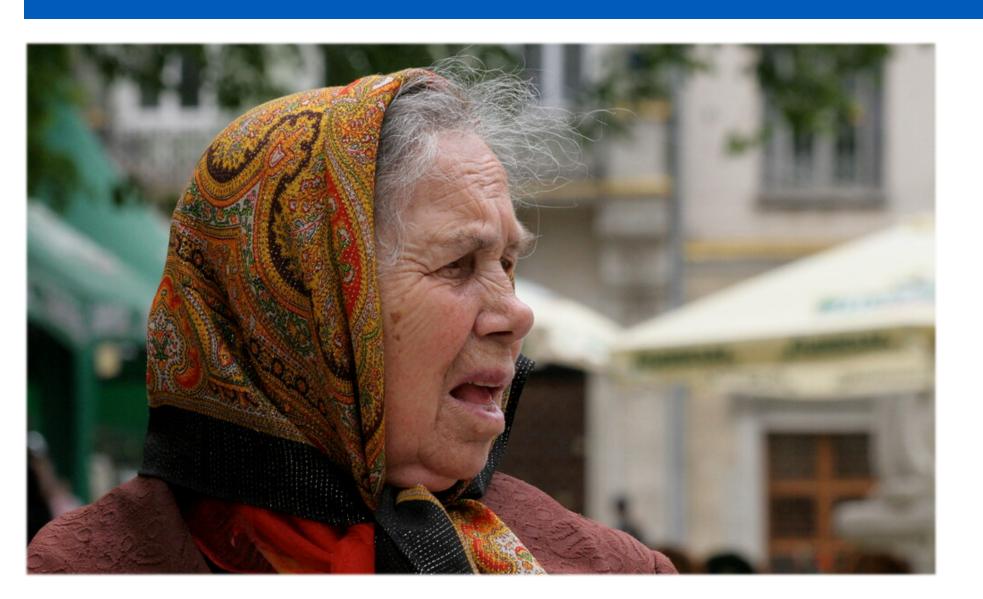
Internally Displaced Persons in Ukraine:

Vulnerability Assessment



INTRODUCTION

The ongoing conflict in Ukraine has forced thousands of people to flee their homes. According to the Ministry of Social Policy of Ukraine, as of October 7, 2019, the number of registered internally displaced persons (IDPs) exceeds 1.4 million.

According to the UNHCR mission in Ukraine, half of the IDPs are elderly people, and about 15% are children. IDPs face challenges which add to their vulnerability, including survival and physical security, limited freedom of movement, lack of employment, and inadequate housing opportunities.

This project identifies the *oblasts* (regions, or Level 1) of Ukraine with the highest concentration of internally displaced persons and the *oblasts* with a high concentration of vulnerability. It ultimately shows the *oblasts* with high concentrations of both.

SPATIAL QUESTIONS

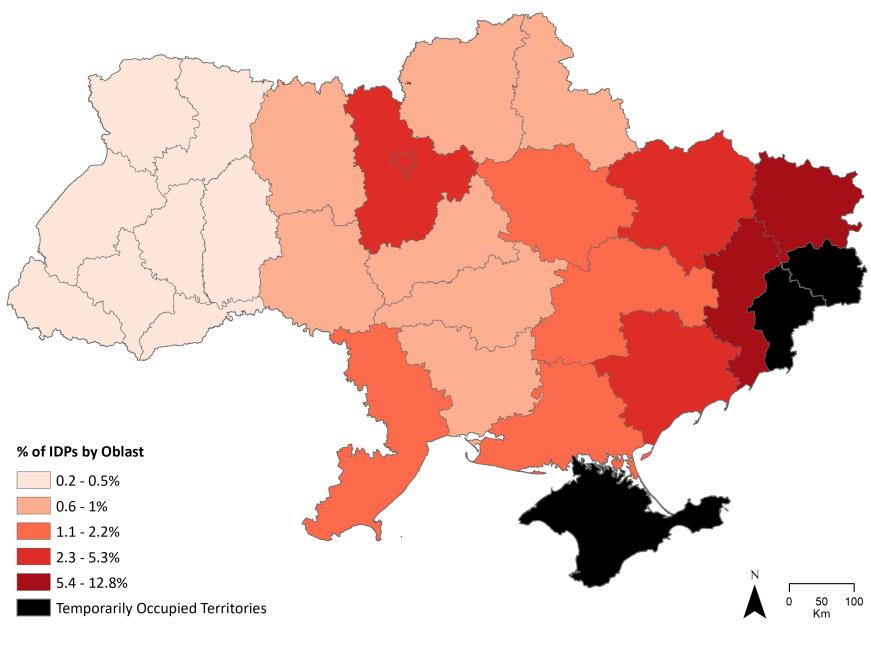
This project aims to answer the following questions:

