Single Choice	1 = End Poll Quota Reached 2 = RESP Sex

Q#	Q Name	English	Question Type	Skip Pattern
B6	RESP-Sex	WHAT IS THE GENDER OF THE RESPONDENT? [OPERATOR: LISTEN TO THE VOICE AND CHECK THE BOX WHETHER THE RESPONDENT IS MALE OR FEMALE.] 1) MALE 2) FEMALE	Single Choice	1-2 = HH explain
B7	HH-explain	The following questions ask about your household. By household we mean the people who have been living together in the same house, and/or shared the food for the past 6 months. The head of household is the person who makes most of the decisions regarding how to share the available resources and generally is the main earner of the household. [OPERATOR: READ THE EXPLANATORY TEXT, NO ANSWER IS REQUIRED] 1) Continue	Single Choice	1 = HH Head
B8	HH Head	Are you the head of the household? 1) Yes 2) No	Single Choice	1 = HHH Marital 2 = HHH Sex
B9	HHH Sex	Is the head of your household male or female? [OPERATOR: CHOOSE ONLY ONE OPTION] 1) MALE 2) FEMALE	Single Choice	1-2 = HHH Age
B10	HHH Age	What is the age of the Head of Household?	Range	Any Response = HHH Marital
B11	HHH Marital	What is the marital status of the head of household? 1) Married 2) Widow/Widower 3) Single 4) Common law	Single Choice	1-6= HH. Size

Q#	Q Name	English	Question Type	Skip Pattern
		5) Other 6) Don't know		
B12	HH Size	We would like some information on the composition of your household. How many people in your household belong to each of the following categories? [OPERATOR: READ EACH CATEGORY AND RECORD THE ANSWER]	Range	Any Response = Num. Phones
B12_1		Boys, between **0-4** years of age		
B12_2		Boys between 5 and 17 years of age		
B12_3		Men between 18 and 59 years of age		
B12_4		Men 60 **and older**	Range	
B12_5		Girls, between **0-4** years of age		
B12_6		Girls between 5 and 17 years of age		
B12_7		Women between 18 and 59 years of age		
B12_8		Women 60 **and older**		
B13	Num Phones	How many active phones numbers are currently being used by your household?	Range	Any Response = Res. Type

Q#	Q Name	English	Question Type	Skip Pattern
B14	Res Type	How would you describe the residency status of the head of your household [OPERATOR: SINGLE RESPONSE] 1) She/he is a national permanent resident (Ukrainian citizenship) 2) She/he is a foreigner legal resident (non-Ukrainian citizenship) 3) She/he is an Internally Displaced Person 4) She/he is a Refugee 5) Other (specify) 6) DON'T KNOW 7) REFUSED	multiple Choice	1-7 = Vulnerable
B15	Vulnerable	Are there people in your household who are? [OPERATOR: CHECK ALL THAT APPLY 1) Physically or mentally disability (not including chronic illness) (YES/NO) 3) Unemployed (YES/NO) 4) Veteran of war/ATO (YES/NO) 5) Single parent 6) Foster children 7) Affected by chronic illness 8) Other special needs/disabilities (specify) 9) None	Multiple Choice	1-11 = Education
B16	Education	What is the highest level of education achieved by the Head of Household? [OPERATOR CHOOSE ONLY ONE BASED ON THE RESPONSE GIVEN] 1) No formal schooling / self-study 2) Incomplete primary education (less than 4 grades) 3) Primary education 4) Incomplete secondary education (less than 10 grades) 5) Complete secondary education (11 grades) 6) Secondary special / technical school 7) Incomplete higher education (3 courses or less)	Single Choice	1-10= Education 2

Q#	Q Name	English	Question Type	Skip Pattern
		8) Complete higher education 9) Completed graduate school 10) Don't know / Refusal to answer		
B17	Education 2	What is the highest level of education achieved by anyone in the Household? [OPERATOR: CHOOSE ONLY ONE BASED ON THE RESPONSE GIVEN] 1) No formal schooling / self-study 2) Incomplete primary education (less than 4 grades) 3) Primary education 4) Incomplete secondary education (less than 10 grades) 5) Complete secondary education (11 grades) 6) Secondary special / technical school 7) Incomplete higher education (3 courses or less) 8) Complete higher education 9) Completed graduate school 10) Don't know / Refusal to answer		1-10 = Employment1

