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Food Security & Livelihoods Assessment in Eastern Ukraine, NGCA

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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.

450-kilometer contact line separates government-controlled areas (GCAs) and non-government-controlled areas (NGCAs), with about 38 percent of the region outside government-controlled. According to the Humanitarian Response Plan (HRP) 2021, about 5.2 million people live in the conflict area, with 3.4 million people in need of humanitarian assistance-—comprising of 55 percent women—and protection and 1.4 million internally displaced persons (IDP)[3]. The region's economy has felt the brunt of the conflict partly because of distorted market links, government embargo on NGCA since 2017 and industrial collapse exacerbated by the effects of sporadic shelling, interrupted supply chain further entrenched the affected people into the poverty trap and chronic vulnerability.

The broken trade links, low demand for coal and government embargo on NGCA have forced mining industries to shutdown leading to mass unemployment and dependency on pension. The government of Ukraine allows humanitarian access to NGCA to cross the contact line but not trade[4].

As a result of the conflict, area of farmlands was reduced significantly: 375K hectares were lost in Donetska NGCA and 215K hectares in Luhanska NGCA. Agricultural land in NGCA that was lost is being used now without control that deteriorates ecological conditions[5]. In addition, significant areas of farmland suffered from fighting and mine contamination and require recultivation efforts.

Unemployment in GCA of Donetska and Luhanska oblasts is around 15.7 and 16.6 percent respectively, which is above the national average which is set at 10.3 percent[6]. Additionally, the COVID-19 pandemic aggravates the humanitarian needs due to closure of the designated enter-exit checkpoints (EECPs) along the contact line. Following the introduction of movement restrictions due to COVID-19 in late March 2020, the number of monthly crossings has drastically dropped. Although in November 2021, the number of crossings through the "contact line" via the EECPs "Stanytsia Luhanska" (in Luhanska oblast) and

[1] Since February 20, 2014.
[2] https://reliefweb.int/report/ukraine/acaps-briefing-note-ukraine-conflict-donetsk-and-luhansk-4-november-2019.
[3] https://www.humanitarianresponse.info/en/operations/ukraine.
[4] https://reliefweb.int/sites/reliefweb.int/files/resources/Ukraine%20Humanitarian%20Needs%20Overview%202020%20%28Issued%20January%202020%29.pdf.
[5] https://niss.gov.ua/sites/default/files/2021-09/analytrep_11_2021.pdf.
[6] State Statistics Service of Ukraine, ILO unemployment rate of population in January - June 2021.

"Novotroitske" (in Donetska oblast) increased by 37 per cent compared with the previous month (48,568 vs. 30,551), it still remains significantly lower compared to the pre-pandemic level, constituting only 4 per cent of the 1.2 million crossings recorded in November 2019.[7] Meanwhile, the volume of humanitarian aid delivered on UN-organised convoys to NGCA between March and October 2020 dropped by 14 per cent compared to the same period during 2019. That resulted in drop in the number of people crossing for their pension, mandatory self-quarantine reinstated by the government, and higher prices in NGCA for food and basic needs. The quarantine measures have taken a significant toll on people's well-being and livelihoods. Since 22 March 2020, an estimated 300,000 residents of NGCA have been deprived of access to their Ukrainian pensions because restricted movement hindered their access to bank accounts[8]. Farmers were unable to travel to their fields to plant essential food crops, which resulted in a spike in food prices and decreases in their income and that of the small traders who relied on their produce. The high unemployment rate, increased food insecurity and lack of access to basic services rendered conflict-affected people even more vulnerable and dependent than before on humanitarian assistance.

As a result, price increased in food was observed. According to Joint Market Monitoring led by ACTED and undertaken collaboratively by ACCESS Consortium partners (ACTED, PIN, MdM and IMPACT) jointly with NRC and Save the Children, as of August - September 2021, food prices in NGCA has increased since August - September 2020 by 35% and since August 2020. In NGCA food prices were about 5% higher than in GCA[9]. Sunflower oil and potatoes showed the highest increases since August 2020, at an average of 84% and 85%, respectively.

The volatile context in terms of humanitarian space, security, and political situation in NGCA is a basis for serious concerns related to the security of respondents and organizations involved (or perceived by de facto authorities as to be involved) in the exercise of data collection. It is not only a matter of reliability of data, but of actual "do no harm" approach.

Furthermore, the humanitarian crisis in Ukraine is unique compared to similar protracted humanitarian target population in that the older people account for 37 percent (1.3 million people) of the 3.4 million people in need, according to the HRP, 2021. On top of this, the HRP 2021, estimates people with disabilities at 15 percent of the Donbas region compared to the national average of 6 percent across Ukraine. Percentage of people with disabilities encountered access constraints to social services, food, and health care.

The humanitarian situation in NGCA is complex by the sustained and increasingly restricted humanitarian access entitles in control of the area. Further to this, access to NGCA is restricted, and data collection is complex including humanitarian staff access.

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[7] https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/ukraine_humanitarian_snapshot_crossing_points_2021215.pdf

[8] https://ukraine.un.org/sites/default/files/2020-12/UN%20SEIA%20Report%202020%20%281%29.pdf (p.37).

[9] https://app.powerbi.com/view?r=eyJrIjoiYWI4MDFlYTgtYTU2OC00OGM0LWIxMTktNGRkYzBkNDRmMDliIiwidCI6ImQyMDBlOTAzLTE5YjAtNDUyZS1iZDIxLWQxYWEwMTEzOTBkNSIsImMiOjh9.

In this context, the Food and Agriculture Organization of the United Nations (FAO), as the lead agency of the Food Security & Livelihoods Cluster (FSLC),[10] took the responsibility of conducting the present study to determine the most recent 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 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 and Livelihood Assessment (FSLA) are 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,
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.

[10] The Food Security &Livelihood 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 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 World Food Programme (WFP) at the global level.

Methodology

I. Survey design

The FSLA is planned to be conducted in two rounds, to cover the two main agricultural seasons (Winter and the Summer) targeting the population of the Non-Government-Controlled Area (NGCA) of the Donetsk and Luhansk Oblasts. The second round of data collection, conducted between in September and October 2021, data has been collected for 920 households distributed as in Table 1 below. The sample has been designed as stratified by location, with the aim to ensure adequate representativeness of the population of interest and has been 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 NGCA	**400**	**2 192 554**	**2.7**
Urban 50+	280	1 679 893	3.3
Urban 50- & Rural	120	512 661	5.0
Luhansk NGCA	**400**	**1 189 467**	**2.7**
Urban 50+	260	777 957	3.5
Urban 50- + Rural	140	411 510	4.5
Donetsk + Luhansk 0-10 km zone NGCA	**120**	**530 848**	**5.0**
Total sample size NGCA	***920***	***3 912 869***	

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. [11] In addition 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).[12]

[11] http://www.fao.org/in-action/voices-of-the-hungry/using-fies/en/
[12] http://www.fao.org/documents/card/en/c/cb5623en/

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 described as "moderate" and "severe" in the context of the SDG monitoring framework and intended to be comparable cross 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)[13]. Those who reported having experienced food insecurity, are 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: Winter and post–Summer, 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 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 March and May 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)[14], 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 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

[13] https://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp211058.pdf
[14] https://www.kiis.com.ua/?lang=eng

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 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 with 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 ongoing COVID-19 pandemic and which targets areas and populations located in a conflict zone, has determined conditions that required some adaptations and that deserves attention as possible limitations.

Face-to-face interviews (which would have been the preferred mode of data collection for these types 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 the target 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 920 respondents from the NGCA 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 oblast, urban/rural, and sex and age structure.

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

Respondents 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 50% of households in NGCA) among their main sources of income. The second important source of income is the "Non-agricutural wage" (20%, but less observed in Donetsk by 19% than in Luhansk by 22%) followed by "Humanitarian/Social assistance" (reported by 15% in both Donetsk and Luhansk). The "Own non-agricultural" and the "Own agriculture", instead, are claimed to be among the main sources of income just by 7% and 4% of the respondents, respectively, which reflects the relatively minor importance of both sources of income in the study areas. The distribution of the relative frequency with which these sources of income are reported is rather similar across locations and population groups. However, the humanitarian and social assistance seems to be more relevant source of income for bigger households than smaller size households observing a smoth trend. Lastly, for the single member households "Pensions" (reported by 77% households) seems to be the dominant income source.

The frequency with which pensions and humanitarian and social assistance are mentioned among the main sources of income, clearly presents a 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 almost two third of the households in the surveyed areas (62%) have declared to depend on only one "main" source of income. While some degree of diversification on income sources is notable (about 35.3% of the households have 2 or 3 main sources of income), very few households (only 2.6%) have declared to rely on four or more "main" income sources.

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 NGCA 10+ zone	**2 182 388**	**25/75**	**44/56**	**52/48**	**6.3**	**34.0**	**21.6**	**38.1**	**5.3**	**13.4**	**51.5**	**29.8**	**86.8**	**10.5**
Urban 50+	1 795 024	27/73	46/54	52/48	7.1	30.1	22.1	40.7	4.4	13.3	48.6	33.7	86.1	11.0
Urban 50- & Rural	387 364	24/76	42/58	52/48	8.2	33.0	21.5	37.3	5.3	14.7	59.2	20.7	88.4	7.9
Luhansk NGCA 10+ zone	**1 555 107**	**33/67**	**45/55**	**55/45**	**1.3**	**33.8**	**27.0**	**37.9**	**4.8**	**11.5**	**47.2**	**36.4**	**83.8**	**7.2**
Urban 50+	871 434	33/67	43/57	51/49	2.5	34.1	26.5	37.0	2.8	11.3	40.5	45.4	78.8	9.8
Urban 50- + Rural	683 673	36/64	51/49	62/38	0.0	37.5	30.2	32.4	6.8	9.2	54.4	29.6	88.6	4.7
Donetsk + Luhansk 0-10 km zone NGCA	**516 571**	**22/78**	**37/63**	**49/51**	**0.0**	**44.5**	**17.9**	**37.6**	**10.0**	**15.6**	**57.9**	**16.5**	**90.6**	**7.8**
NGCA City	3 559 987	30/70	46/54	53/47	5.2	33.2	23.4	38.2	4.4	12.4	48.3	34.9	84.6	9.7
NGCA Urban-Type Settlements (UTS)	443 143	23/77	35/65	59/41	0.0	33.7	26.5	39.8	6.1	15.9	56.4	21.6	96.2	2.3
NGCA Village (Rural)	250 936	24/76	40/60	45/55	0.0	45.8	22.7	31.5	16.8	10.2	61.2	11.9	82.2	14.1
Total sample size NGCA	***4 254 066***	***29/71***	***45/55***	***53/47***	***4.4***	***33.9***	***23.7***	***38.0***	***5.1***	***12.7***	***49.8***	***32.4***	***85.7***	***9.2***

* 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

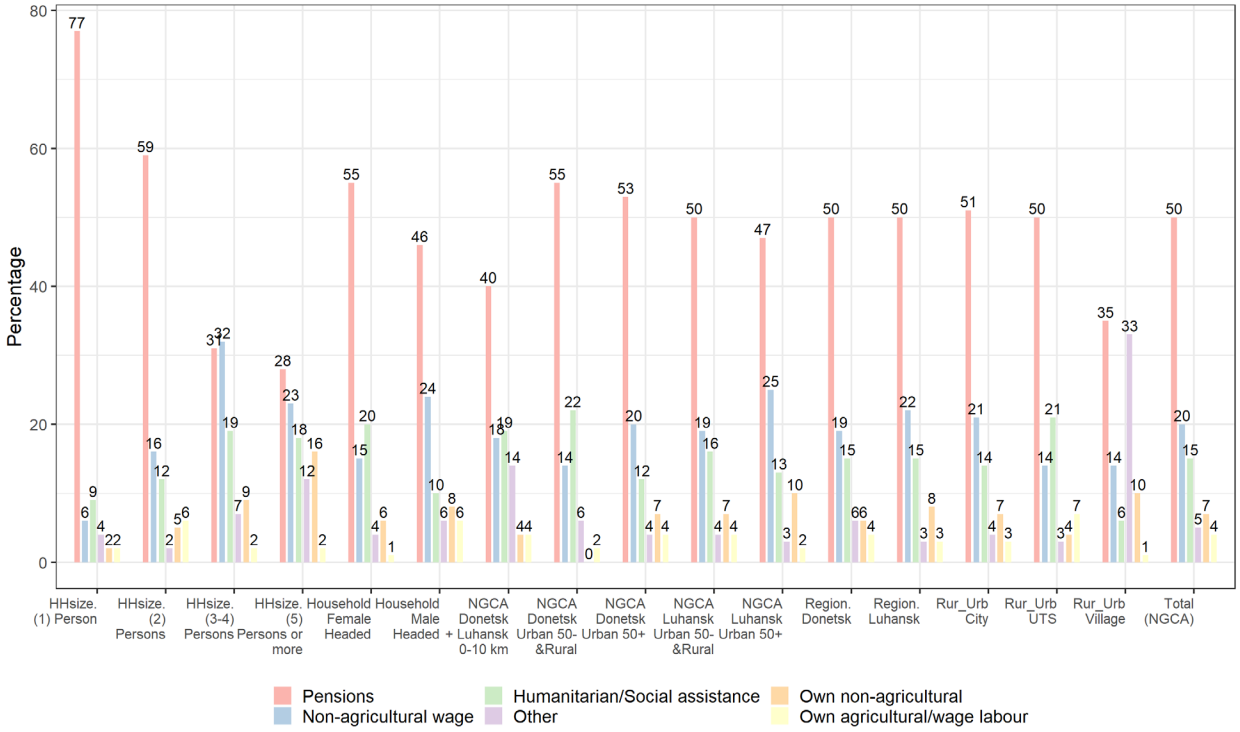
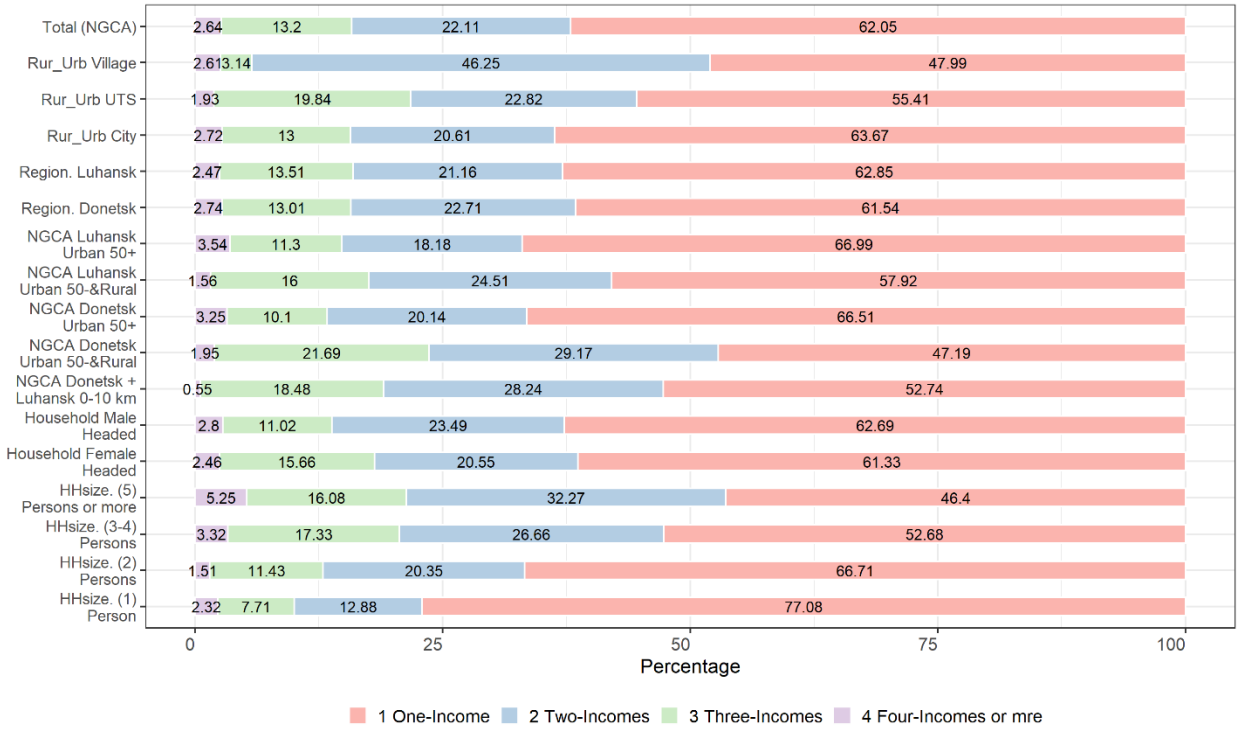


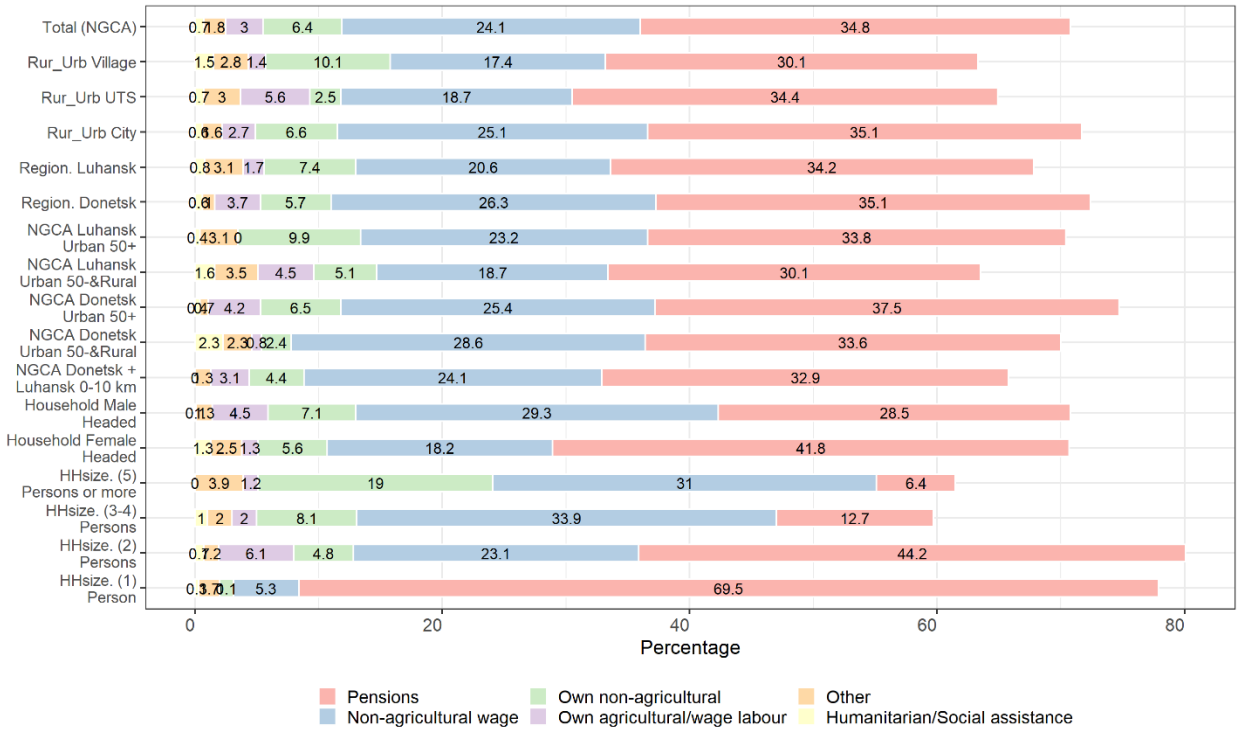
Figure 2. Income sources diversification: distribution of housholds by reported number of sources



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 their main sources. Analysis of the responses reveals that "Pensions", and "Non-agricultural wages" are often large contributors (providing 75% or more of the total) to the households' income. Figure 3 shows that, overall, 34.8% of the households in the represented population receive the majority of their income from pensions compared to 24.1% who 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 6.4% of the households. Notably, income sources linked to agriculture have been reported as only marginally contributing (3%) to the majority (75% or more) of households' incomes. Detailed distribution among locations and population groups can be read in Figure 3 below.

