

IDENTIFIERS OF FOOD INSECURE HOUSEHOLDS IN UKRAINE REVEALED

July 2023

Amidst enduring **full-scale war**, ensuring food security and access to healthy nutrition becomes an immensely challenging issue. The effects of mass destruction, migration, disrupted business activity and logistics, and decreased income exacerbate food insecurity, impacting both the availability and access to nutritious diet.

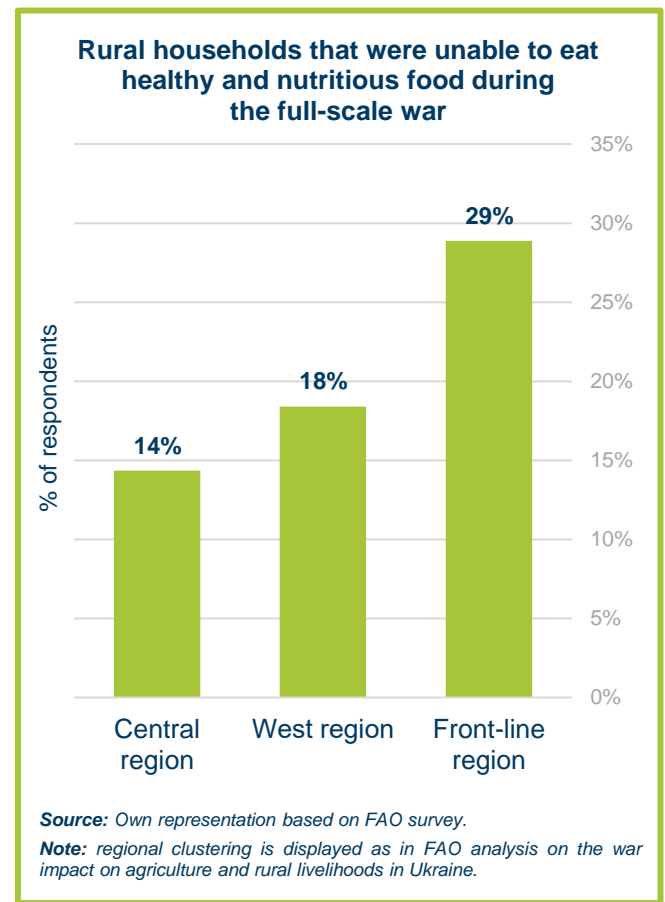
The brief by Center for Food and Land Use Research at Kyiv School of Economics is based on a nation-wide rural household survey¹ conducted by the Food and Agriculture Organization of the United Nations (**FAO**) on September-October 2022. It **discovers the markers of food insecure population in rural areas**.

OBJECTIVES OF THE STUDY

Prior to the full-scale war, the share of the rural population that could not provide sufficient nutrition in rural areas was 3 times higher than in urban areas (6% versus 2%)². Nevertheless, **Ukraine did not have major issues with hunger and scarce food**³. Therefore, while assessing food security among rural households in Ukraine during the invasion, the focus is not only on the indicators of actual food availability and access to it, but as well on **nutritional quality, variety of food** available and affordable, as well as **food sufficiency**.

The **objective** of the study is **to profile the groups** that are particularly exposed to risks concerning food insecurity during the full-scale war in Ukraine. This may help to implement a **well-targeted approach**, which consequently could have the greatest impact in addressing food insecurity among rural households in Ukraine during the wartime.

GENERAL FINDINGS



More than half of rural households spend >50% of their total expenses on food, households along the frontline – over 60% of population. Zaporizka oblast is of utmost concerns with **79%** of rural families allocating over half of their expenditures on food.

¹ The Food and Agriculture Organization of the United Nations (FAO) conducted a country-wide (excluding temporarily occupied territories) survey during September-October 2022 targeting 5,230 rural households across Ukraine. The survey aimed to gather essential evidence on the war's impact on rural livelihoods, informing programming decisions and supporting advocacy efforts.

² State Statistics Service of Ukraine. 2021. *Household Self-Assessment of Their Income Level*. Kyiv. https://www.ukrstat.gov.ua/druk/publicat/kat_u/2022/zb/07/sdrsd_21.pdf

³ The Economist Intelligence Unit. 2021. *Global Food Security Index*.

RF's full-scale military invasion of Ukraine since February 2022 has had devastating consequences for the country. The FAO study⁴ shows that rural population, 72% of which are involved in agricultural production, struggle with their operations⁵, experience significant increase in production costs⁶ and decline in household's income⁷. The **total damages and losses** incurred by these agricultural producers are **\$2.25 billion** just in the first six months of the invasion. **Purchasing power hugely deteriorated**: by April 2023, domestic food prices are 35% higher than before the invasion⁸.