Q#	Q Name	English	Question Type	Skip Pattern
B18	Employment1	What is your current employment status?: [OPERATOR: CHOOSE ONLY ONE BASED ON THE RESPONSE GIVEN] 1) Government employee 2) Non-government employee 3) Self-employed 4) Student 5) Homemaker 6) Retired 7) Unemployed, able to work 8) Unemployed, unable to work 9) Other. Enter, please:_____ 10) Don't know / Refusal to answer		1-10 = Employment2
B19	Employment2	What is the current employment status of the household head?: [OPERATOR: CHOOSE ONLY ONE BASED ON THE RESPONSE GIVEN] 1) Government employee 2) Non-government employee 3) Self-employed 4) Student 5) Homemaker 6) Retired 7) Unemployed, able to work 8) Unemployed, unable to work 9) Other. Enter, please:_____		1-10 = Main Income Source

Q#	Q Name	English	Question Type	Skip Pattern
		10) Don't know / Refusal to answer		
C. INCOMES & LIVELIHOODS				
C0	RefPeriodText	We are now moving on to questions about incomes, livelihoods, access to food, and agriculture. Unless otherwise noted, the following questions refer to the last three months.	String	

Q#	Q Name	English	Question Type	Skip Pattern
C1	Main Income Source	Which have been your household's main sources of income over the last three months? [OPERATOR: SELECT ALL THAT APPLY BASED ON THE RESPONSE. IF LESS THAN THREE, PROMPT WHETHER THERE ARE OTHERS, CONSIDERING ALL HOUSEHOLD MEMBERS] 1) Income from own agricultural activities 2) Income from own non-agricultural activities 3) Agricultural wage labour (employed by others for farm work) 4) Non-agricultural wage labour (employed in the private or governmental sector outside agriculture) 5) Pensions 6) Benefit from social cash transfer - social benefits - Humanitarian assistance/ charity 7) Remittances from migrants (inside or outside the country) 8) Rents (from owned land or buildings) 9) Returns on financial investments (shareholder related dividends 10) Other 11) Don't know 12) Refuse	Multiple Choice	1-17 = Income First Main 18-19 = IncomeChangeP30D
C2	Income First Main	Of these income sources [READ ALL THAT HAVE BEEN REGISTERED IN THE PREVIOUS QUESTION] which one you consider your household's main income source?	Single Choice	Any Response = Total Income Share
C3	Total Income Share	Over the last three months, what share of your household's total income, **in percentage,** has come from #MainIncomeSource#? [OPERATOR: SINGLE RESPONSE] 1) The totality or almost (over 75%) 2) The large majority (50 to 75%) 3) A significant part (25 to 50%) 4) DON'T KNOW 5) REFUSED	Single Choice	Any Response = IncomeChangeP30D

Q#	Q Name	English	Question Type	Skip Pattern
C4	IncomeChangeP30D	Has your household's **overall** income in the last three months changed compared to the same period last year? Would you say it has... [OPERATOR: SINGLE RESPONSE] 1) Significantly increased (>50%) 2) Somewhat increased (0-50%) 3) Not changed 4) Somewhat decreased (0-50%) 5) Drastically decreased (> 50%) 6) DON'T KNOW 7) REFUSED	Single Choice	1-7 = Num Paid Work
C5	Num Paid Work	How many members of your household have engaged in any kind of paid work in the last three months?	Range	Any Response = Shocks
C6	Shocks	Has anyone in your household experienced the following shocks in the last three months? 1)Lost employment/reduced salary 2)Sickness/health expenditure 3)Death of household member/funerals/death of breadwinner 4)Inflation or unexpected price increase (for food, fuel, rent payment, utilities etc.) 4)Court expenditures 5)Insecurity/theft 6)Poor harvest 7)Natural disasters 8)Military damage to the assets 9)Other shock 10) None 11) Don't know 12) Refuse	Multiple Choice	Any Response = Debt
C7	Debt	Has the head or any other in f the household taken out any debts over the last three months? 1) Yes 2) No	Single Choice	1 = Debt Reason 2 = FOOD SECURITY