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

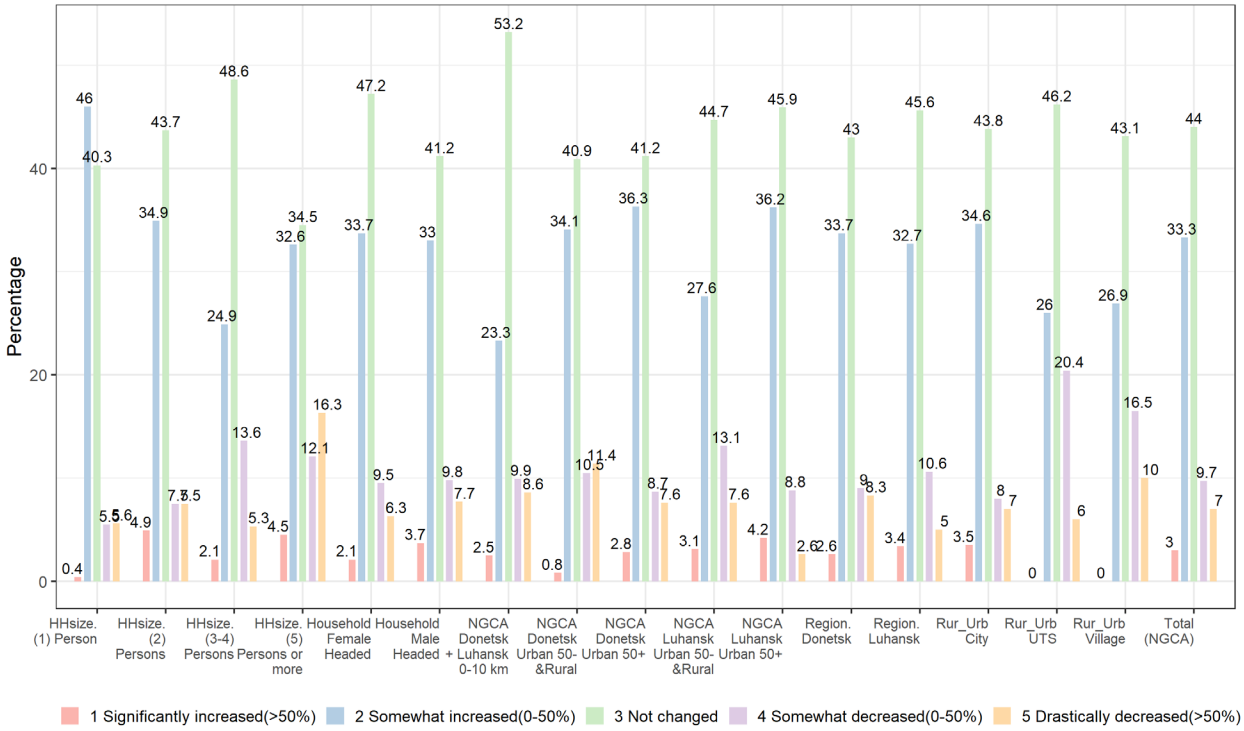


Income stability

Self-reported income changes relative to the same reference period of (July-September) of the previous year, as shown in Figure 4, reveal that for most households (80.3% of the total in NGCA) income levels were stable or increased compared to last year. A small share of the households (3%) declared a "more than 50% increase" compared to 7% who declared "more than 50% decrease" in their income. While a significant share of the households (33.3%) reported a moderate increase (up to 50%) of their income only 9.7% reported a moderate decrease (up to 50%), revealing a certain heterogeneity in the income dynamics that seem more oriented toward income increase. In general, while 16.7% reported experiencing income deterioration, 36.3% reported income increase and the rest of NGCA households have income stability.

This distribution of income stability/instability is not specific to certain locations or population groups but similarly distributed across different locations and population groups.

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.

Analysing the households' sources of income for those that show a moderate increase (plus 0-50% of their main income) in the last year reveals that pension is the main sources of income that has moderately increased as declared by 19.1%, Figure 5. The "non-agriculture wages" comes in the second place by 8.8% followed by "own non-agriculture" by 3.3% and "Own agricultural/wage labour" by 1.9%. The rest of the main sources of income have hardly positively changed, instead.

The other main category of households' income change is the "No Change" category shows a slightly different behaviour than the previous one, including slight shares of "Other" income sources than pension and non-agricultural wages. 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" (26.4% for 3-4 persons) and "own non-agricultural" (7.5% for 5 persons or more), which reveals a kind of income stability for the bigger households with significantly less dependence on pensions.

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

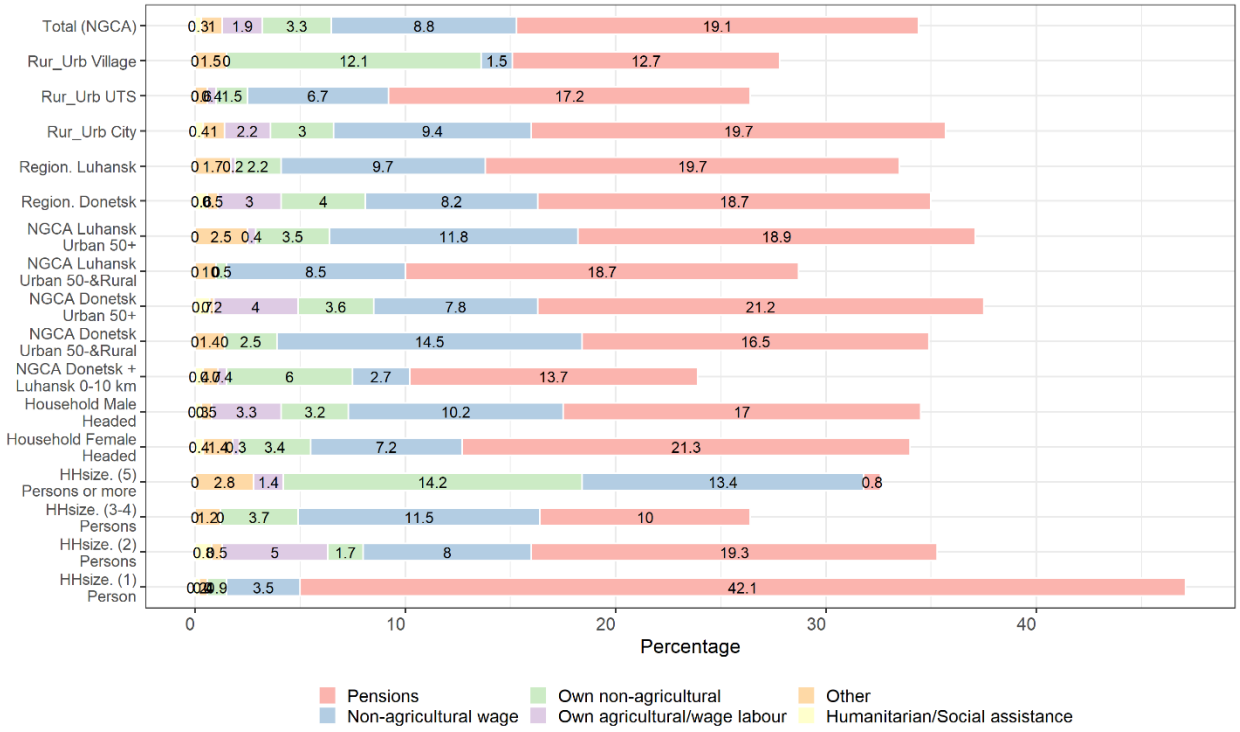
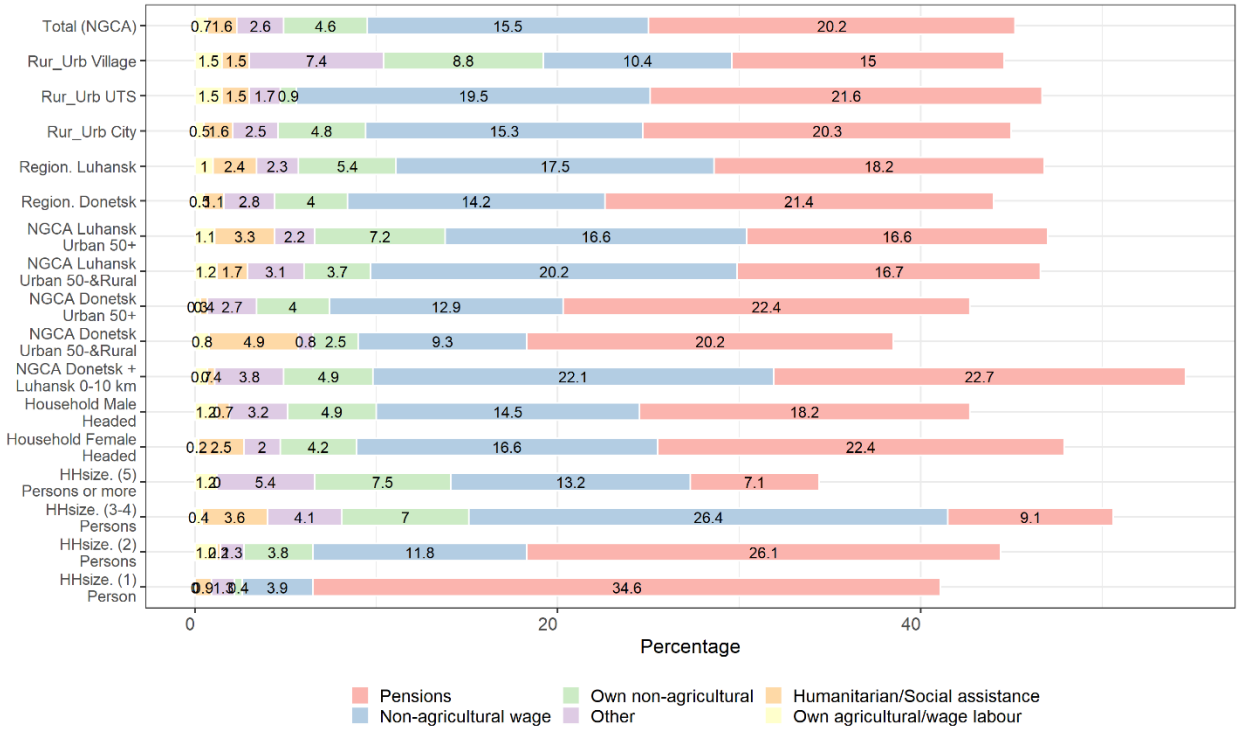


Figure 6. Income Change (No Change) of Main first Income

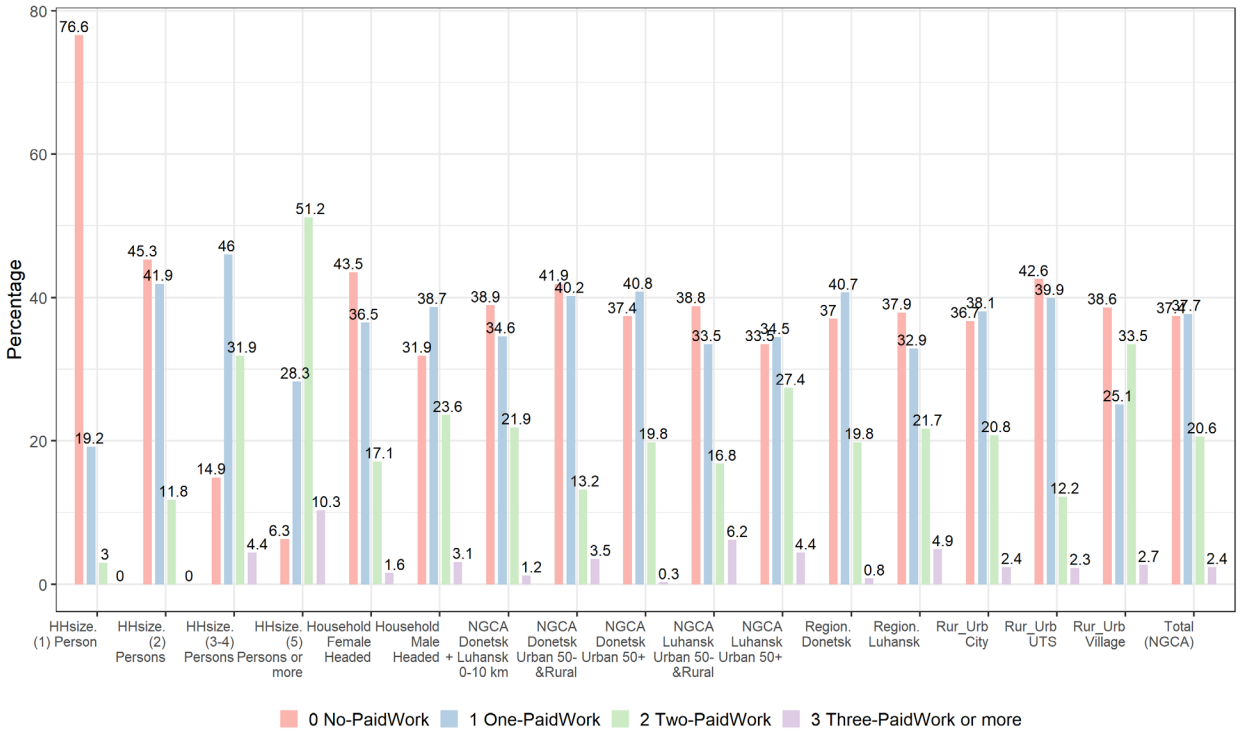


The number of people engaged in paid work in a household is also a good indication of the household's income stability. Households that depend on only one member engaged in paid work are likely to be more vulnerable to various shocks. Figure 7 shows very clearly that income vulnerability is an issue in NGCA area, as the vast majority of respondents reported relying on either no paid work at all (37.4%) or on only one paid work (37.7%). It is required, however, to clarify that households that observe a high share of no paid work might still have different sources of income as pension, for example.

20.6 % of the respondent, however, reported relying on two paid works but only 2.4% declared that three or more members engaged in paid work.

Contrary to other statistics on income reported thus far, the distributions in terms of number of units engaged in paid work seem quite different across areas. Households in the 0-10 Km buffer zone, smaller family sizes and those headed by females 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 more than one source of paid work.

Figure 7. Income from paid work

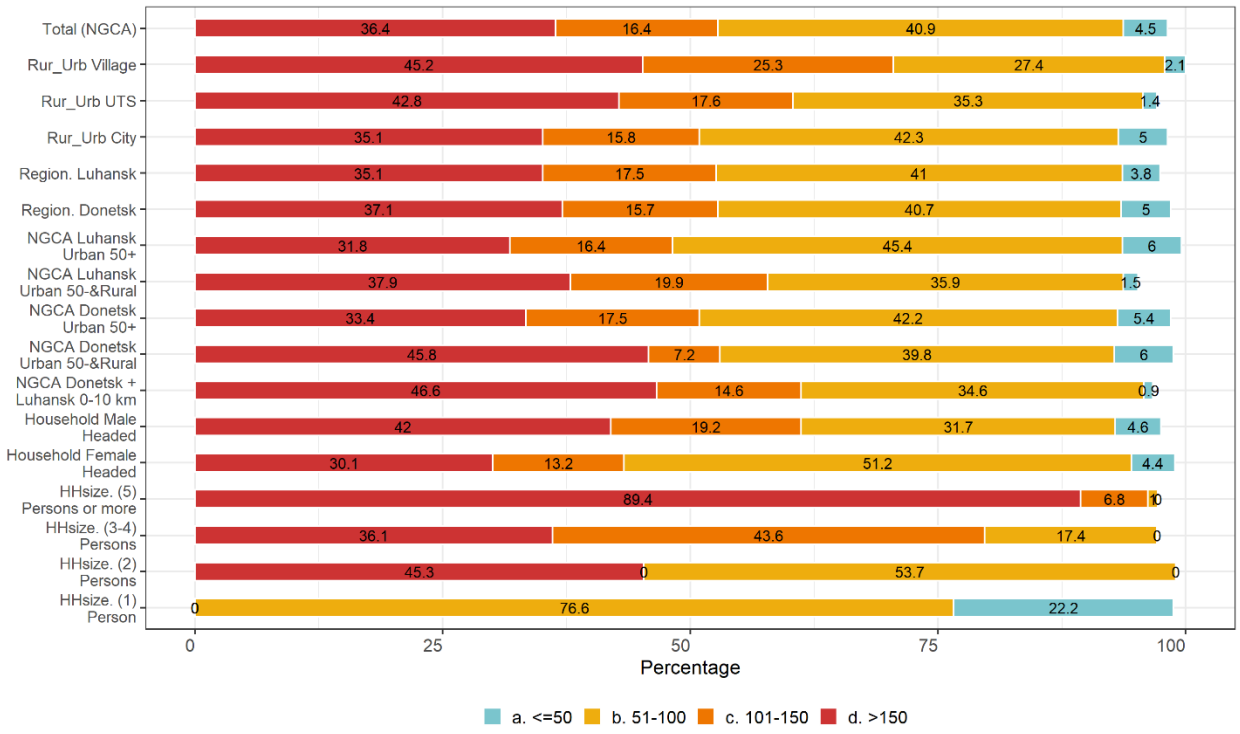


To make better sense of the information provided on the number of the household's members engaged in paid work, it is analysed with regards to the household demographic characteristics to generate its economic dependency ratio. It is the ratio between the number of household members who are not in working 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[15].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 NGCA (52.8%) 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, 36.4% of households suffer from higher levels of economic 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 (89.4%).

Figure 8. Economic Dependency Ratio

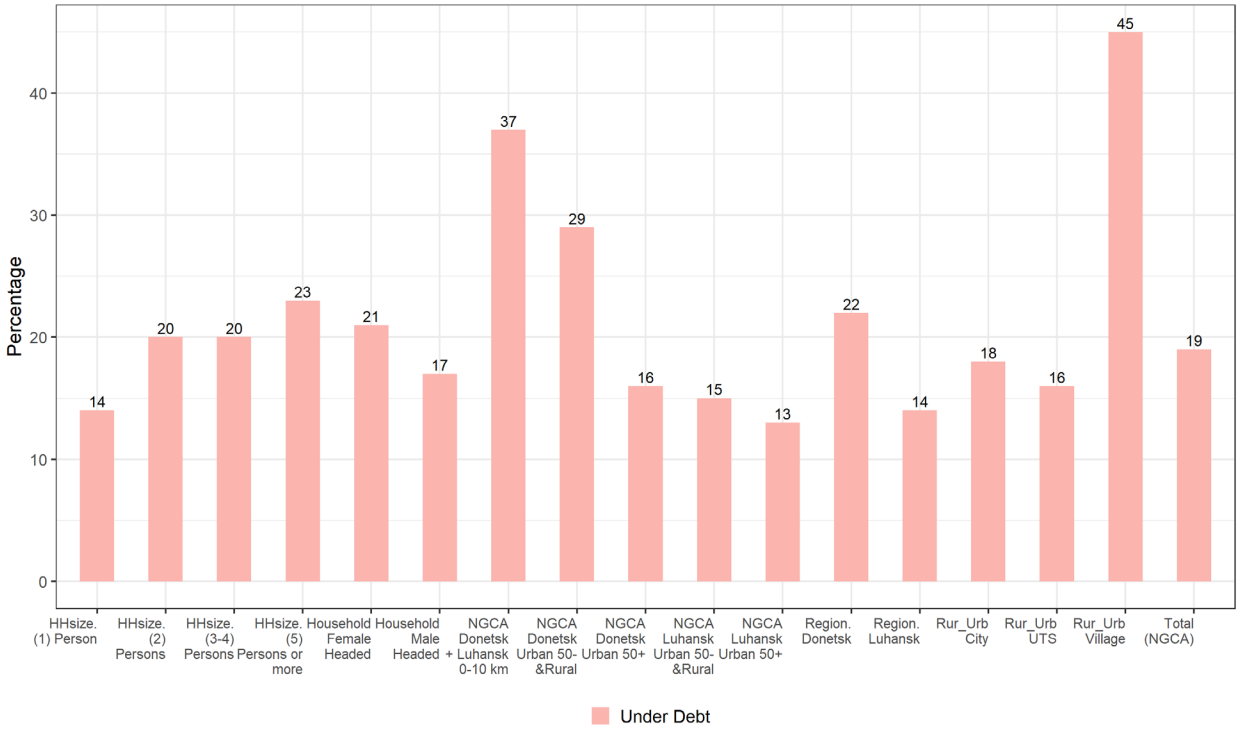


Indebtedness

In general, indebted households are arguably economically vulnerable ones. Figure 9 reveals that 19% of the households in NGCA took debts during the three months preceding the interview. Relatively different portions of HHs suffering under debt in different locations and population groups. Nevertheless, relying on debts were further adopted in Donetsk region, the villages, the big families (5 or more members), the female headed households, "NGCA Donetsk Urban 50- &Rural" area and the buffer zone 0-10 km.