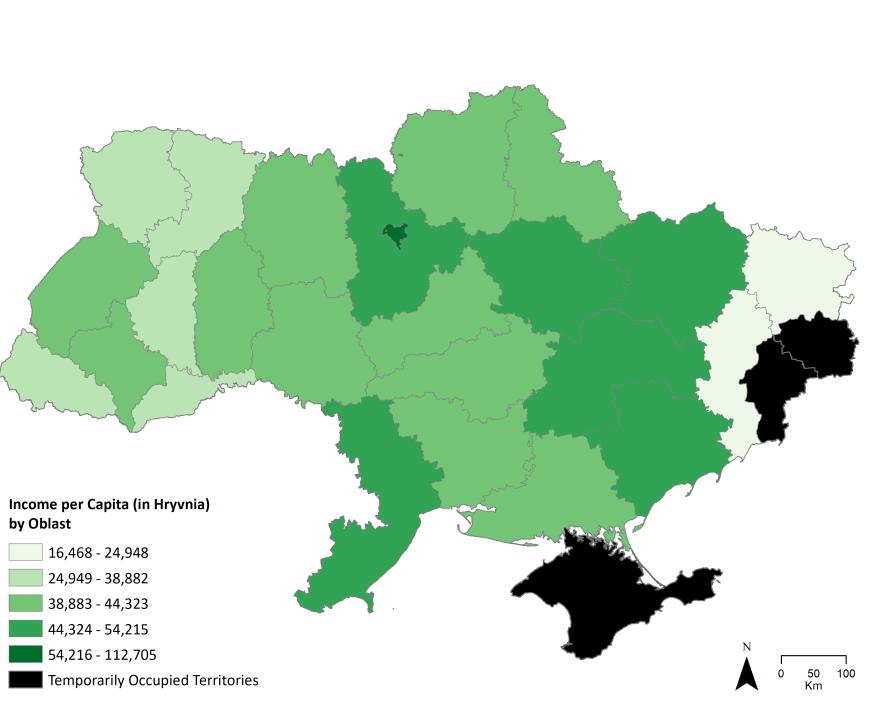
- 1. Which *oblasts* (regions) of Ukraine are IDPs most concentrated in?
- 2. Which *oblasts* have the highest vulnerability level?
- 3. Which *oblasts* have high concentrations of IDPs and a high vulnerability level?
- 4. How many IDPs fall into each vulnerability rank?

METHODOLOGY

To answer the first question, a map illustrating the percentage of IDPs in each *oblast* was created. The number of IDPs was normalized by the total population of each *oblast*.

To answer the next research question, the most recent available data





(2017) was collected, and the vulnerability assessment at the level of *oblast* (Level 1) was conducted.

The following 5 factors were included: unemployment rate; per capita income; number of physicians; number of schools; and number of identified crimes.

Each indicator was given a score using the natural breaks (Jenks) method: 0 being very low; 1 — low; 2 — medium; 3 — high; and 4 — very high vulnerability level. The vulnerability scores for each *oblast* were then aggregated, and a map was created to illustrate vulnerability level by *oblast*.

The *oblasts* with a high vulnerability level and a high concentration of IDPs were then calculated by adding ranked IDP density to ranked vulnerability. Finally, a bar chart reflecting the numbers of IDPs in each vulnerability rank was created.