Q#	Q Name	English	Question Type	Skip Pattern
C8	Debt Reason	What was the reason for taking out these debts? 1) To pay for food 2) To pay for housing/rent 3) To pay for medical services or medicine 4) To pay for household utilities 5) To purchase agricultural inputs 6) To pay for education 7) To pay for other household expenses 8) To pay debt 9) Other 10) Don't Know 11) Refused	Multiple Choice	1-11 = Debt Outstanding
C9	Debt Outstanding	Are any of these debt(s) still outstanding? 1) Yes 2) No 3) Don't Know 4) Refused	Single Choice	1-4 = FOOD SECURITY
D. FOOD SECURITY				
D1	FS_Introduction	Now I would like to ask you some questions about the food consumed by your household. 1) NEXT	Single Choice	1 = Food Exp Share
D2	Food Exp Share	Approximately what proportion of your household income was spent on food in the last three months? 1) 10 - 19% 2) 20 - 29% 3) 30 - 39% 4) 40 - 49% 5) 50 - 59% 6) 60 - 69% 7) 70 - 79% 8) 80 - 89% 9) 90 - 100%	Single Choice	1-99 = FoodMainSrc

Q#	Q Name	English	Question Type	Skip Pattern
		98) Don't know 99) Refuse		
D3	Food Main Src	In the last three months, what has been the main habitual source of food for your household? 1) Own production 2) Small local shops 3) Local farmers' markets 4) In-kind food assistance / humanitarian aid 5) Supermarket or other larger retailer 98) Don't know 99) Refuse	Single Choice	1-6 = FIES Worried
D4	FIES Worried	During the last month, was there a time when you or others in your household **were worried about not having enough food to eat** because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO 98) DON'T KNOW 99) REFUSED	Single Choice	1-99 = FIES Healthy
D5	FIES Healthy	During the last month, was there a time when you or others in your household were **unable to eat healthy and nutritious food** because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO 98) DON'T KNOW 99) REFUSED	Single Choice	1-99 = FIES Fewfoods
D6	FIES Fewfoods	During the last month, was there a time when you or others in your household had to **eat only a limited variety of foods** because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1) YES	Single Choice	1-99 = FIES Skipped

Q#	Q Name	English	Question Type	Skip Pattern
		2) NO 98) DON'T KNOW 99) REFUSED		
D7	FIES Skipped	During the last month, was there a time when you or others in your household had to **skip one of the main meals** (breakfast, lunch, dinner) because of lack of money or other resources to get food? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO 98) DON'T KNOW 99) REFUSED	Single Choice	1-99 = FIES Ateless
D8	FIES Ateless	During the last month, was there a time when you or others in your household **ate less than they thought they should** because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO 98) DON'T KNOW 99) REFUSED	Single Choice	1-99 = FIES Ranout
D9	FIES Ranout	During the last month, was there a time when **your household ran out of food** because of lack of money or other resources? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO	Single Choice	1 = FIES Ranout_Freq 2-99 = FIES Hungry

Q#	Q Name	English	Question Type	Skip Pattern
		98) DON'T KNOW 99) REFUSED		
D9_1	FIES Runout_Freq	How often did this happen? Was it only once or twice? Did it happen in some weeks but not every week, or it was every week? [OPERATOR: SINGLE RESPONSE] 1) Rarely (once or twice) 2) Sometimes (in some weeks but not every week) 3) Often (every week) 98) Don't know 99) Refused	Single Choice	1-99 = FIES Hungry
D10	FIES Hungry	During the last month, was there a time when you or others in your household **were hungry but could not eat** because there was not enough money or other resources for food? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO 98) DON'T KNOW 99) REFUSED	Single Choice	1 = FIES Hungry_Freq 2-99 = FIES Wholeday
D10_1	FIES Hungry_Freq	How often did this happen? Was it only once or twice? Did it happen in some weeks but not every week, or it was every week? [OPERATOR: SINGLE RESPONSE] 1) Rarely (once or twice) 2) Sometimes (in some weeks but not every week) 3) Often (every week) 98 Don't know 99) Refused	Single Choice	1-99 = FIES Wholeday
D11	FIES Wholeday	During the last month, was there a time when you or others in your household **went without eating for a whole day** because of lack of money or other resources?	Single Choice	1 = FIES Wholeday_Freq 2-99 = Any FIES