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

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 (30%) took loans because they needed to pay for medical services and/or medicines. This reason is more pronounced for the smaller one-person families by 40.4%, probably because they are mainly elderly persons who extremely need health caring. The second key reason for taking debts (declared by 24.2% of the households in NGCA) was 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 (7.5%). Other less important reasons to take loans are to pay for agricultural inputs that was declared by 2.5%, to pay for education (4.8%) and to pay outstanding debt (3.4%).

Notable, taking debts to pay for food is reported by non-negligible share of households (19.7%) indicating the need for money in order to acquire food in the study area, especially for the two-persons families that reported by 36.1%. Incurring debt to pay for food is also more prevalent in urban areas as compared to rural areas (20.8% vs 18.9%, respectively) and in Donetsk (24.8%) compared to Luhansk region by 6.8%. quite heterogeneous percentages for debt reasons are shown across regions, locations and population groups.

Finally, 61.9% of the households that took debts during the last three months still need to pay them back. This problem is more concentrated in the urban-type settlement areas (where 78.2% of the debts are still outstanding) and in “Luhansk Urban 50-&Rural” areas (77.3%). Quite heterogeneous percentages are revealed by different locations and population groups as seen in Figure 11 below.

Figure 10. Main reasons for indebtedness

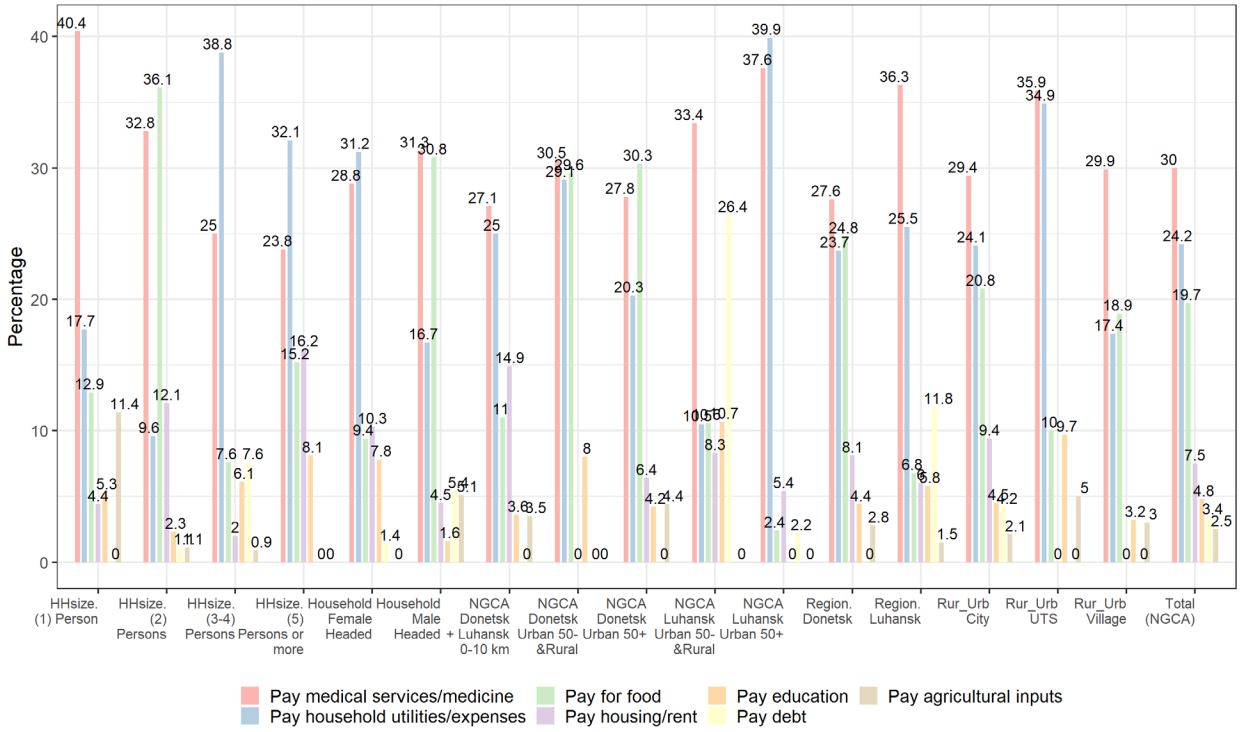
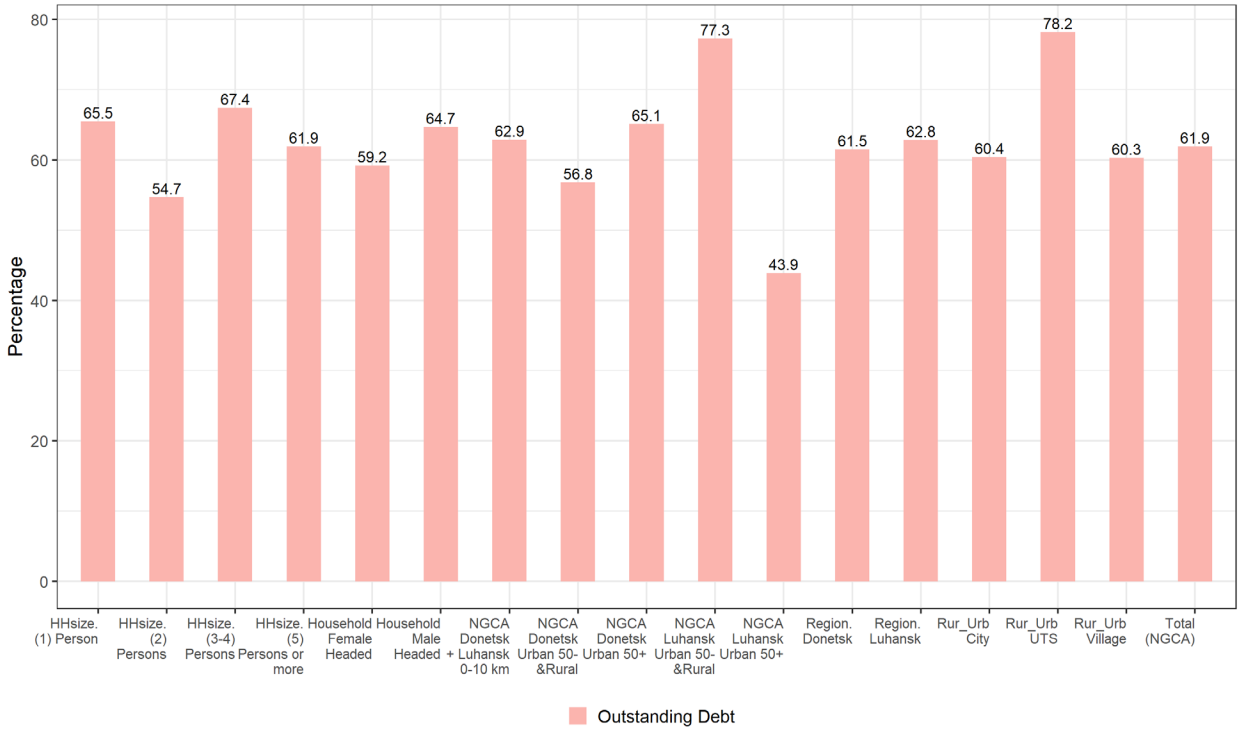


Figure 11. The difficulty to repay debts



Exposure to shocks

Given the conditions prevailing in the study area during the period of the survey, it is unsurprising that households have been exposed to shocks that may imply risks for their livelihoods. Figure 12 shows that 34.1% of the households have not been exposed to any shocks during the previous three months. However, 37% of NGCA households have been exposed to one shock, a distribution that is quite similar across locations and population groups but more concentrated in Donetsk (39.2%) than in Luhansk region (33.5%). A fair share of households (22.6%) indicated that they have been exposed to two shocks and the rest of them (6.3%) have been exposed to three shocks and more with high occurrence in the villages (18.4%).

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 48.4% (Figure 13). This is consistent with the 2020 high consumer price index in Ukraine (289.4) as reported by the World Bank[16].Other shocks are reported much less frequently, with a certain prevalence of reported sickness and related health expenditures (29.4%), followed by loss of employment and salaries (7.4%), death of household member (4.6%), asset damage caused by the on-going military operations (3%), and poor harvest (2.3%). The notable incidence of losses due to military operation, reported by the villages' dwellers (7.9%) and in the 0-10 km buffer zone (6.4%) coupled with the high incidence of inflation and price increase (54.4% and 59.6% respectively) are in particular alarming negative kind of shocks that characterise those locations and population group.

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 was 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 summer season (post-harvest), data collected with the Food Insecurity Experience Scale module referenced to the previous month (i.e., over August and/or September) have been used (within the pooled FIES data from the two data collection rounds)[17] to compute the prevalence of food insecurity at different levels of severity. The results (Figure 14) show that a total of 19.68% of the households in the reference population have experienced food insecurity at either "moderate" or "severe" levels during one month period over July – September. For, 1.6% of the households, experienced food insecurity has been "severe", implying a non-negligible chance of going for a whole day without eating, at least once over the reference period.

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

[17] 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 12. Exposure to shocks

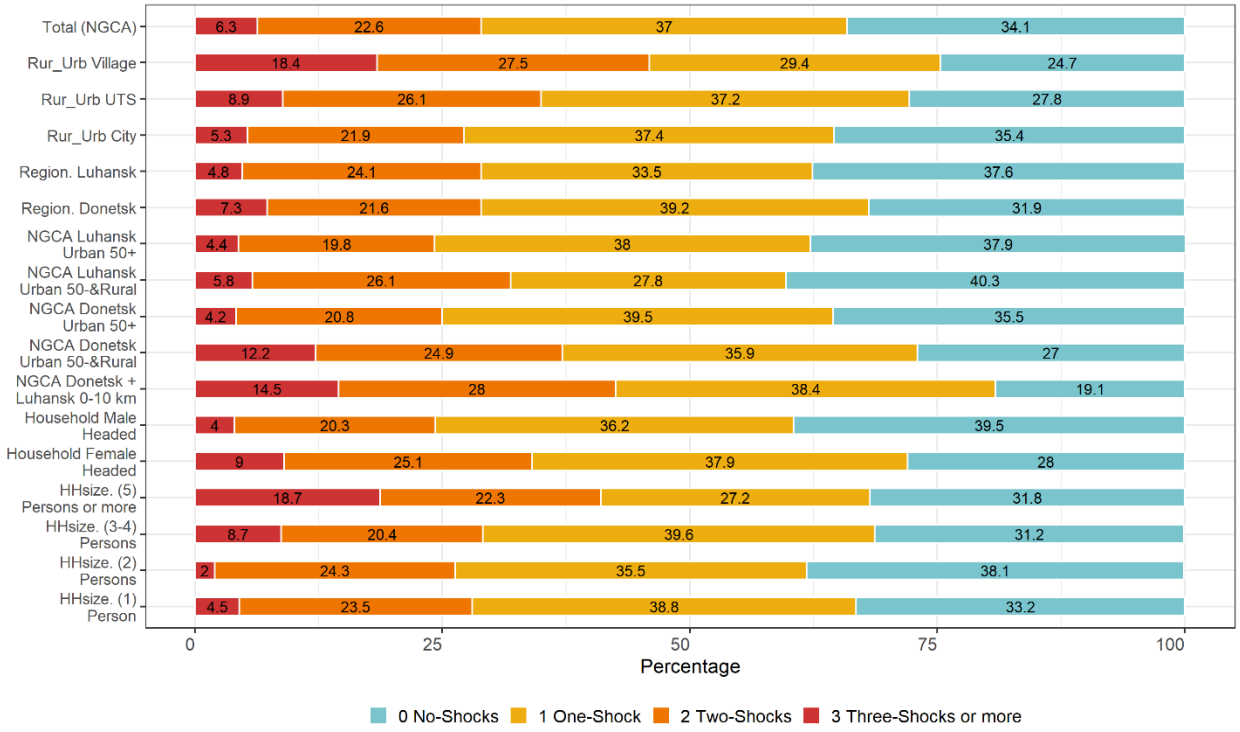


Figure 13. Frequency of main shocks reported

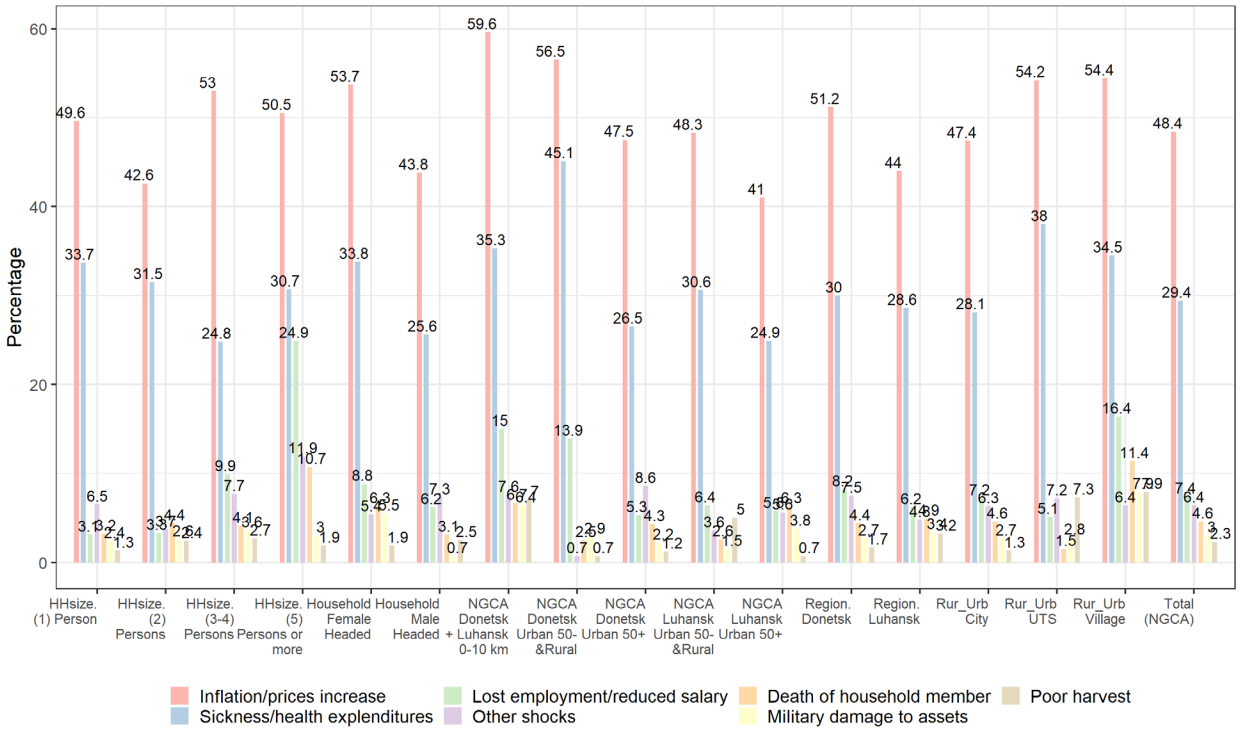
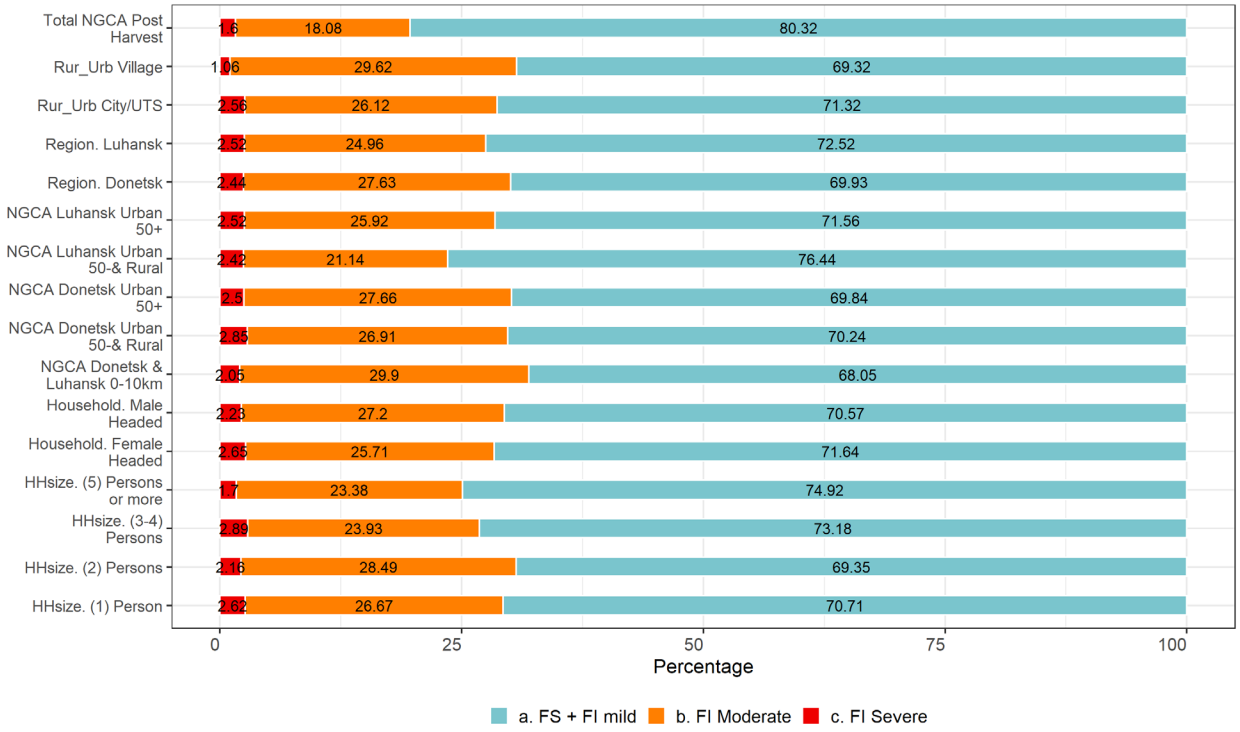


Figure 14. FIES-based prevalence of food insecurity categories by area and population group



These are roughly the same levels of overall food insecurity compared to current assessments in Ukraine, unpublished results from FAO, based on data collected through the Gallup World Poll since 2014. The assessment points 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. 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 NGCA area of Easter Ukraine, in the Summer of 2021, has been relatively more food insecure than in the rest of the country.