FINDINGS AND LIMITATIONS

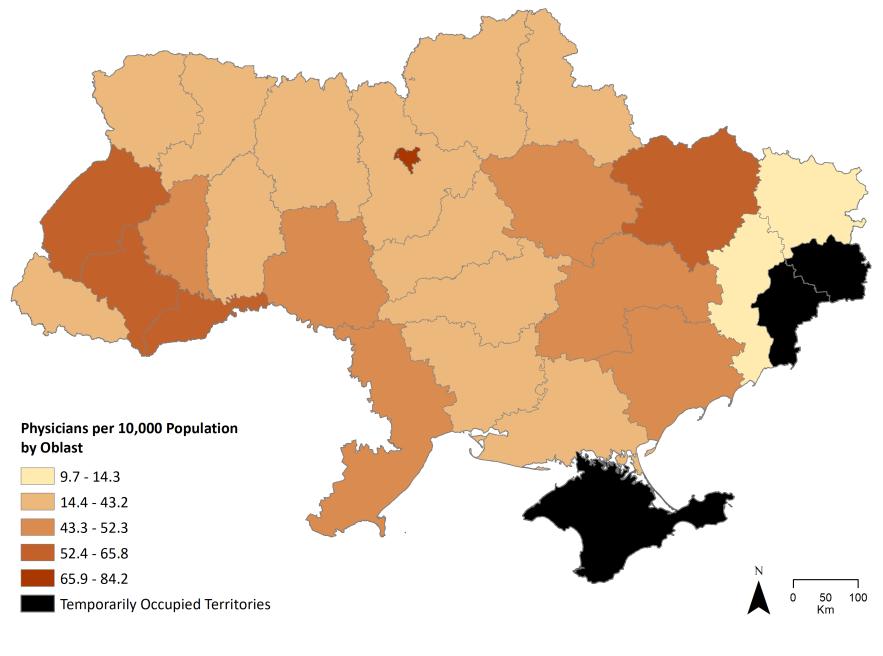
Donetska and Luhanska *oblasts* are the regions with the highest concentrations of IDPs, while Kharkivska, Zaporizka, and Kyivska *oblasts* as well as the city of Kyiv also have a high concentration of internal displacement. The limitation here is that the data for the

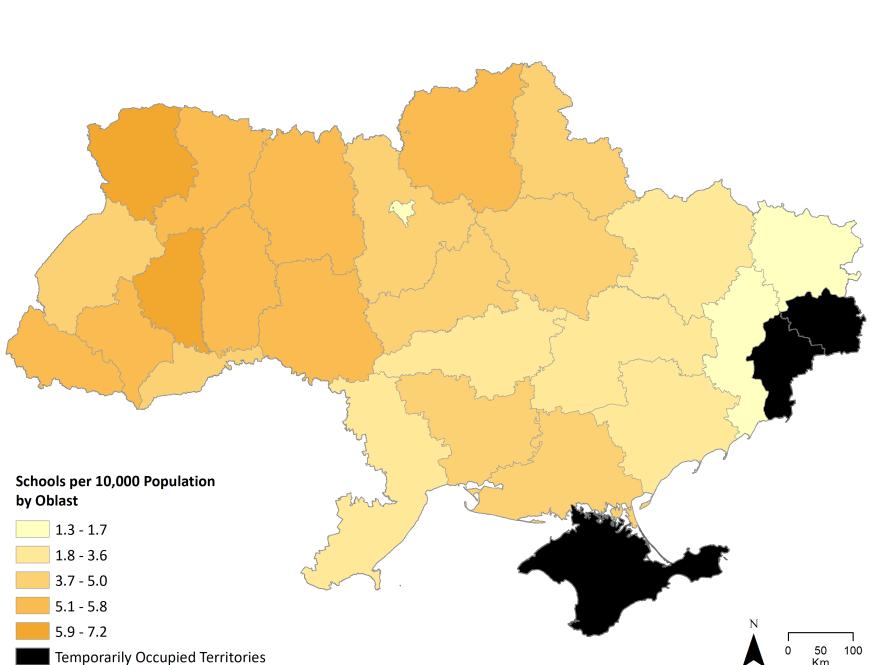
number of IDPs is from 2019, while the data on the total population in each *oblast* comes from 2017.