Q#	Q Name	English	Question Type	Skip Pattern
		[OPERATOR: SINGLE RESPONSE] 1) YES 2) NO 98) DON'T KNOW 99) REFUSED		
D11_1	FIES Wholeday_Freq	How often did this happen? Was it only once or twice? Did it happen in some weeks but not every week, or it was every week? [OPERATOR: SINGLE RESPONSE] 1) Rarely (once or twice) 2) Sometimes (in some weeks but not every week) 3) Often (every week) 98) Don't know 99) Refused	Single Choice	1-99 = Any FIES
D12	Any FIES	[OPERATOR: DID THE RESPONDENT ANSWER "YES" TO ANY OF FIES QUESTIONS?] 1) Yes 2) No	Singel choice	1 = Coping Strategies 2 = ASSISTANCE
D13	Coping Strategies	Given the difficulties in getting food you just reported on, did anyone in your household engage in any of the following strategies during the past three months, in order to be able to get food? 1) NEXT	Single Choice	1 = Sell HH Goods
D14	Sell HH Goods	**Sell household assets/goods** (e.g., TV set, furniture, etc.)? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED	Single Choice	1-5 = Take Debt

Q#	Q Name	English	Question Type	Skip Pattern
D15	Take Debt	**Purchase food on credit or borrowed food**? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED	Single Choice	1-5 = Send HH Members Away
D16	Send HH Members Away	**Send households members to eat/live with another family or friends**? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED	Single Choice	1-5 = Spent Savings
D17	Spent Savings	**Spent savings?** [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED		1-5 = Sell Prod Assets
D18	Sell Prod Assets	**Sell productive assets or means of transport** (e.g., sewing machine, bicycle, car)? [OPERATOR: SINGLE RESPONSE]	Single Choice	1-5 = Withdraw School

Q#	Q Name	English	Question Type	Skip Pattern
		1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED		
D19	Withdraw School	W**ithdraw children from school**? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED	Single Choice	1-5 = Reduce Health
D20	Reduce Health	R**educe essential health expenditures** (e.g., doctor fees, medicines, etc.)? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED	Single Choice	1-5 = Reduce Edu

Q#	Q Name	English	Question Type	Skip Pattern
D21	Reduce Edu	R**educe essential education expenses** (e.g., school fees, books, etc.)? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED	Single Choice	1-5 = Sell House Land
D22	Sell House Land	**Sell a house or land**? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED	Single Choice	1-5 = Migrate Household
D23	Migrate Household	**Migrate with the entire household**? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED	Single Choice	1-5 = High Risk Job
D23	High Risk Job	**Accept high risk, socially degrading or exploitative temporary jobs**? [OPERATOR: SINGLE RESPONSE]	Single Choice	1-5 = Other_coping

Q#	Q Name	English	Question Type	Skip Pattern
		1) YES 2) NO – because it wasn't necessary 3) NO - because you already sold those assets or did this activity within the last 12 months and you cannot continue to do it 4) DON'T KNOW 5) REFUSED		
D24	Other_coping	Was there any **other strategy**, not mentioned thus far, you or any other member in your household had to engage to be able to get food? [OPERATOR: RECORD VERBATIM]	Open ended	ASSISTANCE
E. ASSISTANCE				
E1	Assistance Received	Has your household **received any kind of aid or assistance** in the last three months? 1) Yes 2) No 3) Don't know 4) Refused	Single Choice	1 = Assistance Satisfied 2-4 = Assistance Need
E2	Assistance Satisfied	How satisfied were you with the aid you received? 1) Very satisfied 2) Somewhat satisfied 3) Somewhat unsatisfied 4) Very unsatisfied 5) Don't know 6) Refuse	Single Choice	1-6 = Assistance Need

Q#	Q Name	English	Question Type	Skip Pattern
E3	Assistance Need	What would be your three **GREATEST** needs for assistance for your household over the next three months? 1) Agricultural inputs - Seeds, Fertilizers, Pesticides, etc 2) Access to irrigation 3) Livestock support - Veterinary services, Veterinary inputs, Destocking 4) Marketing support 5) Cash assistance 6) Loans 7) Housing 8) Drinking water 9) Fuel 10) Access to healthcare or medicine 11) Other (specify) 12) DON'T KNOW 13) REFUSED	Multiple Choice	1-13 = AGRICULTURE
F. AGRICULTURE				
F1	AgricAny	In the last three months, has your household been involved in any agricultural activities? 1) Yes 2) No 3) Don't Know 4) Refused	Single Choice	1 = AgricRegular 2-4 = Closing
F1-1	AgricRegular	Are your agricultural activities regular, existing each year (more than one season) or they are pertaining only to the current agricultural season? 1) Yes (regularly, each year) 2) No (only in the current agricultural season) 3) Don't Know 4) Refused	Single Choice	1-4 = Agric Activity Involved