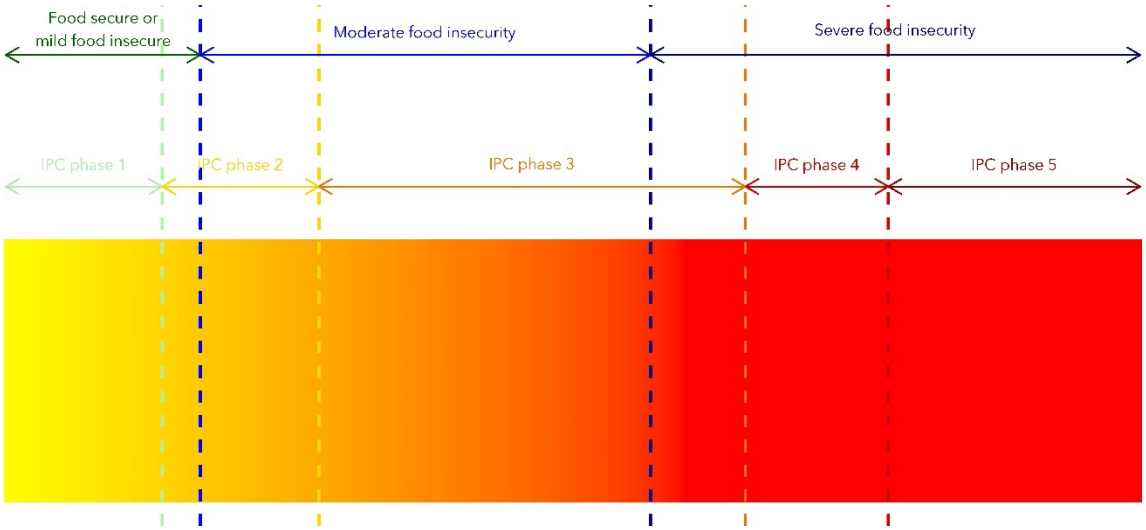
Another useful reference is provided by a recent FAO report on access to food in 2020[18], which presents estimates of the prevalence of recent moderate or severe food insecurity in twenty food crisis countries, measured with reference to the four weeks preceding the surveys that range from a minimum 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

[18] 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.

Figure 15. Comparison between FIES-based and IPC thresholds



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

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 NGCA of Donetsk and Luhansk (with moderate or severe combined amounting to almost 20% of the population) would therefore likely support the classification of these areas under "Phase 2 or worse" of the IPC, a benchmark often used by the international community to flag the need for activating emergency response.[19]

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.)

The area labelled as "NGCA Donetsk & Luhansk 0-10 km" reveals the highest prevalence of recent moderate or severe food insecurity [31.16 (± 13.18)] compared to "NGCA Donetsk Urban 50+" and "NGCA Luhansk Urban 50+" that reveal a prevalence of 30.16% and 28.44% (±8.53 and ±8.55 respectively). A striking no notable differences (within the marginal errors) among households when classified based on the gender of the household's head, with female headed households slightly less food insecure [28.36% (±6.16)] than male-headed ones [29.43% (±6.88)]. However, the female headed households are more food insecure at the severe level 2.65% compared to 2.23% of the male headed households.

Overall, prevalence of recent *severe* food insecurity, at 1.6% is particularly low when 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) even though, once again, it must be considered that the latter refers to the *annual*, rather than recent food insecurity.

[19] 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 NGCA	**920**	19.68	4.74	1.6	1.02
City/Urban-type Settlement	**856**	28.68	4.76	2.56	1.32
Village	**55**	30.68	17.7	1.06	2.38
Region. Donetsk	**479**	30.07	6.44	2.44	1.63
Region. Luhansk	**441**	27.48	6.6	2.52	1.92
Household. Male Headed	**382**	29.43	6.88	2.23	1.59
Household. Female Headed	**538**	28.36	6.16	2.65	1.81
NGCA Donetsk Urban 50+	**280**	30.16	8.53	2.5	2.32
NGCA Donetsk Urban 50-&Rural	**120**	29.76	12.74	2.85	3.1
NGCA Luhansk Urban 50+	**260**	28.44	8.55	2.52	2.53
NGCA Luhansk Urban 50-&Rural	**140**	23.56	11.36	2.42	3.51
NGCA Donetsk + Luhansk 0-10 km	**120**	31.95	13.18	2.05	2.57
HHsize. (1) Person	**253**	29.29	9.02	2.62	2.53
HHsize. (2) Persons	**319**	30.65	7.77	2.16	1.65
HHsize. (3-4) Persons	**282**	26.82	8.14	2.89	2.72
HHsize. (5) Persons or more	**66**	25.08	16.29	1.7	3.79

Source: FAO analysis of Ukraine NGCA FIES data

The highest prevalence of recent severe food insecurity is found in "NGCA Donetsk Urban 50- &rural" (2.85%). These differences, however, must 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 NGCA based on the analysis of the pooled FIES data that allows for better use of the FIES methodology and analysis reveals a slight non-significant deterioration of food security at moderate as severe levels 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 920 cases in terms of FIES raw score (from 0, corresponding to the least food insecure category, to 8, the most food insecure) 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 6, 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.

However, the presence of missing values, with different shares, slightly alters the distribution of food expenditures within different raw scores.

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

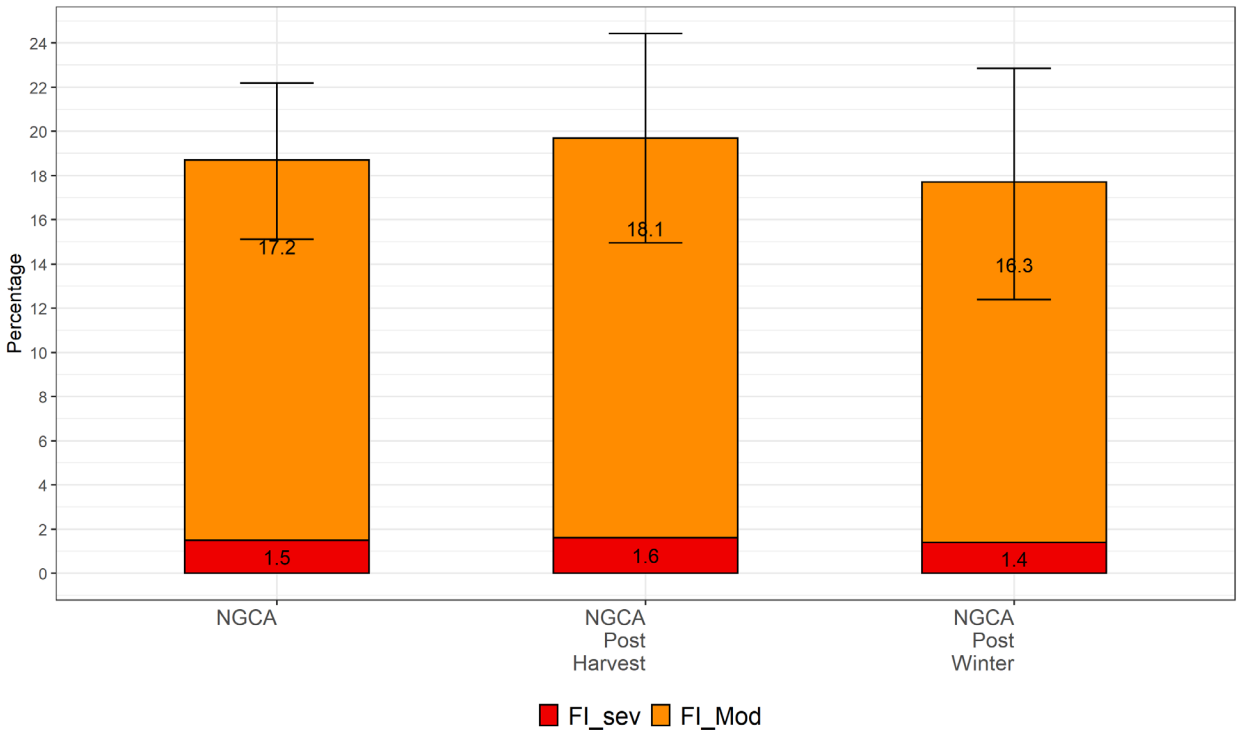


Table 4. Association between food insecurity and share of income spent on food

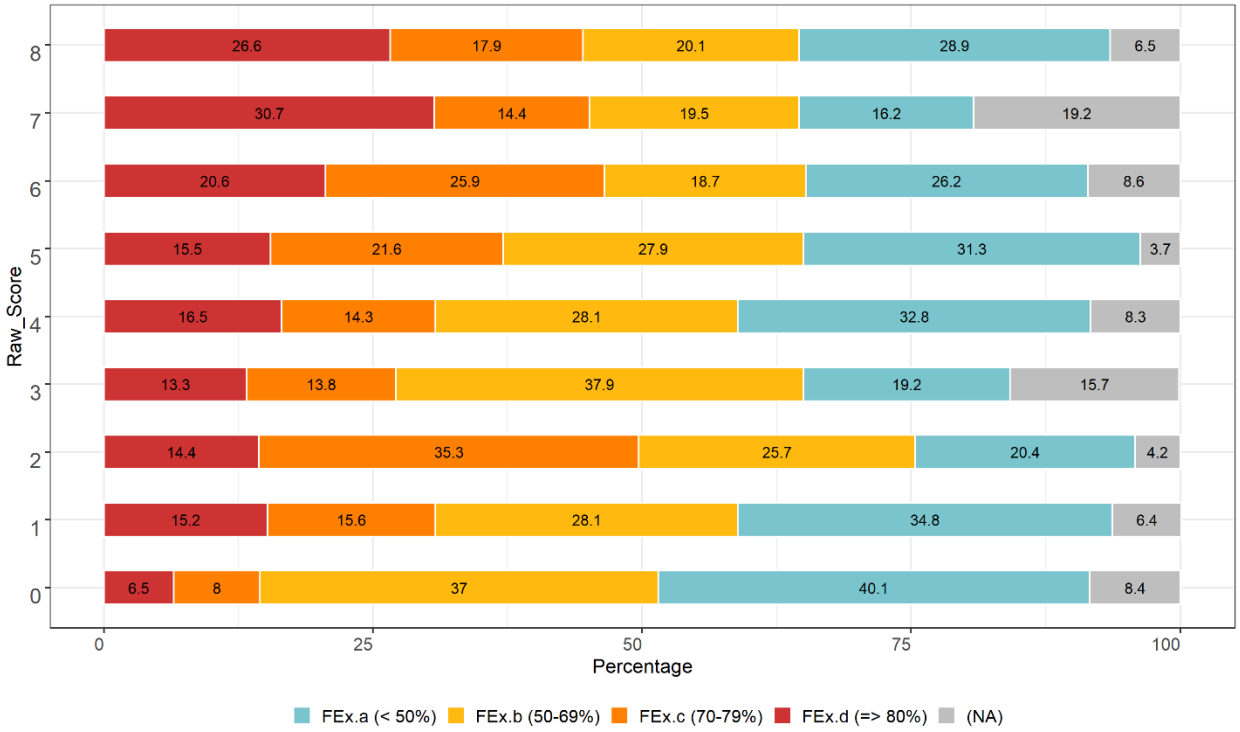
Share of income spent on food	Number of households by FIES raw score									Total
	0	1	2	3	4	5	6	7	8	
<50%	177.3	35.6	17.9	16.2	27.0	17.1	8.4	3.3	4.2	306.9
50-69%	163.4	28.8	22.5	32.0	23.1	15.2	6.0	3.9	2.9	297.8
70-79%	35.5	16.0	30.9	11.7	11.7	11.8	8.3	2.9	2.6	131.3
=> 80%	28.9	15.6	12.6	11.2	13.6	8.4	6.6	6.2	3.8	106.9
#N/A	37.1	6.5	3.7	13.3	6.8	2.0	2.7	3.9	0.9	77.0
Grand Total	442.2	102.5	87.7	84.3	82.3	54.5	32.1	20.1	14.4	920.0

Source: FAO analysis of Ukraine NGCA FIES data

Another interesting analysis compares the FIES raw score with the reported coping strategies, measured using the Livelihoods-based Coping Strategies Index.

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.

Figure 17. Distribution of the of income spent on food in FIES Raw Score



In similar analyses, coping strategies 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.

Table 5. Association between food insecurity and Livelihood Coping Strategies

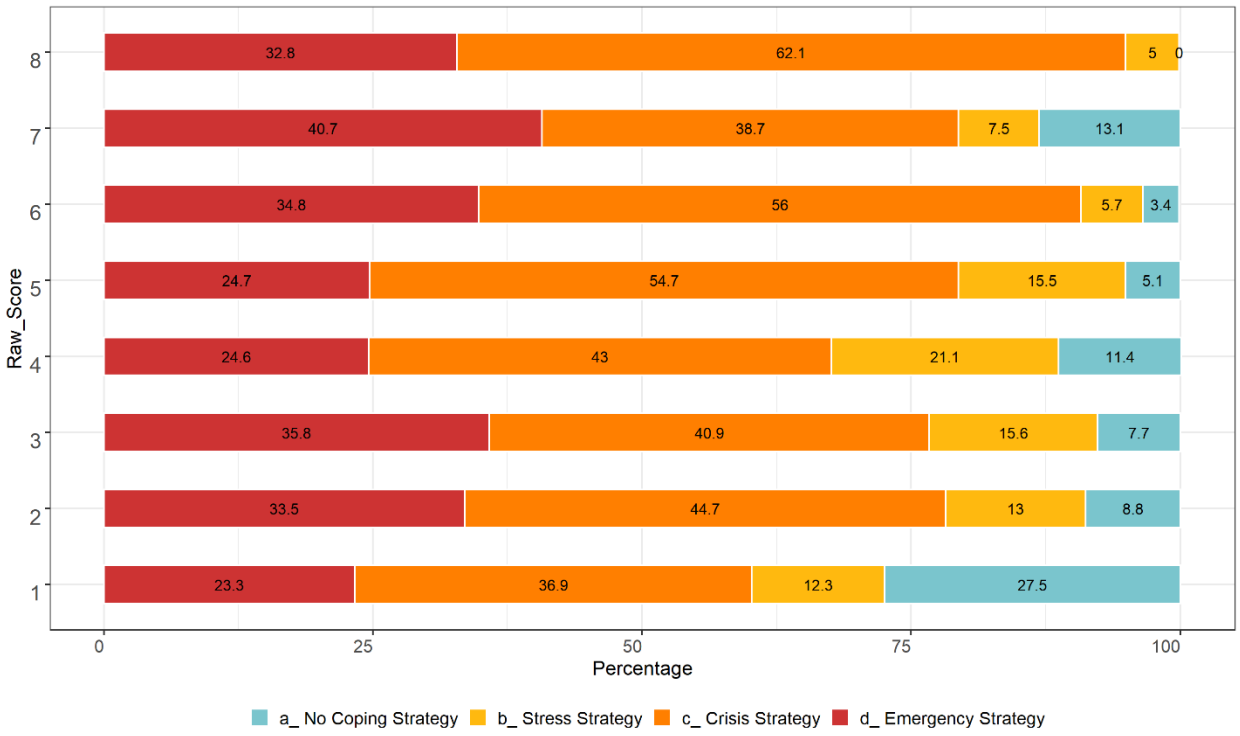
Type of coping strategy adopted	Number of households by FIES raw score								Total
	1	2	3	4	5	6	7	8	
No Coping Strategy	28.2	7.7	6.5	9.3	2.8	1.1	2.6	NA	58.3
Stress Strategy	12.6	11.4	13.2	17.3	8.4	1.8	1.5	0.7	67.0
Crisis Strategy	37.9	39.2	34.5	35.4	29.8	18.0	7.8	8.9	211.4
Emergency Strategy	23.8	29.4	30.2	20.2	13.4	11.1	8.2	4.7	141.1
Grand Total	102.5	87.7	84.3	82.3	54.5	32.1	20.1	14.4	477.8

Source: FAO analysis of Ukraine NGCA FIES data

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 "emergency level", and therefore indicative of very severe food insecurity. The reporting raw score 8, 7, 6, or 5 is indicative of resorting to "emergency" and at higher level to "crisis" strategy.

It is important to note that even households who report a low FIES raw score demonstrate fairly high levels of coping behaviour. Nearly 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. Figure 1 above shows that on average 15% of the total income has been channelled to households in NGCA through social, humanitarian or other kinds of assistance, which reflects the vitality of the tool to people's income in the studied area.

The extent and impact of the received assistance

Figure 19 shows that only 9.8% 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 0-10 km buffer zone of 19.6%. Notably, households in Donetsk

(10.7%) are assisted more than those in Luhansk (8%). The female headed households (10.5%) seem to have received assisted more frequently than those households with headed by males (8.8%).

Highlighting on the impact of receiving any kind of assistance, the assisted and non-assisted households in NGCA 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 significantly different between households that have been assisted (0%) compared to those that have not been assisted (1.7%). These results make sense assuming that the assistance was directed to people in most need to food and generated the assumed impact. The level of the "moderate food insecurity", however, point to higher shares for the assisted households (29.6%) compared with non-assisted ones (19.4%), which indicates that the assistance received was effective to reduce the severe, but more efforts are needed to combat the moderate food insecurity in NGCA area. Given the small share of assisted households (9.6%), the above analyses still to be considered with caution due to the relatively small sample size and due to other factors that might be contributing to the food security situation rather than the assistance received.

The extent of satisfaction with the received assistance

Out of the 9.6% of households who reported receiving assistance, nearly 70% expressed that they were somewhat or highly satisfied with the assistance they received. However, 16% were very unsatisfied with theirs, pointing to the possible need for more or different kinds of assistance by those households. Notably, high percentage of households in the villages (65%) and the 0-10 km buffer zone (74%) were very satisfied by the assistance they received. Detailed percentage according to different locations and population groups are shown in Figure 21 below.

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 priority as 35.7% households' needed assistance followed by the need to access healthcare and medicines by 17.5%. The housing repair and housing utility services needs, instead, have been expressed by 7.5% flowed by the need to cash money and loans that was expressed by non-negligible share of the households (5.9%). Finally, the needs to agricultural and livestock inputs were expressed by 5.2% followed by the need for food that was declared by 3.3% (which is, on average, consistent with the sever food insecurity levels for the assisted and non-assisted households in NGCA).

Analysing the households' perceived needs against their food (in)security classes does make a lot of sense by looking to the moderate food insecurity class as the 60% of those who expressed the need to food fall into this class followed by 34.9% of households that expressed their needs to fuel and cash money by 34%, Figure 23. However, the distribution of the severely food insecure households against their expressed future needs is not perfectly consistent with the distribution of the moderate, probably because those households have already assisted by food which reduced their severe food insecurity level but not the moderate levels.