The study shows that 14% of the population in the central region of Ukraine were unable to eat healthy and nutritious food, 18% in the West, and 29% along the front-line. In the conditions of deprived food affordability and access to nutritious diet, the population is under high risk of physical health issues and the overall resilience of individuals and communities is threatened.

FOOD INSECURITY MARKERS

Proportions in this analysis refer to the abovementioned survey conducted by the FAO. Odds comparisons are derived from Binomial Logit regressions which incorporate food security indicators as dependent variables and household characteristics as explanatory variables from the FAO survey.

Marker 1. Location in active combat areas factor plays major role in defining food security. Overall, **one in every four** (23%) of the rural households are unable to eat healthy and nutritious food in such areas. The problem is even more challenging along the front-line⁹, where the proportion is almost 29%. Moreover, 8% of respondents in the front-line regions have to skip one of the main meals because of lack of resources.

Marker 2. Specific household composition features and characteristics help to determine the potential

groups at risk. Analysis reveals that **female-headed households** show higher levels of vulnerability to food

Food Insecurity Markers – key highlights

Marker 1. Location in active Combat Actions. 23% of rural households nationwide are unable to eat healthy and nutritious food, rising to 29% along the front-line regions.

Marker 2. Female-led household. Female-headed households exhibit higher vulnerability to food insecurity: 28% of female-headed households experience problems with having a healthy and nutritious diet.

Marker 3. Socially vulnerable members. Households with socially vulnerable groups had nearly twice the odds of facing insufficient access to an adequate diet compared to households without such members.

Marker 4. Internal Displacement. Displaced households had more than double the odds of experiencing inadequate access to nutritious and healthy diets compared to residents and returnees.

Marker 5. Debt Burden. Households with pre-war debts report higher instances of food problems: 13% had to forge a meal, compared to less than 7% of households without outstanding debts. Access to finance reduces the odds of being exposed to food scarcity by nearly 30%.

Marker 6. Engagement in agriculture positively affects food security. Families engaged in agricultural production demonstrate lower susceptibility to food insecurity: just 5% among farming households had to skip meal compared to 14% of non-agricultural households.

insecurity compared to those headed by men. For instance, 28% of rural households headed by a female

⁴ FAO. 2022. *Ukraine: Impact of the war on agriculture and rural livelihoods in Ukraine – Findings of a nation-wide rural household survey, December 2022*. Rome. <https://doi.org/10.4060/cc3311en>

⁵ According to the survey, 25% of the rural population reported stopped or reduced agricultural production due to the war.

⁶ 72% of surveyed household involved in crop production and 64% of the households involved in livestock production reported increase in agricultural production costs.

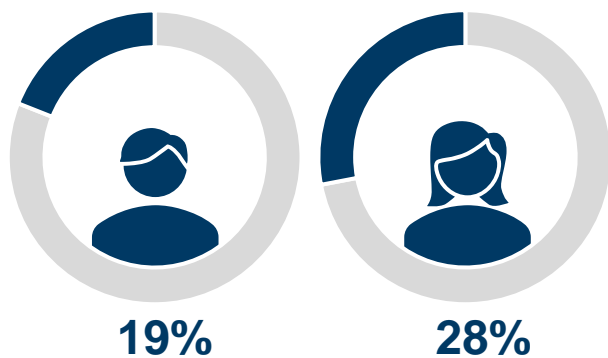
⁷ According to the survey, 55% of the rural households faced income reduction during the full-scale war, including 32% that reported significant or drastic decrease in income (from 25% to over 50%).

⁸ National Bank of Ukraine.

⁹ **Regional clustering** is performed as in FAO analysis on the impact of war on agriculture and rural livelihoods in Ukraine. **Western oblasts:** Chernivetska, Ivano-Frankivska, Khmelnytska, Lvivska, Rivnenska, Ternopiiska, Volynska and Zakarpatska. **Central oblasts:** Cherkaska, Kirovohradska, Kyivska, Odeska, Poltavska, Vinnytska and Zhytomyrska. **Front-line oblasts:** Chernihivska, Dnipropetrovska, Donetska (covering only the Ukrainian controlled parts of the oblast), Kharkivska (covering only the Ukrainian controlled parts of the oblast), Mykolaivska, Sumska and Zaporizka (covering only the Ukrainian controlled parts of the oblast).

have problems with having healthy and nutritious diet, up from 19% of male-headed households. This may be explained by the gender pay gap present for the economy of Ukraine. In 2021, an average monthly wage of a female worker in agriculture constituted 78-89% of a male worker¹⁰.