Q#	Q Name	English	Question Type	Skip Pattern
F2	Agric Activity Involved	Which agricultural activities have you been involved in? [OPERATOR: MULTIPLE RESPONSE] 1) Crop production 2) Vegetable production 3) Fruits production 4) Livestock production (live meat, products, fur) 5) Fisheries/aquaculture 6) Gathering (berries, mushrooms) 7) Bee keeping 8) Don't know 9) Refused	Multiple Choice	1-7= Agric Activity Involved Main 8-9 =closing
F3	Agric Activity Involved Main	Which agricultural activity have you been mainly involved in? [OPERATOR: SINGLE RESPONSE] 1) Crop production 2) Vegetable production 3) Fruits production 4) Livestock production (live meat, products, fur) 5) Fisheries/aquaculture 6) Gathering (berries, mushrooms) 7) Beekeeping 10) Don't know 11) Refused	Single Choice	1-3= Crops1 4 -7= Livestock1 8- 9 = Closing
F1. CROP PRODUCTION				
F1.1	Crops1	In the last three months, have you been growing crops mainly for the purpose of subsistence (own consumption) or mainly for income? 1) Subsistence 2) Income 3) Both	Single Choice	4-5-6= F1.6 1-2-3 = Crop List

Q#	Q Name	English	Question Type	Skip Pattern
		4) Not applicable (not the right season for growing) 5) Don't know 6) Refuse		
F1.2	Crop List	What are the main crops that you have been growing in the last three months? [OPERATOR: MULTIPLE RESPONSE] 1) Grains 2) Oilseeds 3) Vegetables 4) Tuber vegetables 5) Cucurbits 6) Fodder crops 7) Other (specify) 8) REFUSED	Multiple Choice	1-8 = Main Crop If it was 1 in F1.1 go to F1.6
F1.3	Main Crop	Which crop provides you with **the greatest share of your income**? [OPERATOR: MULTIPLE RESPONSE] 1) Don’t know 2) REFUSED	Single Choice	X-X = Area Planted
F1.4	Area Planted	Compared to the area planted last year, have you planted more or less of #MainCrop# this year?? [OPERATOR: SINGLE RESPONSE] 1) Significantly more 2) Somewhat more 2) Same 4) Somewhat less 5) Significantly less 6) Have not been able to plant this season	Single Choice	1-8 = Crop Prod Expect

Q#	Q Name	English	Question Type	Skip Pattern
		7) DON'T KNOW 8) REFUSED		
F1.5	Crop Prod Expect	What is or what do you expect your crop production of #MainCrop# to be compared to [last year]? Do you think it will be... [OPERATOR: SINGLE RESPONSE] 1) Significantly more 2) Somewhat more 2) Same 4) Somewhat less 5) Significantly less 7) None or almost none 7) DON'T KNOW 8) REFUSED	Single Choice	1-8 = Main Crop Difficulty

Q#	Q Name	English	Question Type	Skip Pattern
F1.6	Main Crop Difficulty	What are the three major difficulties, if any, that you have faced over the three months with **your crop production**? **1) No particularly unusual difficulties** 2) Outbreak of pests or diseases 3) Heavy rains / floods 4) Hail / storms / strong winds 5) Dry spell / drought 6) Difficulty to access seeds 7) Difficulty to access fertilizers or pesticides 8) Labour not available 9) Labour too expensive or income insufficient to hire labour 10) Access to land restricted by containment measures 11) Lower irrigation than usual 12) Household members sick 13) Lack of markets 14) Access to land 14) Other (specify) 15) DON'T KNOW 16) REFUSED	Multiple Choice	1-16 = Closing
F2. LIVESTOCK				
F2.1	Livestock1	In the past three months, have you been raising livestock mainly for the purpose of subsistence (own consumption) or mainly for income? 1) Subsistence 2) Income 3) Both 4) Don't know 5) Refuse	Single Choice	1-2-3 =F2.2 4-5 = Difficulty Raising Animals
F2.2	Animals Raised	What are **the main animals** you have been raising for income generation? [OPERATOR: SINGLE RESPONSE] 1) Cattle 2) Small ruminants 3) Poultry 4) Pigs	Multipe Choice	1-5 = Main Animal 6 = Difficulty Raising Animals If it was 1 in F2.1 go to F2.7