Figure 19. Assistance: percentages of households receiving assistance

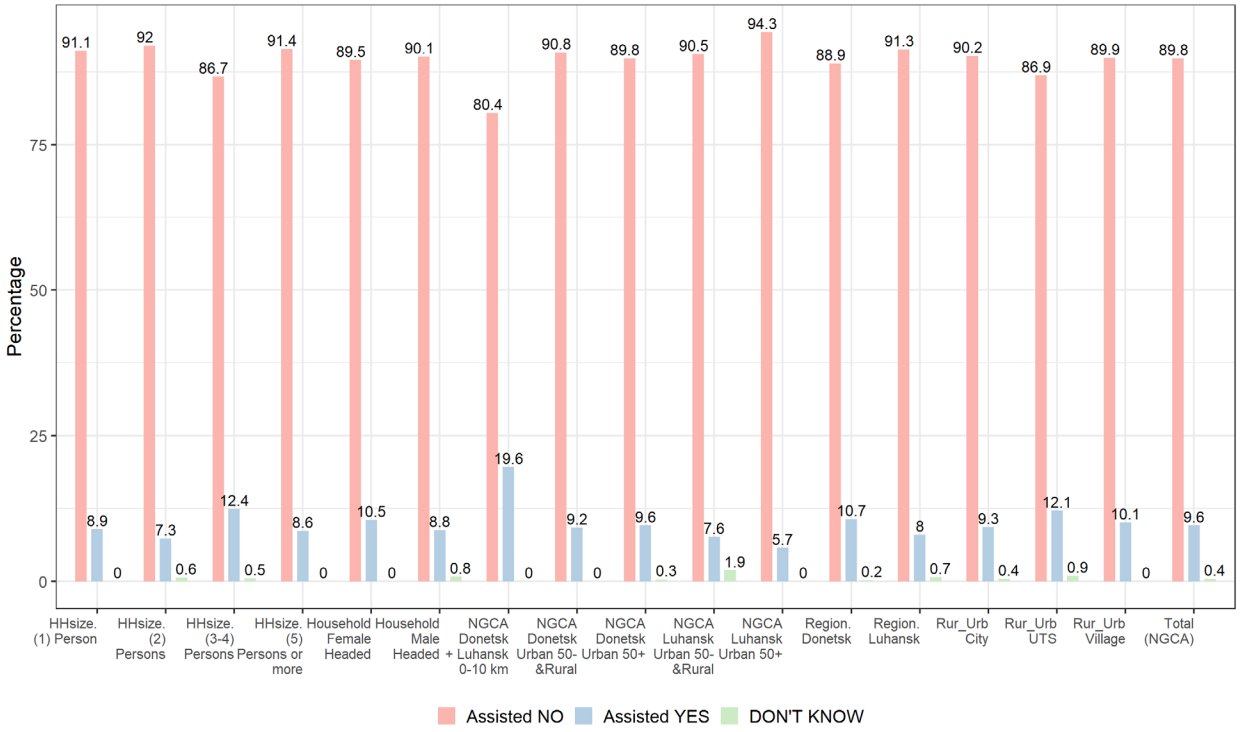


Figure 20. FIES-based food insecurity categories among assisted and non-assisted households

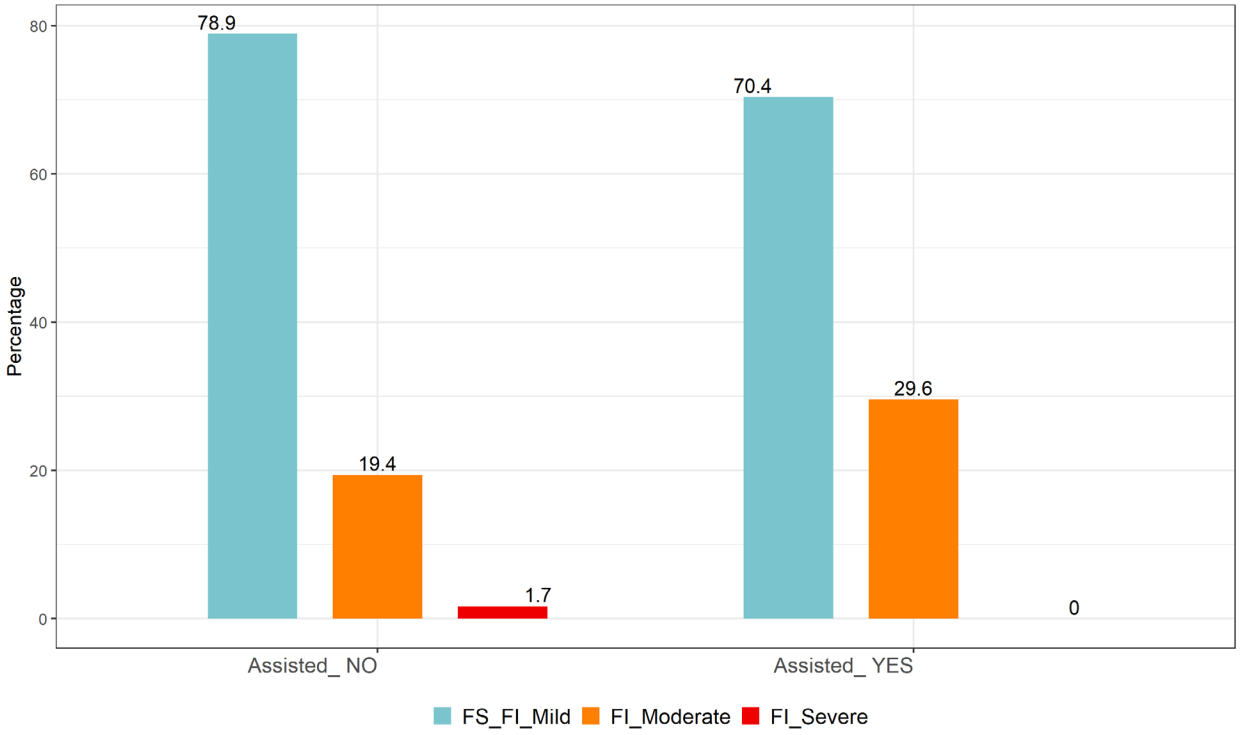


Figure 21. Degree of satifaction with the assitance received

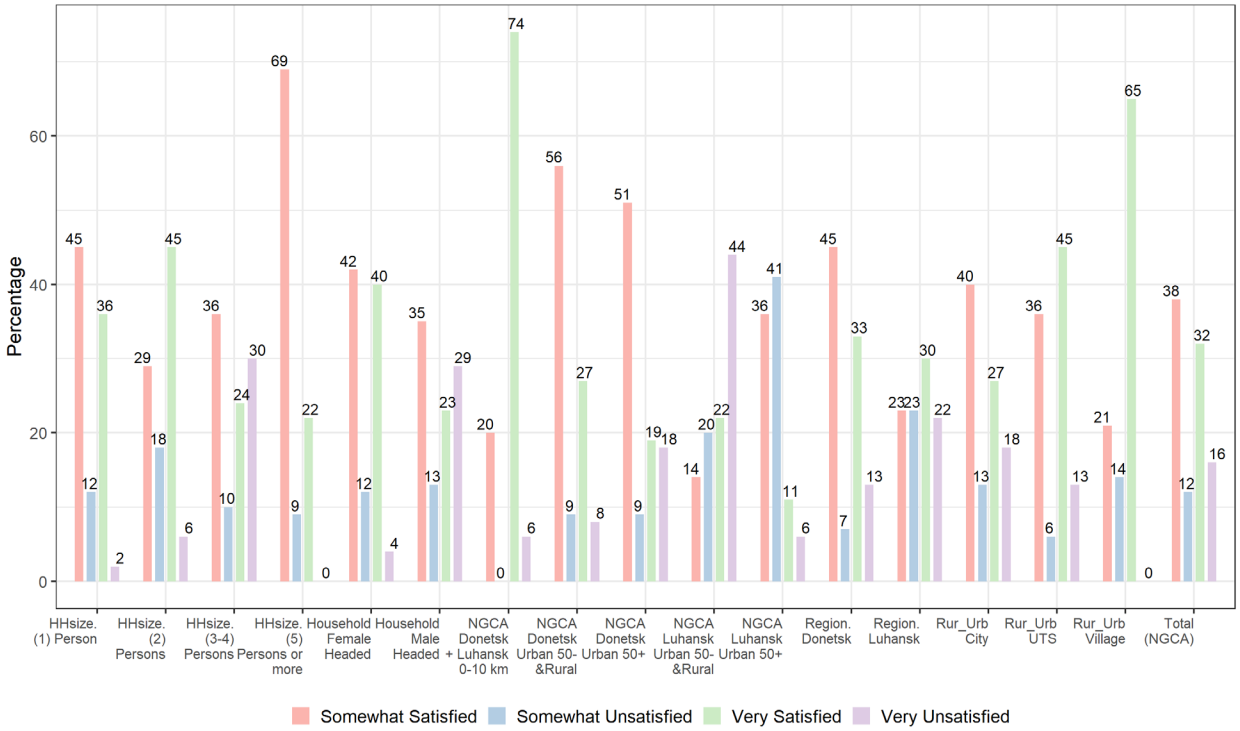


Figure 22. Reported needs for future assistance

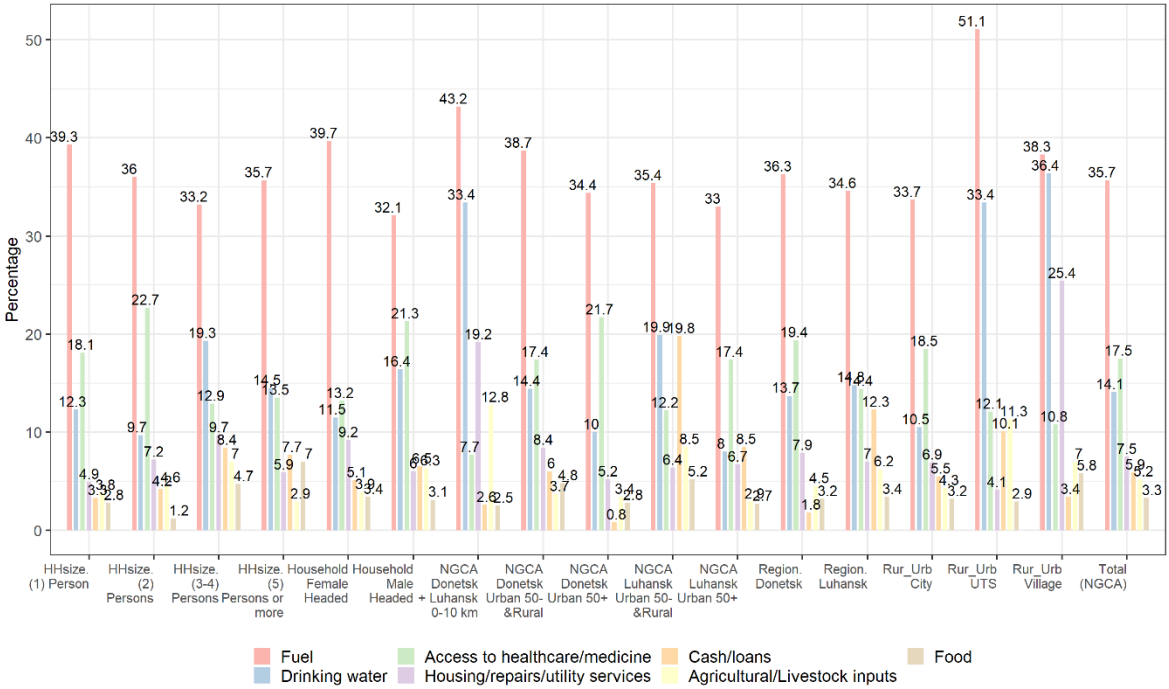
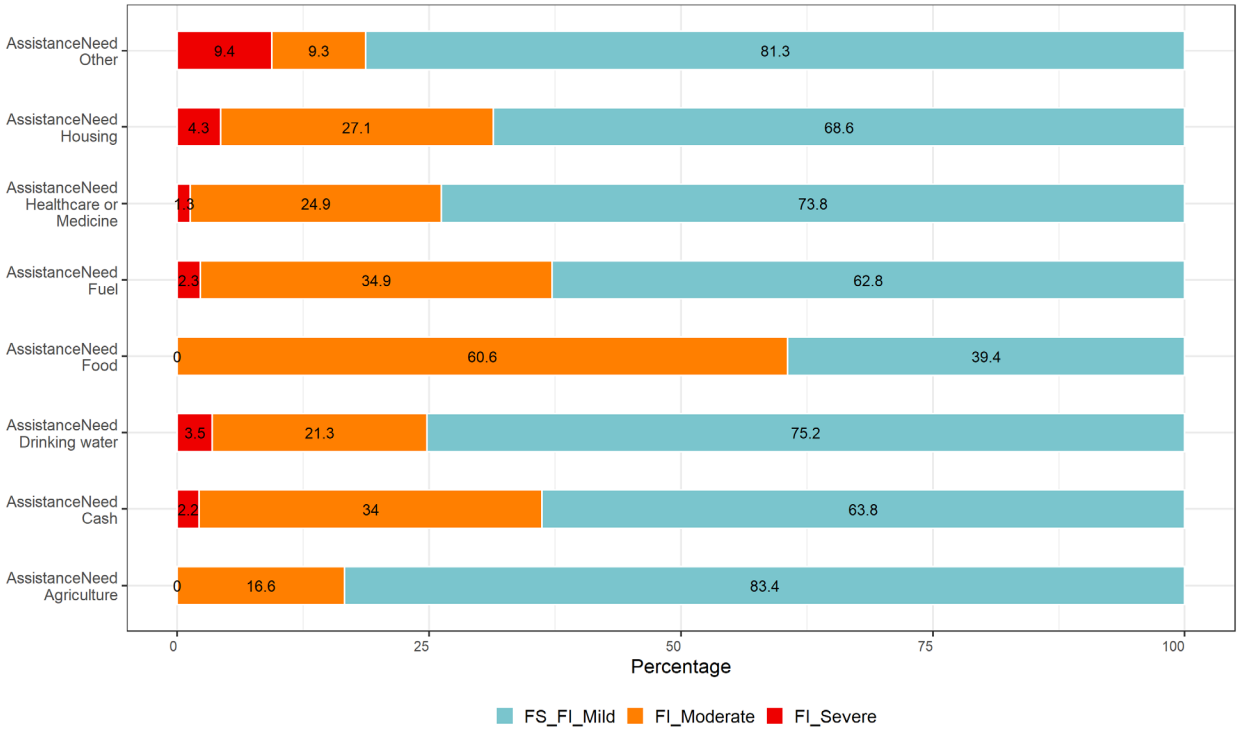


Figure 23. The distribution of food insecurity levels within people's different perceived needs



V. Agriculture

Although engagement in some form of agriculture is declared by a fair share of households in NGCA, the agriculture sector seems to be only marginally relevant from the economic point of view as for the majority of respondents (99.8%) the cultivation of vegetable fruits, field crops and livestock is merely 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 41.6% of all surveyed households (Figure 24). Different regions and locations show relatively different levels of involvement in the sector. In general, Luhansk's households appear to have been engaged more in agriculture activities (44.7%) compared to Donetsk's households (39.7%). The area most engaged in agriculture is the UTA (60.9%) followed by the villages by 59.1%. The locations where most household are engaged in agriculture, instead is "NGCA Luhansk Urban 50-& Rural" by 56.7% followed by the 0-10 km buffer zone by 55.3% of the households reporting agricultural activities, compared to only 33% of households reporting such engagement in "NGCA Donetsk Urban50+" area.

Figure 24. Frequency of households' engagement in agriculture

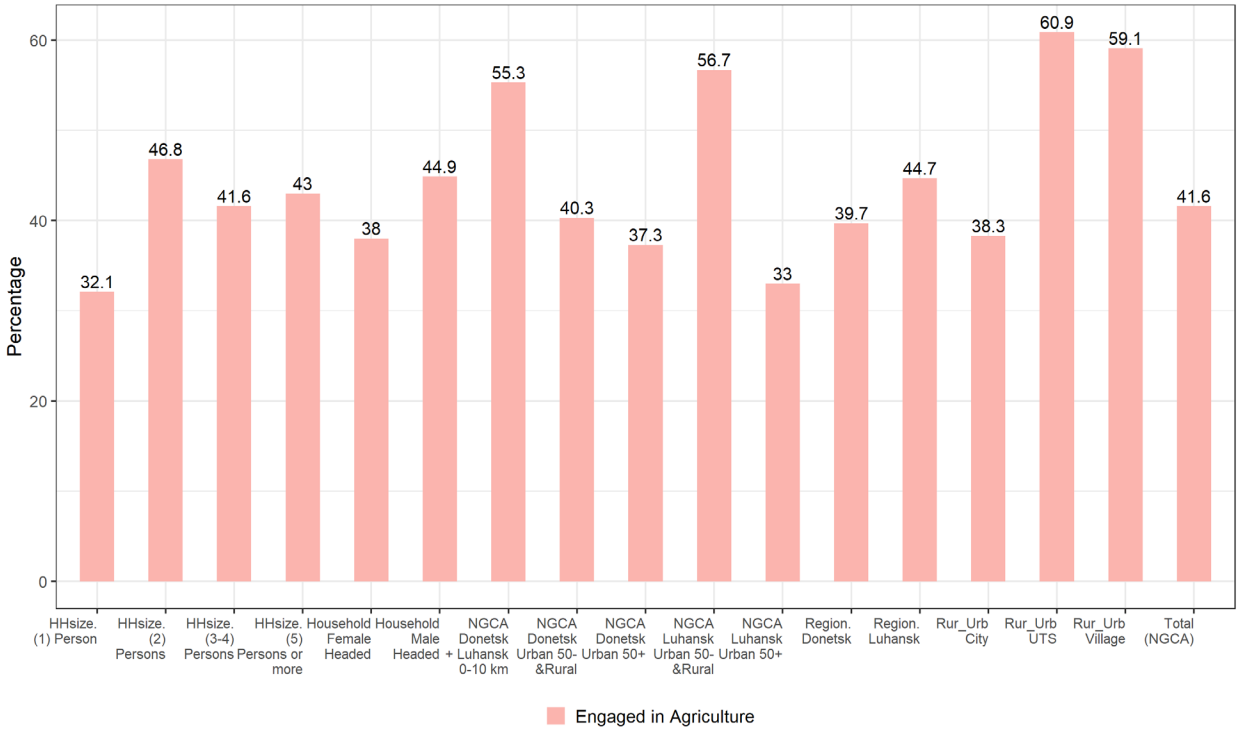


Figure 25 shows the agricultural households' relative engagement in different types of agricultural activities. The importance of producing fresh food is quite evident, as 89.7% of these households are engaged mainly in vegetable production. The second important set of agricultural activities includes those pertaining to fruits (41.5%), livestock (17.7%) and crop production (14.9%). The least/marginally adopted agricultural activities by the households are the food gathering by 5.8%, the bee keeping (2.2%) and finally the fisheries and aquaculture (1.1%). The percentages of the households' engagement in different agricultural activities are somewhat consistent across locations and population groups in NGCA.

Crop Production

Vegetables are the most frequently grown crop by households in the study areas as 81.8% of the households involved in agricultural activities declared their engagement in vegetables production. Figure 26 shows that the households' involvement in tuber vegetable production comes secondly but with a considerably lower rate (38%). To a rather lower extent only 0.9% of the households reported being engaged in the production of grains compared to 4.4% are growing fodder crops. A fair share (11.9%) of households grows cucurbits compared to others crops, including oilseed production, that are declared as the fodder crops by 4.4% of households. Quite consistent percentages are observed across different locations and population groups over NGCA.

It is evident that the main purpose of the households' engagement in crop production is to fulfil their own consumption needs. Figure 27 reveals that almost all households (98%) declare growing crops for own consumption. However, a small proportion (1.8%) of those households are growing crops for income as well. Only a tiny share (0.2%) of the households declared to be growing crops only for income generating

purposes. Consistent percentages are shown across different regions and locations confirming the homogeneity of crop production's purposes within different locations and population groups.