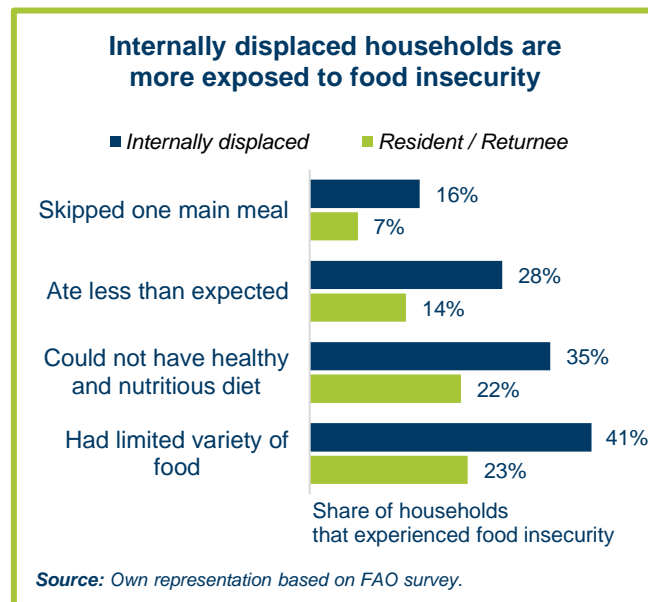
Share of rural households headed by male / female that faced problems with having nutritious and healthy diet



Source: Own representation based on FAO survey

Households comprising of **socially vulnerable groups**, including disabled or chronically ill individuals, welfare beneficiaries, or pensioners, are more likely to suffer from food insecurity. The odds of a household with socially vulnerable members of having insufficient access to an adequate diet are nearly **two times higher compared to a household without such members**. The households with socially vulnerable members are identifiable by the government as they are usually recipients of transfers or social assistance programs. This is important for pre-identification of those who may be in need the most.

Marker 3. Internal displacement is an indicative factor associated with increased risks of food insecurity¹¹. Our findings exhibit that rural households that have been displaced from their homes have **more than double the odds** of experiencing inadequate access to nutritious and healthy diets compared to residents and returnees.



Marker 4. Debt burden is another traceable indicator associated with food insecurity risks. Households with debt prior to the full-scale war more frequently face problems with nutrition. Around **13% of households that have had pre-war debts** reported that at least one member of their household skipped the main meal during a day due to lack of resources. In comparison, this figure is less than **7% among households without any pre-war outstanding debts**. Moreover, it's important for the families to **have access to finance in case of critical need – this decreases the odds of being exposed to food scarcity by nearly 30%**, according to our estimates.

Marker 5. Engagement in agricultural production positively affects food security of rural households. Families engaged in agricultural production demonstrate lower susceptibility to food insecurity, with **non-agricultural households having a prevalence of 14% in which family members have to skip at least one meal per day, compared to just 5% among farming households**. These farming households might not only experience higher levels of well-being, but also the advantage of direct access to food. An involvement in agricultural production allows them to cultivate and produce food for own consumption, reducing the dependence on external sources.

¹⁰ State Statistics Service of Ukraine. https://www.ukrstat.gov.ua/operativ/operativ2017/qdn/smzp_zs/smzp_zs_ek/smzp_zs_ek_u.htm

¹¹ FAO. 2019. *Special Report - FAO/WFP Crop and Food Security Assessment Mission to the Syrian Arab Republic*. Rome. <https://www.fao.org/3/ca5934en/ca5934en.pdf>

CONCLUSIONS

The full-scale war in Ukraine has significantly impacted food affordability and access to healthy nutrition among rural households. The findings reveal **high proportions of households unable to consume nutritious food, particularly in conflict-affected areas.**

Female-headed households and those with **socially vulnerable** members face heightened vulnerability to food insecurity. **Internally displaced households** and those burdened with pre-war **debts** are also at increased danger. However, rural households engaged in **agricultural production** demonstrate greater food security due to their direct access to food.

These insights provide a set of indicators for the government and humanitarian organizations to effectively target and address food insecurity of rural households during the war in Ukraine.

By identifying factors such as household composition, social vulnerability, displacement status, and debt burden, support can be more efficiently directed to those in need. This may have a positive impact on mitigating food insecurity and improving the well-being of affected population.

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