Q#	Q Name	English	Question Type	Skip Pattern
		5) Other (specify) 6) REFUSED		
F2.3	Main Animal	**Which animal would you say has provided you with the greatest share of your income in the** past three months**?** [OPERATOR: SINGLE RESPONSE] 1) DON'T KNOW 2) REFUSED	Single Choice	Dynamics = Main Animal_Num 1-2 = F2.7
F2.4	Main Animal_Num	How many **#MainAnimal#** do you have now? [OPERATOR: ENTER 88 FOR DON'T KNOW & 99 FOR REFUSED. ONLY READ ITEMS IN PARENTHESES TO CLARIFY FOR RESPONDENT. MULTIPLE RESPONSE.]	Range	Any Response = Animal Num Comparison
F2.5	Animal Num Comparison	Compared to the same period last year, do you have more or less **of your main animals**? [OPERATOR: SINGLE RESPONSE] 1) Much more 2) A bit more 3) The same 4) A bit less 5) Much less 6) DON'T KNOW 7) REFUSED	Single Choice	1-3 = Difficulty Raising Animals 4,5 = Reason Animal Less 6,7 = Difficulty Raising Animals

Q#	Q Name	English	Question Type	Skip Pattern
F2.6	Reason Animal Less	Why do you have fewer animals now compared to the same period last year? [OPERATOR: MULTIPLE RESPONSE] 1) Higher mortality due to lack of veterinary services 2) Better sales than usual 3) Distress sales for urgent cash needed 4) Sold animals because unable to feed them 5) Culled animals for household consumption 6) Other 7) DON'T KNOW 8) REFUSED	Multiple Choice	1-8 = Difficulty Raising Animals
F2.7	Difficulty Raising Animals	**What are your three greatest difficulties, if any, faced over the** last three months **in terms of raising your animals?** [OPERATOR: INSIST ON THE UNUSUAL CHARACTER OF THESE DIFFICULTIES. STRUCTURAL DIFFICULTIES SHOULD NOT BE INCLUDED. SINGLE RESPONSE] 1) Difficulty to access feed 2) Constrained access to pasture 3) Constrained access to water 4) Difficulty to access veterinary services 5) Difficulty to access veterinary inputs 6) Other (specify) 7) No unusual difficulties faced 8) DON'T KNOW 9) REFUSED	Multiple Choice	1 = Difficulty Access Feed 2-3 = CALLBACK 4 = Difficulty Access Vet 5 = Difficulty Access Vet Input 6-9 = CALLBACK
F2.8	Difficulty Access Feed	Why have you been facing difficulties to access feed for your animals over the last three months? [OPERATOR: SINGLE RESPONSE] 1) Prices higher than usual 2) Not available from usual vendor 3) Not able to access market to purchase 4) Income insufficient to purchase 5) Other (specify) 6) DON'T KNOW 7) REFUSED	Multiple Choice	1-7 = CALLBACK

Q#	Q Name	English	Question Type	Skip Pattern
F2.9	Difficulty Access Vet	Why have you been facing difficulties to access veterinary services for your animals over the last three months? [OPERATOR: MULTIPLE RESPONSE] 1) Prices higher than usual 2) Not available from usual service provider 3) Not able to access service provider 4) Income insufficient to access service 5) Other (specify) 6) DON'T KNOW 7) REFUSED	Multiple Choice	1-7 = CALLBACK
F2.10	Difficulty Access Vet Input	Why have you been facing difficulties to access veterinary inputs for your animals over the last three months? [OPERATOR: MULTIPLE RESPONSE] 1) Prices higher than usual 2) Not available from usual vendor 3) Not able to access market/shop to purchase 4) Income insufficient to purchase 5) Other (specify) 6) DON'T KNOW 7) REFUSED	Multiple Choice	1-7 = CALLBACK
G. CLOSING				
G1	Callback	Thank you for participating in this survey. Your answers will help us to understand and respond to your community needs. May we call you back again in the near future? [OPERATOR: DO NOT READ OPTIONS. CHOOSE ONLY ONE OPTION] 1) YES 2) NO		1-2 = Language2

Q#	Q Name	English	Question Type	Skip Pattern
G2	Language2	Select the language that was mostly used to complete the interview. [OPERATOR: DO NOT READ OPTIONS. CHOOSE ONLY ONE OPTION] 1) Russian 2) Ukranian		1-2 = Close-Out
G3	Close-Out	Thank you for your time. The interview has come to an end.		NA