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

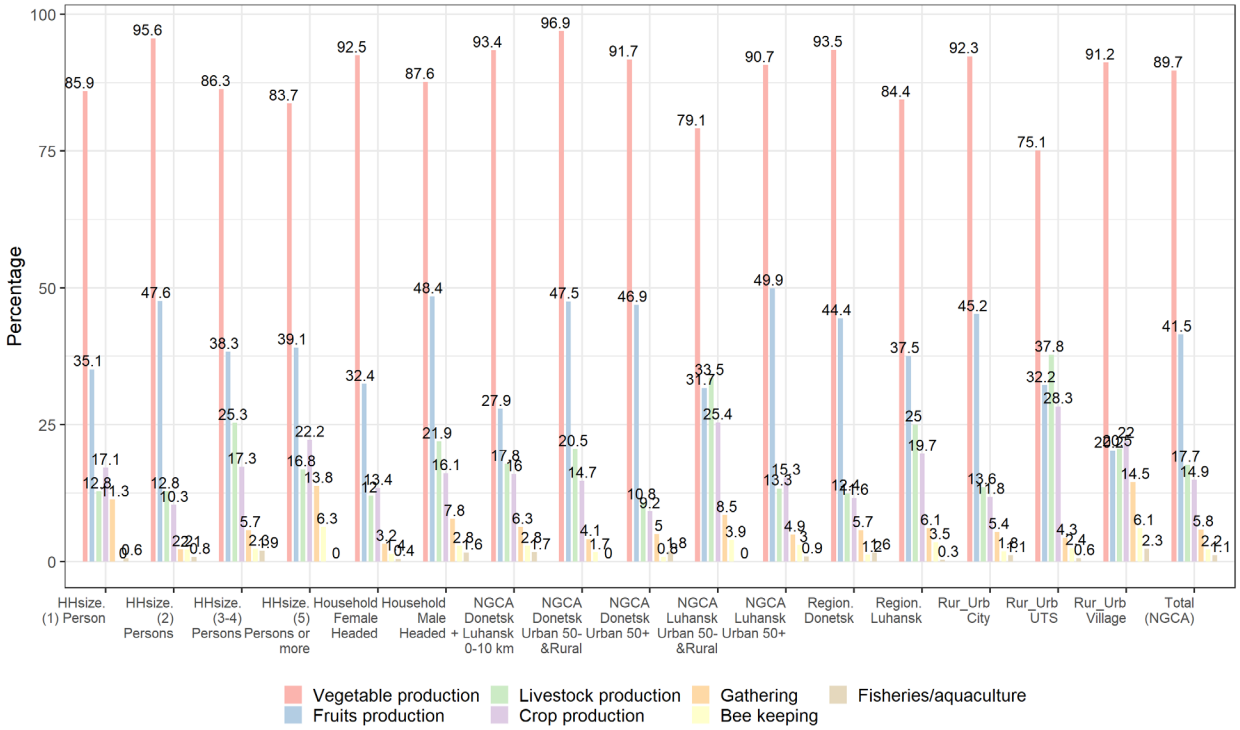


Figure 26. Agricultural activities: Crops reported as the main crop

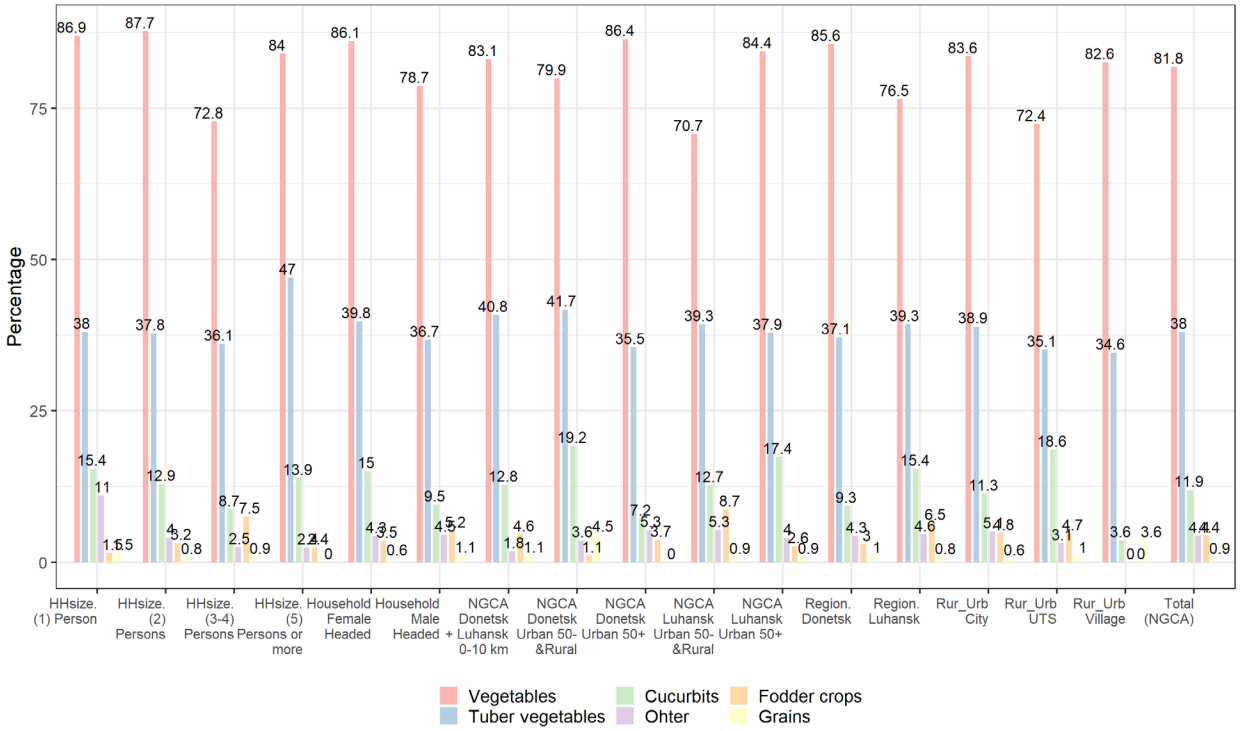
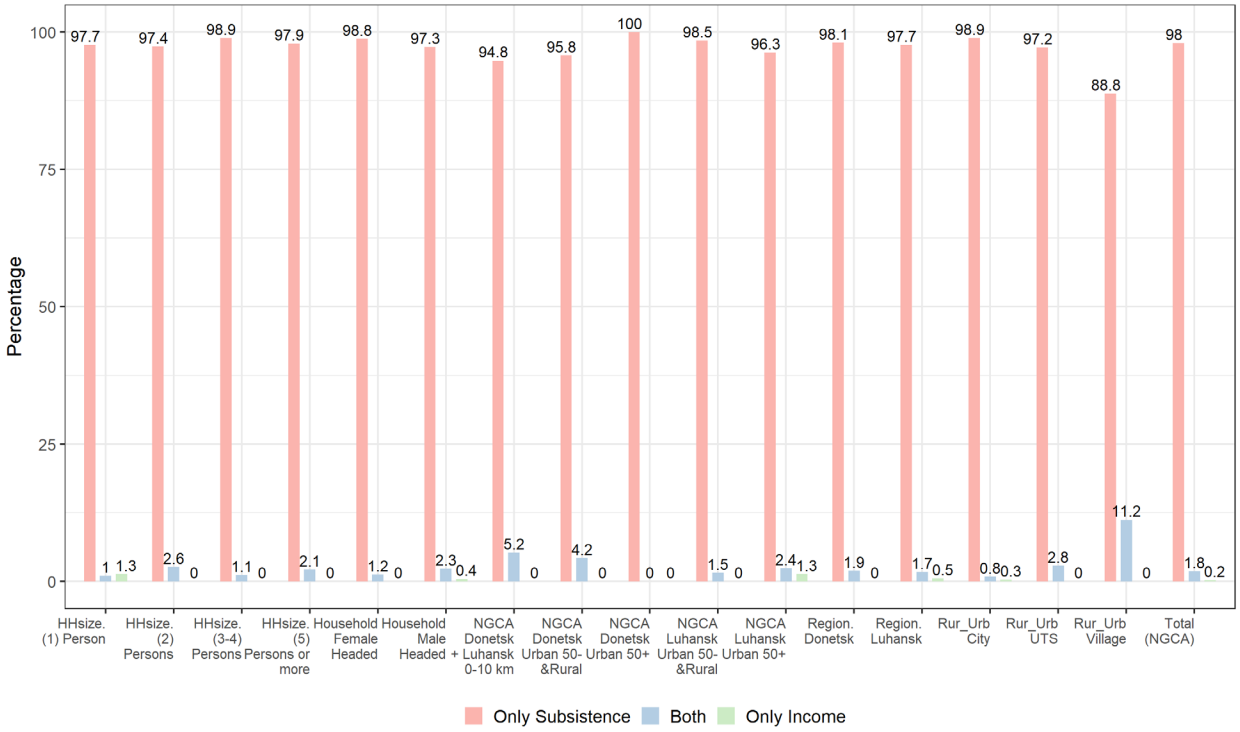


Figure 27. Reasons for growing crops



The crop producers faced various difficulties in growing their crops as revealed by the households in the studied areas. The outbreak of pests and diseases comes in the first place as the main difficulty faced by crop producers, being reported by 18.1%. The incidence of drought comes second as reported by 15.4% of the households. Figure 28 shows the other reported difficulties according to their magnitude starting from the environmental adversaries of the form of heavy rain, wind or flood (10.1%) followed by the lower irrigation water services than usual, reported by 6.2% of the households. The lack of or higher costs labour force is also demonstrated as production difficulty by (4.3%) followed by the difficulties accessing fertilizers, seeds and pesticides (4.1%) and the sickness of household member as reported by 3.7%. Somehow homogenous rates of crop producers' difficulties are common across locations and population groups.

Livestock Production

The main aspect of livestock sector is its minor share in the surveyed areas as it is involved by 69 households forming 7.5% of the population and 17.7% of those who are involved in agriculture. The following paragraphs will highlight the main aspects of livestock production.

The main animals raised by households in NGCA are poultry, cattle, pigs, small ruminants and others. Figure 29 shows that poultry producers come in the first place as 36% of households declared raising livestock followed by cattle producers by 11%. Then comes pig producers (9%) and households who keep small ruminants (8%). The distribution of the share of different kinds of animals raised b households across different locations and population groups is slightly heterogeneous as seen in the graph below.

Figure 28. Main reported problems in growing crops

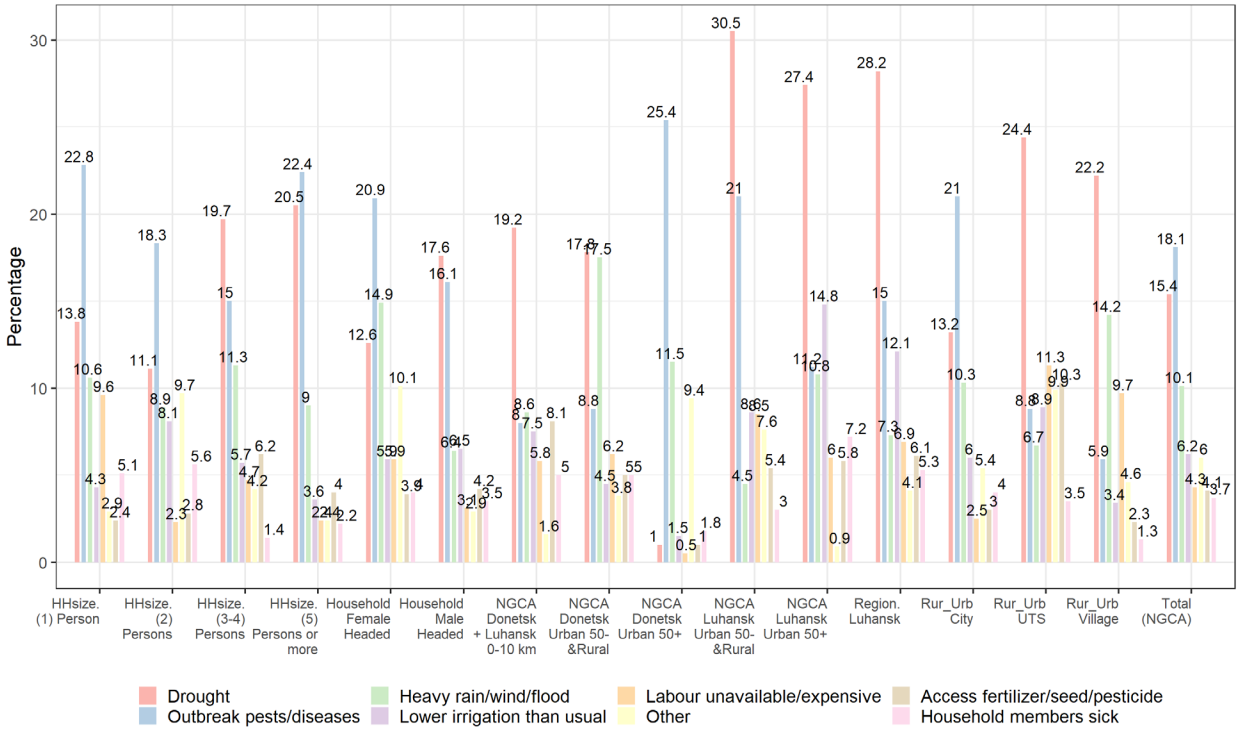
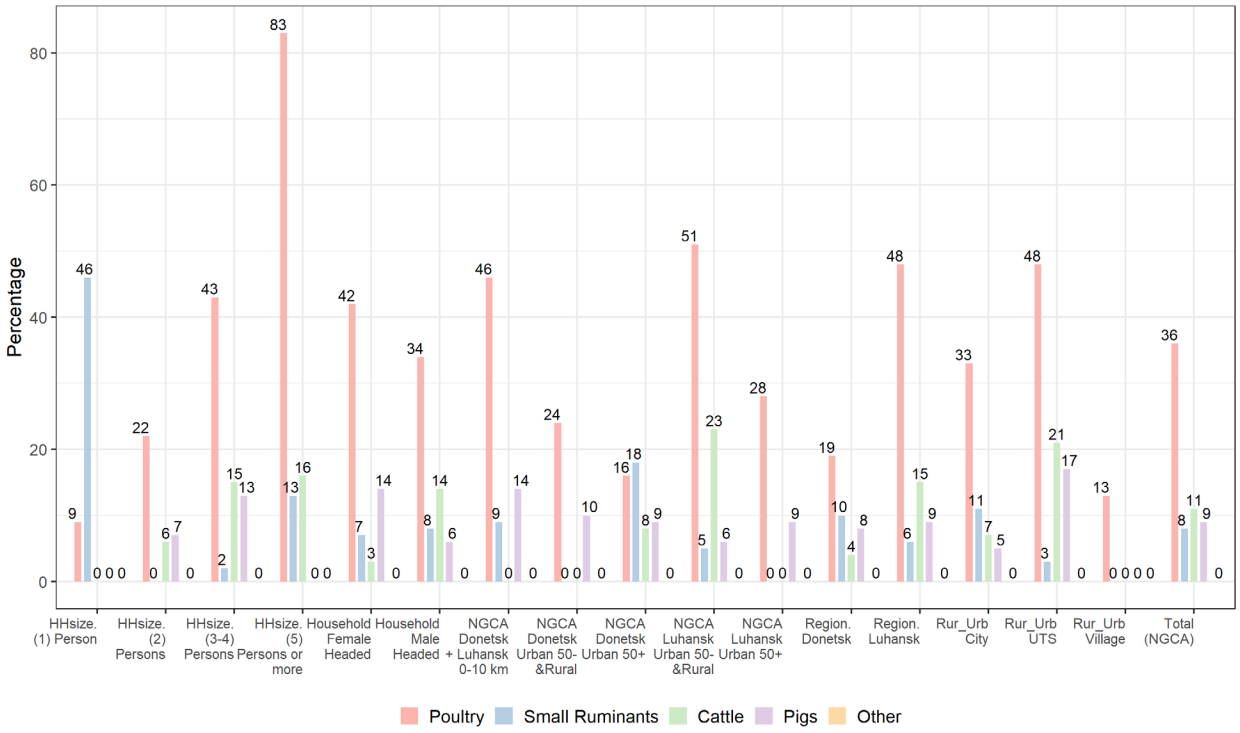
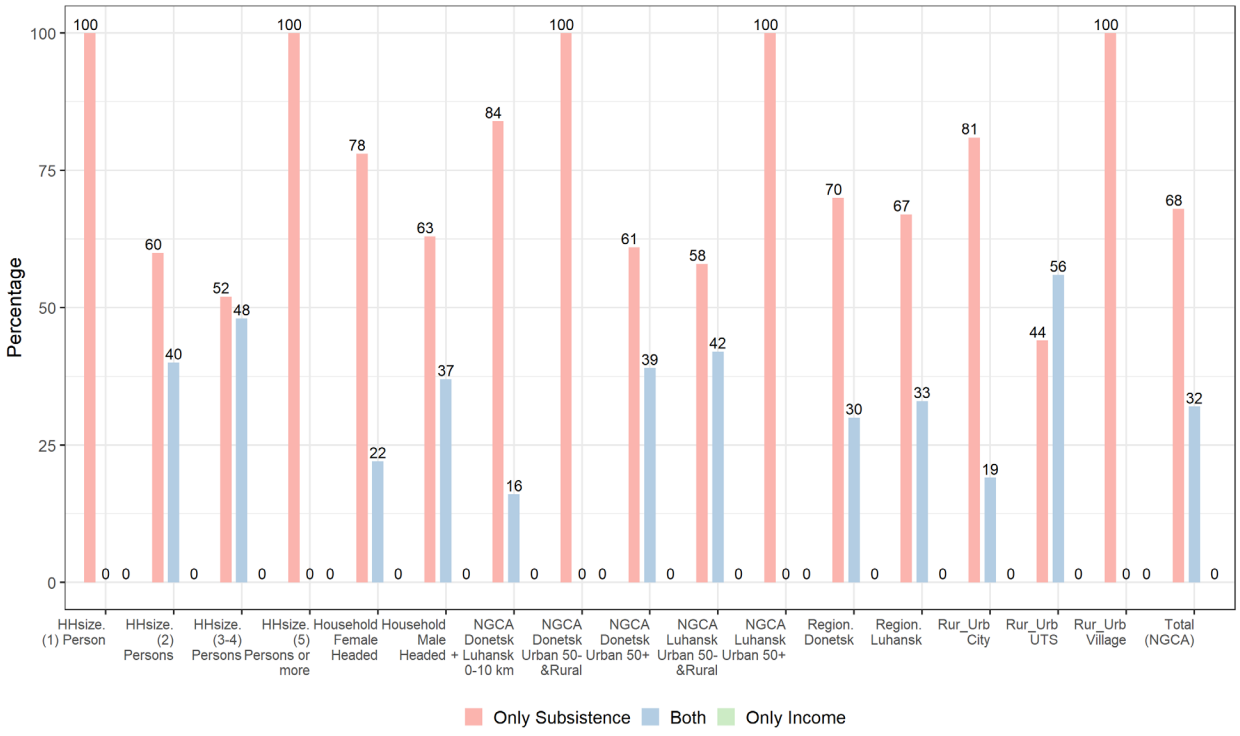


Figure 29. Relevance of livestock raising activities by type of animal



As for the crops, households' engagement in animal production in this area is essentially for complementing their own food consumption, contributing to their food security. Figure 29 reveals that the majority of the households (68%) raise animals only for self-consumption. In addition, 32% of the households are raising animals for both income as well as for their own consumption. However, none of the households declared to keep animals only for the income generating purpose. Different percentages are shown across different locations population groups maintain the prevalence of subsistence aspect of livestock production.

Figure 30. Reasons for raising livestock



Conclusion

In the conflict-affected regions of Eastern Ukraine, the Food Security and Livelihoods Assessment that is based on FIES methodology (Food Insecurity Experience Scale) offered a comprehensive overview of conflict-affected households' food security and livelihood conditions. 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."

In terms of income sources, 50% of households derive income from pensions, followed by 20% from non-agricultural wages and 15% from humanitarian/social assistance. According to the FIES post-winter assessment, humanitarian and social assistance ranked second in terms of income sources in NGCA. The highest reliance on pensions is among single-person households (77%), which is indicative of the region's vulnerability. 7% of households reported non-agricultural and 4% own-agricultural sources of income. Two-thirds of surveyed households rely on a single source of income, which indicates a high level of vulnerability and shocks due to the lack of diversity in their sources of income. As an example, pensions and non-agricultural wages contribute approximately 75% of the total household income, with 34.8% of the represented population receiving the majority of their income from pensions compared to only 24.1% of 75% or more from non-agricultural wages.

A total of 80.3% of households in NGCA experienced stability in income during the reference period from July-September, but 16.7% experienced deterioration in income during the same period. It is important to emphasize that income stability/instability is not specific to one location or population group, but is distributed across different locations and populations. In the 0-10 km buffer zone, most households, particularly those with fewer members and those headed by women who do not have paid employment, rely on more than one source of income. Additionally, the economic dependency ratio is somewhat higher in NGCA, indicating that families in the study area are under a greater economic burden than in the entire country.

As debt is an indicator of economic vulnerability, 19% of households in NGCA took on debt that is significantly higher compared with the post-winter assessment when we had 12.4% of households under debt. This could be one of the factors of possible increased food insecurity in the next period. Households in Donetsk region, in the villages, in big families (5 or more members), and among female-headed households are more prone to taking debts in order to pay for medical services, utilities, rent and agricultural inputs with a non-negligible to pay for food. The most common household shocks are inflation and rising prices of basic commodities, followed by illness and related health expenditures. Other shocks include the loss of a family member, damage caused by military operations, and a poor harvest.

19.68% of households experienced moderate or severe food insecurity in the reference population. In comparison with the post-winter FIES assessment, when we had 17.32% of households under moderate or severe food insecurity, the increase in food insecurity prevalence is not statistically significant. However, we should monitor closely the development of the situation to detect the possible rapid upsurge. In Donetsk and Luhansk 0-10 km, the prevalence of moderate and severe food insecurity is the highest in NGCA.

On average, 15% of the total households in NGCA income came through social, humanitarian, or other kinds of assistance with female headed households receiving more assistance than male headed households. Of the 9,6% households that reported receiving assistance, nearly 70% were somewhat or highly satisfied, and 16% were unsatisfied. The assistance received by households within a buffer zone of 0-10 km was rated as satisfactory by 65-74% of the households.

41.6% of households interviewed are engaged in some agriculture activity, with households in Luhansk engaging in the activity at a greater rate (44.7%) compared to Donetsk (39.7%), especially households in the villages (59.1%). 89.7% of households are engaged in vegetable production, followed by fruits (41.5%), livestock (17.7%), crop projection (14.9%), beekeeping (2.2%), and food gathering by (5.8%) and fishing (1.1%). A higher proportion of households grows vegetables. In addition, 0.9% of households report growing grains, and 4.4% produce fodder; other crops, such as oilseed, cucurbits account for 16.3% of household production. Almost all of those (98%) who grow crops as the key reason indicated own consumption, which is statistically significantly higher compared to the post-winter assessment (88%). Hence, the significance of growing crops for own consumption increased. That is also evidence for the necessity of increasing of agricultural assistance.

Pest and disease, drought, 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.

Poultry, cattle, pigs and small ruminants and others are raised in NGCA with poultry accounting for 36% followed by cattle (11%), pig (9%) and small ruminants (8%) with 32% of the households raising animals for income and consumption.

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 “moderate and severe” 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 “severely” 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 not only in rural area, but also for those residing in urban locations who are engaged in agricultural practices.

- Facilitating access to markets, 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. To promote people’s access to fresh food and small producers’ access to income-generating opportunities it is recommended to implement projects targeted at restoring and /or building market linkages, including value chains and market infrastructure.

- Increase efforts to diversify livelihoods for households who have lost their primary livelihoods by investing in agriculture (including crops and 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.

- When developing targeting of beneficiaries, it is also recommended to prioritize those who are exposed to shocks at the highest extents: people residing in villages, women-headed households, households with number of members over 3 and especially over 5, people residing in 10 km areas along the “contact line”.

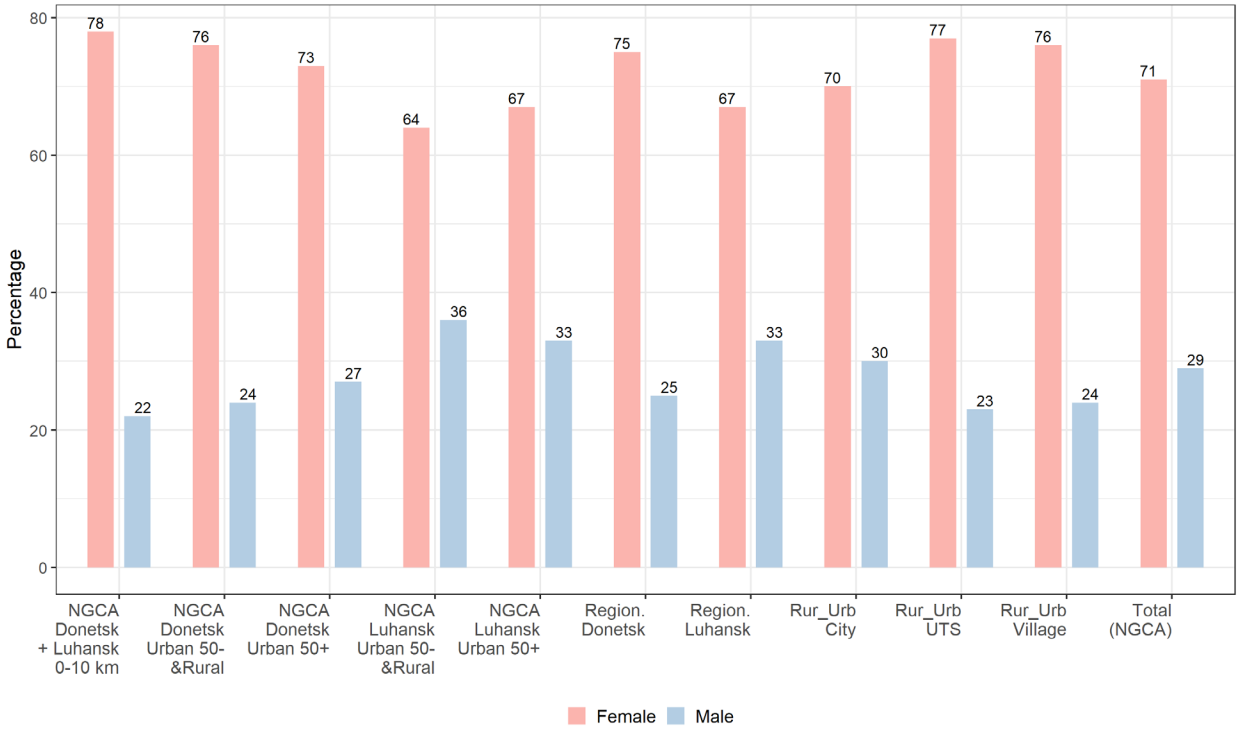
Annexes

Annex 1. Sample and household characteristics

The share of respondents' sex

The random sample favours female 71 percent compared to 29 percent of male respondents who generally answered the call in NGCA zone. Figure A1.1 shows that this percentages are quite consistent through different locations with the highest percentage of female respondents in the 0-10 km buffer zone (78%). Female respondents were more observed in Donetsk (75%) than Luhansk (67%) region.

Figure A1.1. Distribution of respondent sex



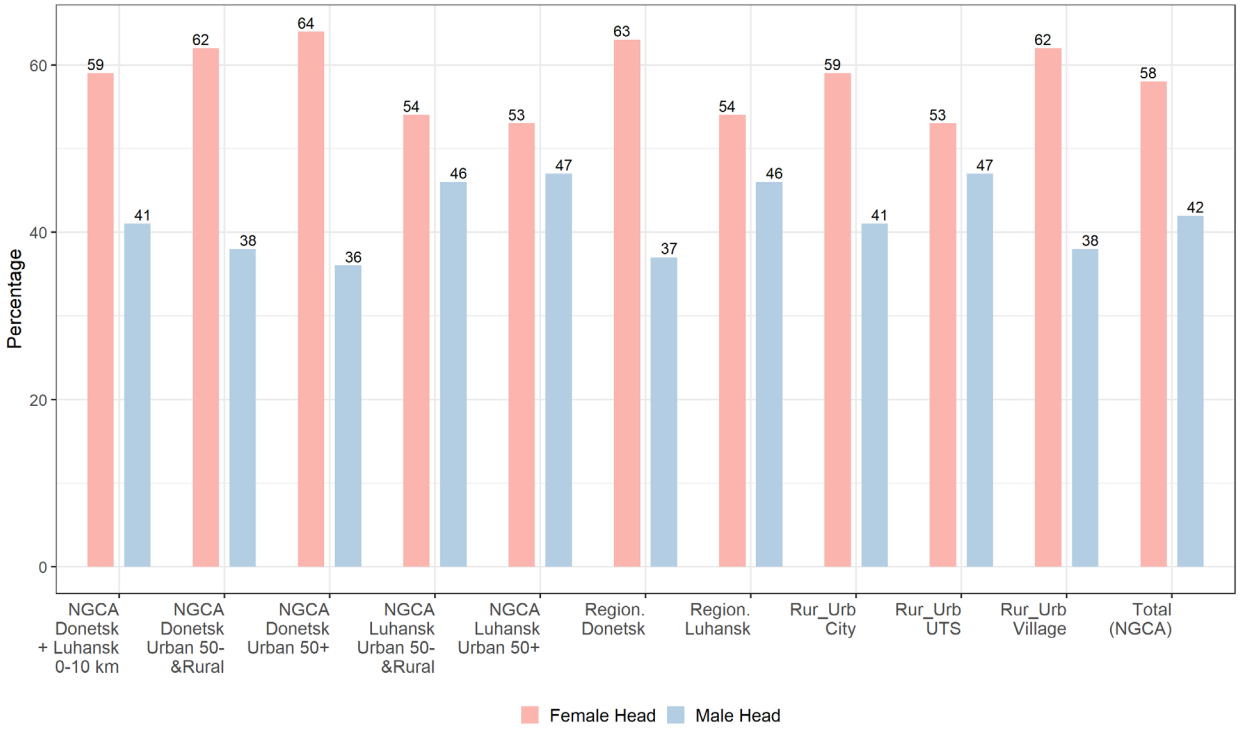
Households Characteristics:

This section is devoted to observing the main characteristics of the surveyed households in the studied area as a whole and disaggregated to the level of each single region (Oblast) and to the target locations and population groups.

The share of the households' head sex

Similar to the share of the respondents' sex, the sex of the households' head is dominant by females. Figure A1.2 shows that 58% of households are led by females in NGCA areas. However, the most characterised area by male headed households is the UTS by 47%.

Figure A1.2. Distribution of the household head sex



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 shows that the age category of "60 year and above" is the most frequent age group of the household head (53.5%) followed by the middle age group (46-59) that covers 23.9%. The less frequent age group, instead, is the youngest group (25 years and below (0.4%). The only location that observes different characteristics is the 0-10 km buffer zone, which has higher share of age groups (26-45) than the (46-59) by 21.7% and 19.2% respectively.

The share of the households' members' age group

The composition of the households explicitly reveals that the elderly category (60-year and above) is the dominant one within families as it is presented in 64% of the surveyed households in NGCA. Figure A1.4 shows that older population seems to be more dominant in "NGCA Donetsk Urban 50- & Rural", where 72% of people were belonging to elderly group. The elderly category is observed more in Donetsk (70%) than Luhansk by 59%. Although they have homogenous distribution, the location that characterised by the highest presence of children below 18 is the villages by 36%.

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 (49.2%) followed by the "Complete higher/graduate school" education (30.5%) and the complete secondary education by (14.5%). The distribution of these education levels of the head of the household seems to be similar in both oblasts, Donetsk and Luhansk, with higher

share of the complete school in Luhansk (35.4%) compared to Donetsk by 26.1%. But in, general, urban areas show higher levels of the higher education category than the villages (32.7% vs 16.4% respectively).

Figure A1.3. Distribution of the household head age category

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

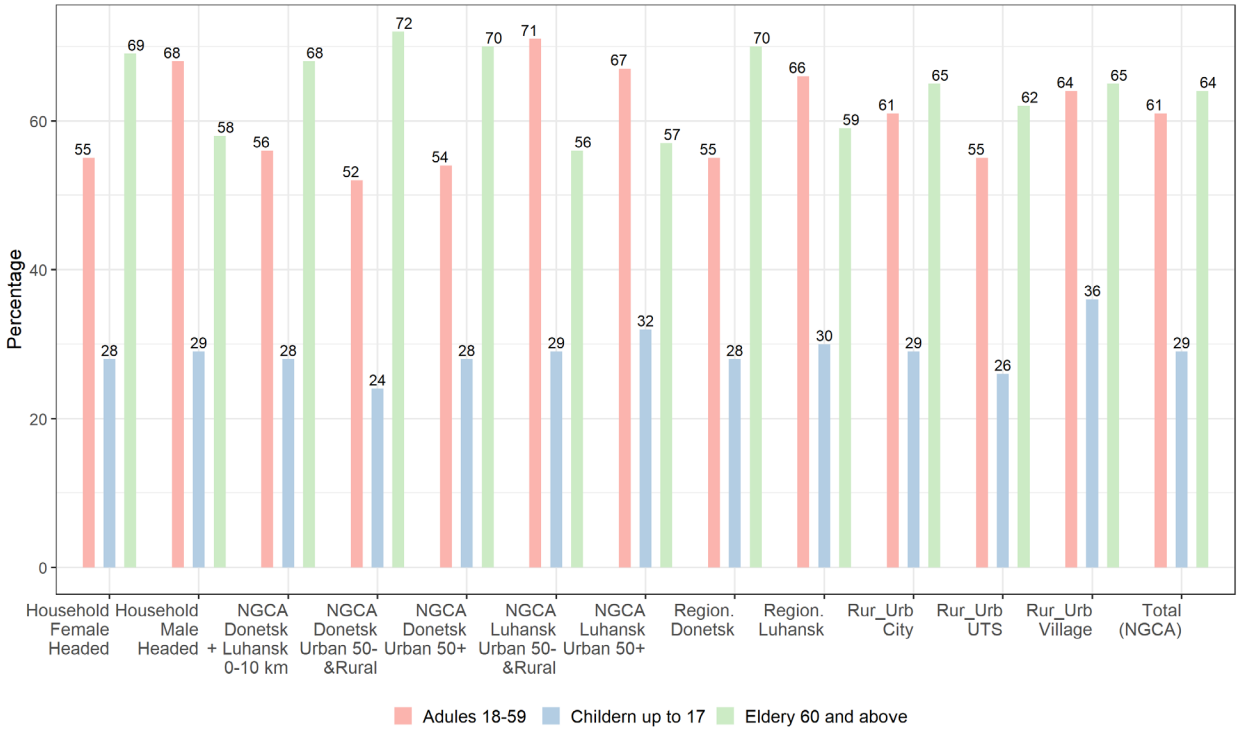
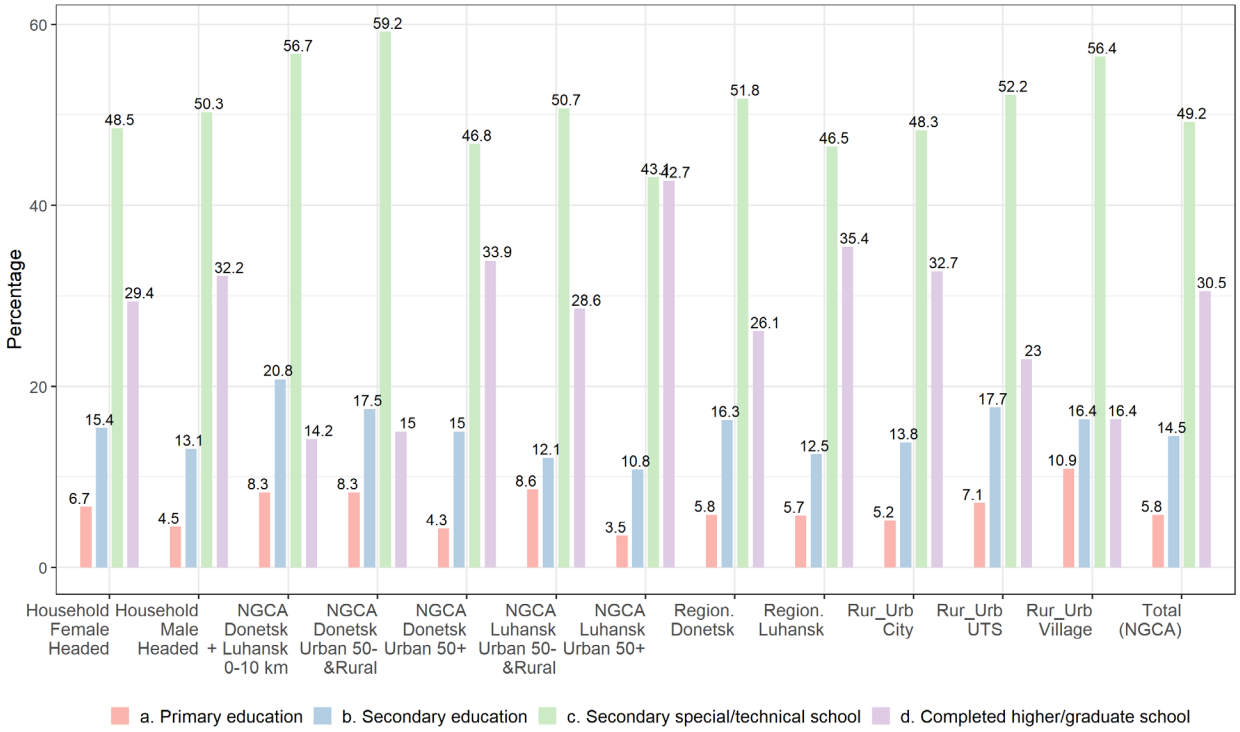


Figure A1.5. Distribution of the household head education categories



The higher education level of the households' members

In spite of the probable impact of including different generations, the education level categories of households' member show similar distribution to those of the head of the household, putting the "Secondary Specialised/technical school" education category at the top of the rank (42.3%) as shown by Figure A1.6 below. It is notable the presence of almost all categories except the "no education" that seems to be missing indicating the presence of a minimum education level in the surveyed areas. The distribution of these education levels seems to be quite different across locations, stressing the dominance of secondary education compared to higher education in rural areas (53.5% vs 37.3%). Except for "NGCA Luhansk Urban 50+" where completed higher education comes first by (46.5%) compared to the secondary special/technical school (36.2%). The figure below shows the distribution of the higher education level of the household member across locations and population groups.

Employment of the head of the households

The employment status of the head of the household is another important determinant of the economic conditions of those households and their food security levels accordingly. Most of the households that revealed their employment status (59.1%) declared that the household head is "Retired" as shown in Figure A1.7. The second and third employment categories are "non-government employee" (14.6%) and "government employee" (11%). The distribution of these categories is somewhat consistent across locations, with a complete dominance of the "Retired" category in "NGCA Donetsk Urban 50-&Rural" area, the city and male headed households.

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

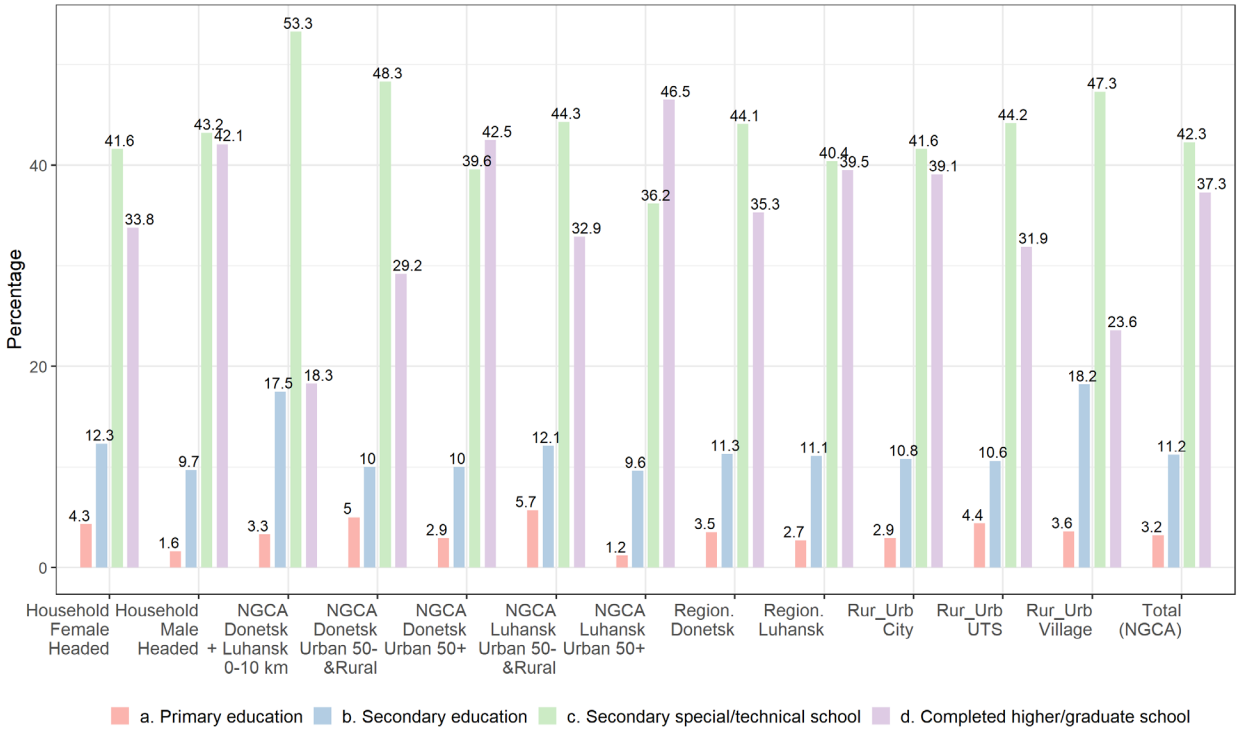
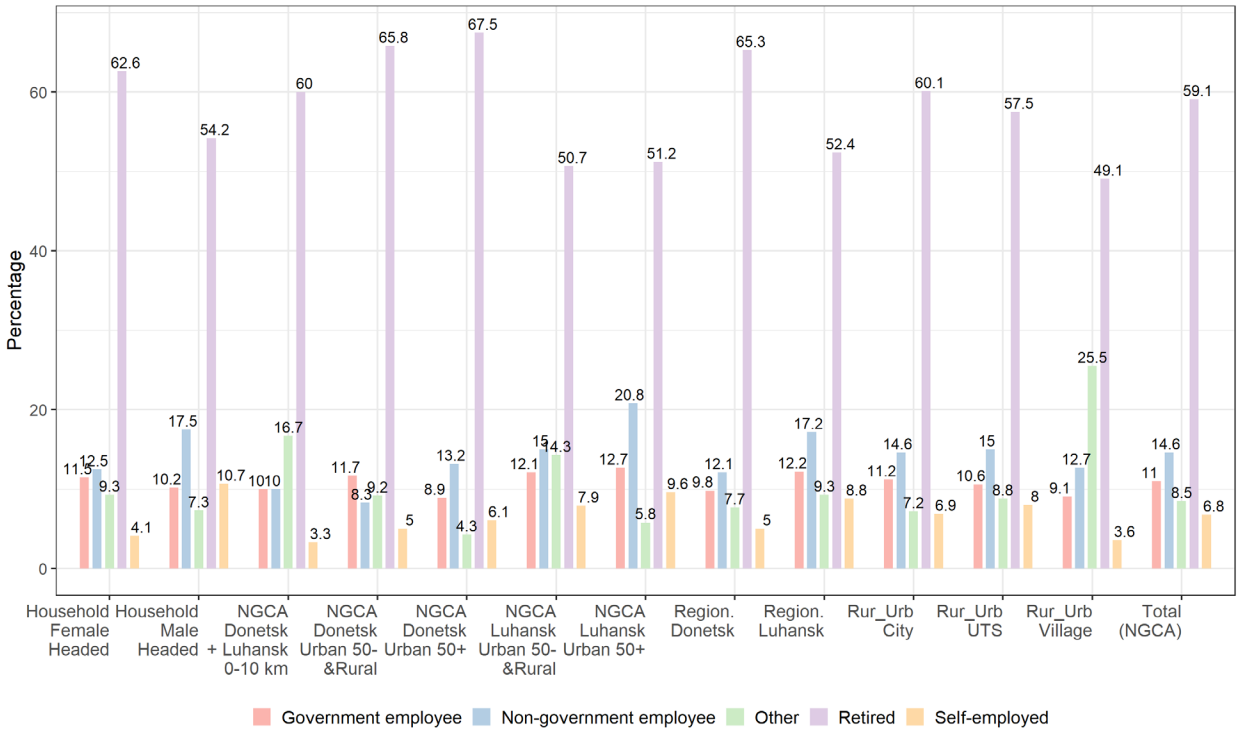


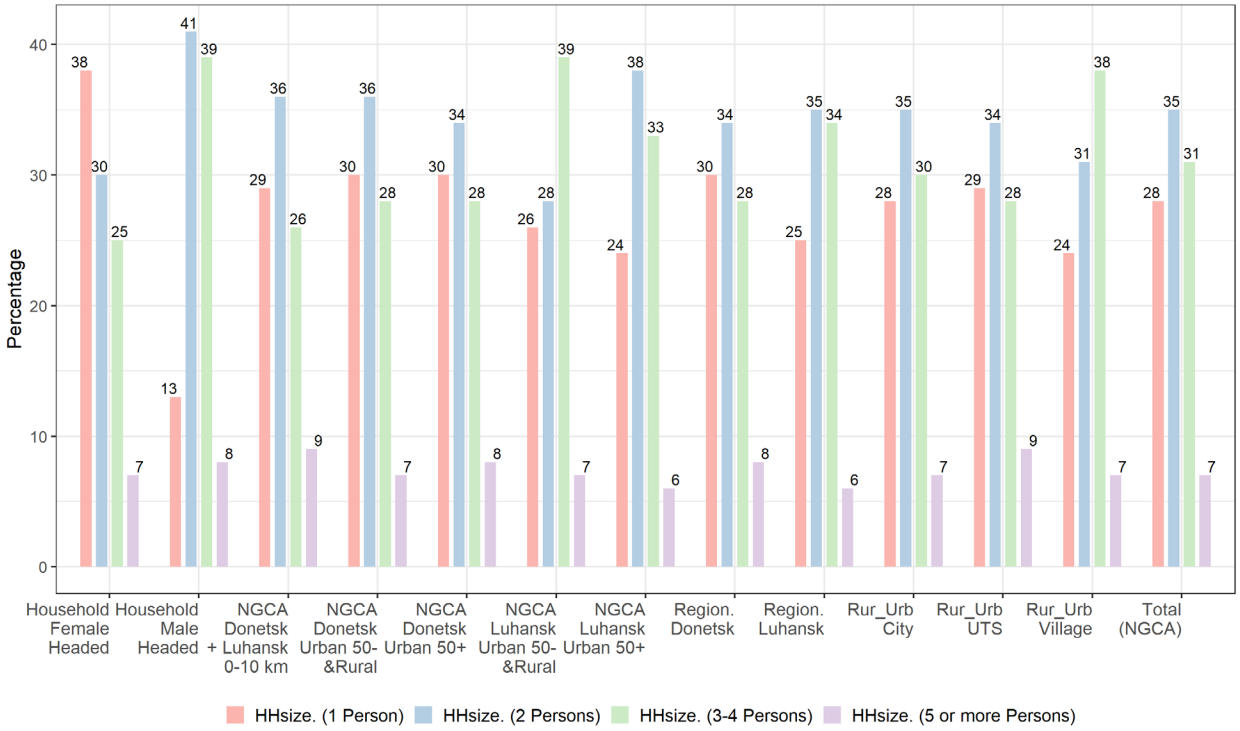
Figure A1.7. Distribution of the household head employment categories



Households' composition

The dominant household type in NGCA areas is the middle size "2 Persons" households (35%) followed by "3-4 Persons" category (31.5%). Figure A1.8 also shows that the single person households whose share is relatively high comes next by 28%. However, the big households "5 Persons and above" seem to be less frequent instead (7%). A similar distribution is dominant across locations and population groups.

Figure A1.8. Distribution of the household size categories



Households' residency status

The residency structure of the surveyed populations reveals the existence of mainly three categories as shown in Figure A1.9 below. While the "Ukrainian citizen" category is the dominant residency type that account for 86.2% of total households, the rest are mainly IDPS (8.2%). However, the data also show a little presence of Non-Ukrainian Citizens of merely 0.5%. This structure is quite homogenous among different locations and population groups.

Households' vulnerabilities

The households' vulnerability situation is another determinant factor that would impact their income, livelihoods and food security situation as a sequence. Figure A1.10 shows the presence of different vulnerabilities that are dominated by incidence of chronic illness (53.5%), which reveals a health problem and/or health care issue in the NGCA area. While the presence of this kind of vulnerability is more or less consistent among locations and population groups, it is more pronounced for the female headed households (58.7%), the small household sizes (70.8%) and in the villages (60%). The second common vulnerability type is the "Unemployed" category (24.9%) followed by the presence of physical or mental disability "Physically/mentally disability" (18.8%) and the "Single Parent" (11.7%). The "Veteran of war/ATO" comes then by 2.9% followed by the existence of foster children in the household (1.2%).

Assumingly, all these kind of vulnerability categories are connected to the effect of the conflict on the households in the dispute areas. The distribution of these vulnerabilities across locations and population groups is somewhat homogenous.

Figure A1.9. Distribution of the household residency categories

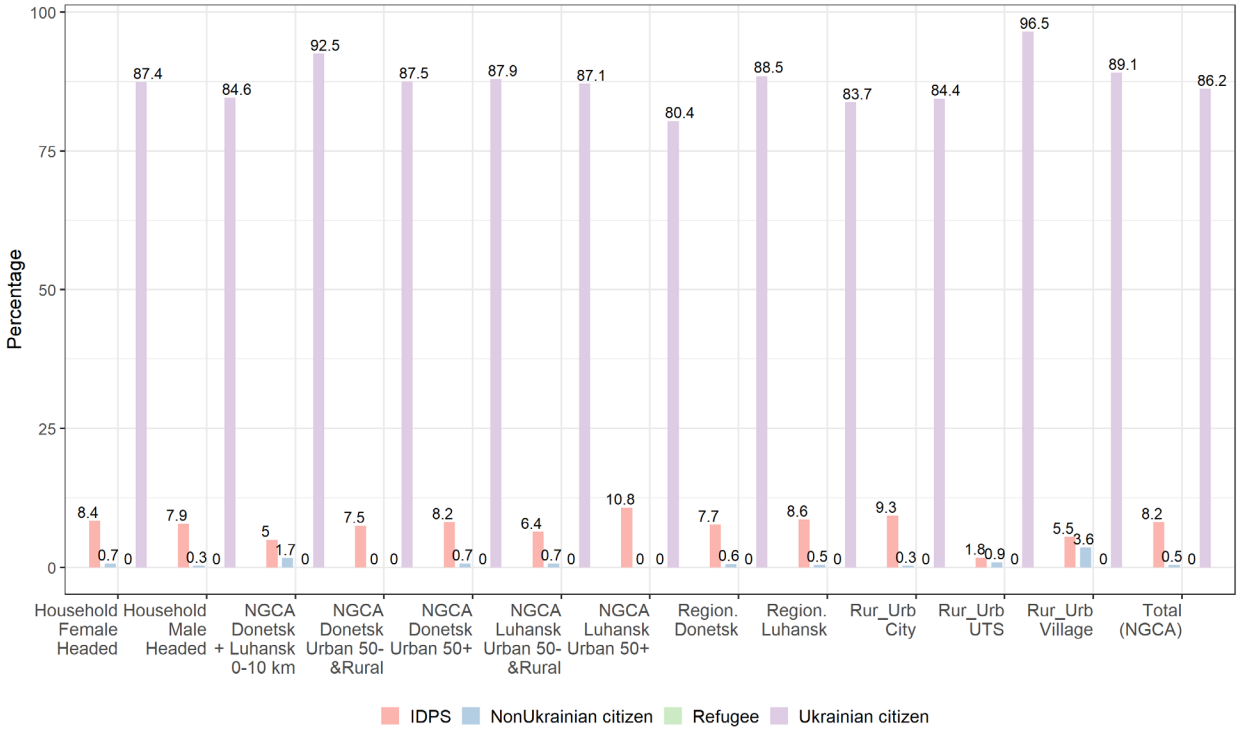
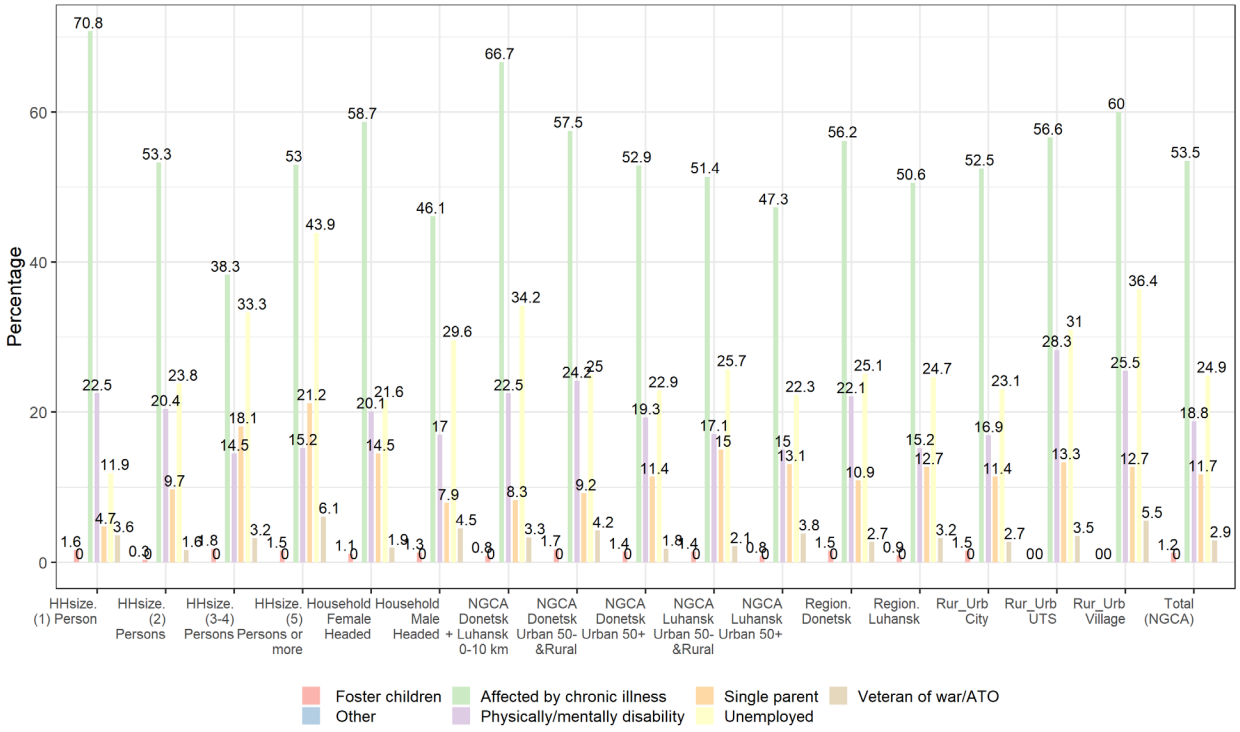


Figure A1.10. Distribution of the household vulnerability categories



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?	Single Choice	1 = Pass Phone 2 = Ineligible

Q#	Q Name	English	Question Type	Skip Pattern
		1) Yes 2) No		
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 5) Other 6) Don't know	Single Choice	1-6= HH. Size

Q#	Q Name	English	Question Type	Skip Pattern
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
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

Q#	Q Name	English	Question Type	Skip Pattern
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) 8) Complete higher education 9) Completed graduate school 10) Don't know / Refusal to answer	Single Choice	1-10= Education 2

Q#	Q Name	English	Question Type	Skip Pattern
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
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

Q#	Q Name	English	Question Type	Skip Pattern
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:_____ 10) Don't know / Refusal to answer		1-10 = Main Income Source
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
C8	Debt Reason	What was the reason for taking out these debts? 1) To pay for food	Multiple Choice	1-11 = Debt Outstanding

Q#	Q Name	English	Question Type	Skip Pattern
		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		
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% 98) Don't know 99) Refuse	Single Choice	1-99 = FoodMainSrc
D3	Food Main Src	In the last three months, what has been the main habitual source of food for your household? 1) Own production	Single Choice	1-6 = FIES Worried

Q#	Q Name	English	Question Type	Skip Pattern
		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		
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 2) NO 98) DON'T KNOW 99) REFUSED	Single Choice	1-99 = FIES Skipped
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?	Single Choice	1-99 = FIES Ateless

Q#	Q Name	English	Question Type	Skip Pattern
		[OPERATOR: SINGLE RESPONSE] 1) YES 2) NO 98) DON'T KNOW 99) REFUSED		
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 98) DON'T KNOW 99) REFUSED	Single Choice	1 = FIES Ranout_Freq 2-99 = FIES Hungry
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)	Single Choice	1-99 = FIES Hungry

Q#	Q Name	English	Question Type	Skip Pattern
		3) Often (every week) 98) Don't know 99) Refused		
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? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO 98) DON'T KNOW 99) REFUSED	Single Choice	1 = FIES Wholeday_Freq 2-99 = Any FIES
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]	Single Choice	1-99 = Any FIES

Q#	Q Name	English	Question Type	Skip Pattern
		1) Rarely (once or twice) 2) Sometimes (in some weeks but not every week) 3) Often (every week) 98) Don't know 99) Refused		
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
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

Q#	Q Name	English	Question Type	Skip Pattern
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] 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 = Withdraw School
D19	Withdraw School	**Withdraw children from school**? [OPERATOR: SINGLE RESPONSE] 1) YES 2) NO – because it wasn't necessary	Single Choice	1-5 = Reduce Health

Q#	Q Name	English	Question Type	Skip Pattern
		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		
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
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

Q#	Q Name	English	Question Type	Skip Pattern
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] 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 = Other_coping
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	Single Choice	1-6 = Assistance Need

Q#	Q Name	English	Question Type	Skip Pattern
		3) Somewhat unsatisfied 4) Very unsatisfied 5) Don't know 6) Refuse		
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 7) DON'T KNOW 8) REFUSED	Single Choice	1-8 = Crop Prod Expect

Q#	Q Name	English	Question Type	Skip Pattern
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
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				

Q#	Q Name	English	Question Type	Skip Pattern
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 **5) Other (specify)** 6) REFUSED	Multipe Choice	1-5 = Main Animal 6 = Difficulty Raising Animals If it was 1 in F2.1 go to F2.7
F2.3	Main Animal	**Which animal would you say <u>has</u> 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