Donetska and Luhanska *oblasts* have very high level of vulnerability. Zaporizka, Khersonska, Mykolaivska, Kirovohradska, Cherkaska, and Poltavska *oblasts* have high vulnerability scores. The variable illustrating the number of identified crimes deserves further scrutiny: it can potentially mean that more crimes might have been committed, but they were either not reported to the police or were not properly investigated.

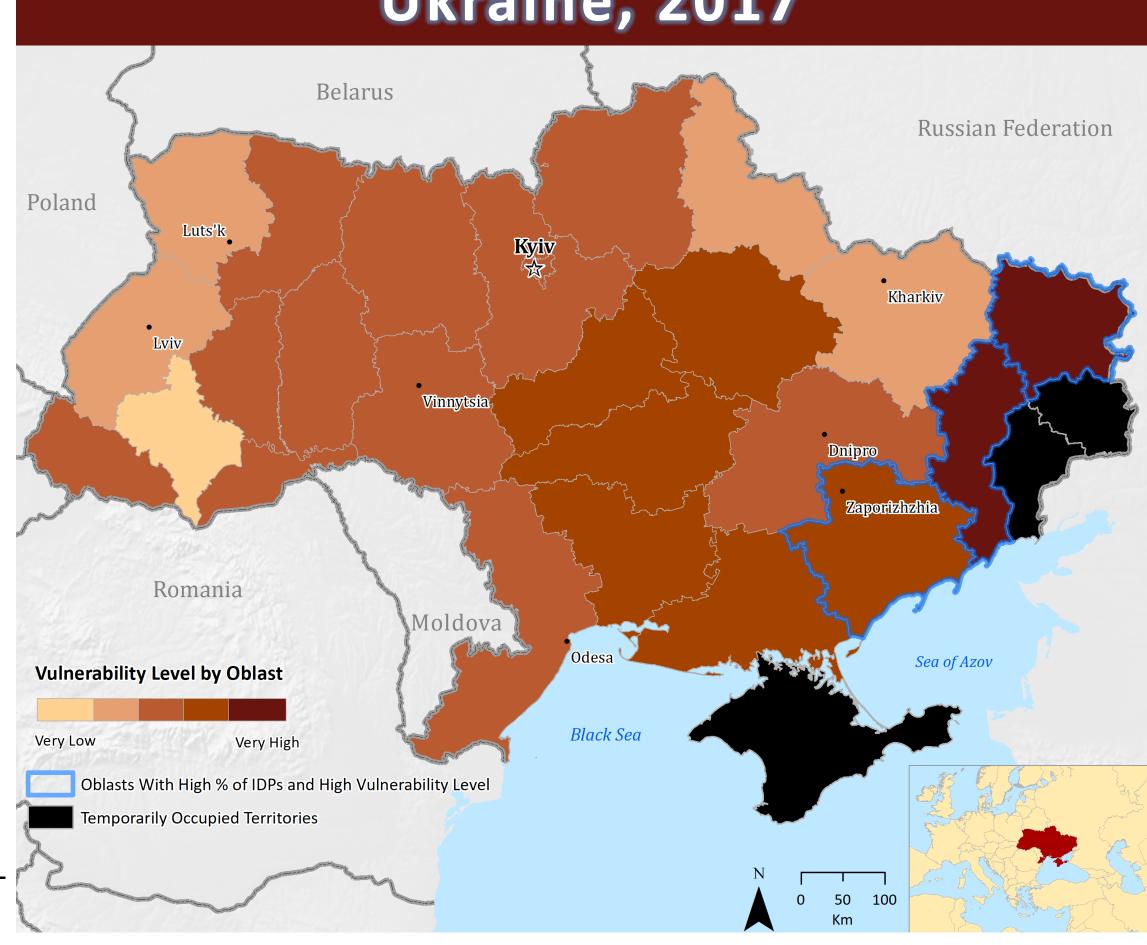
The analysis shows that the regions with high concentrations of IDPs and a high vulnerability level are Donetska, Luhanska, and Zaporizka *oblasts.* The national government should allocate more resources to these areas to alleviate people's suffering and prevent potential conflict between IDPs and members of host communities.

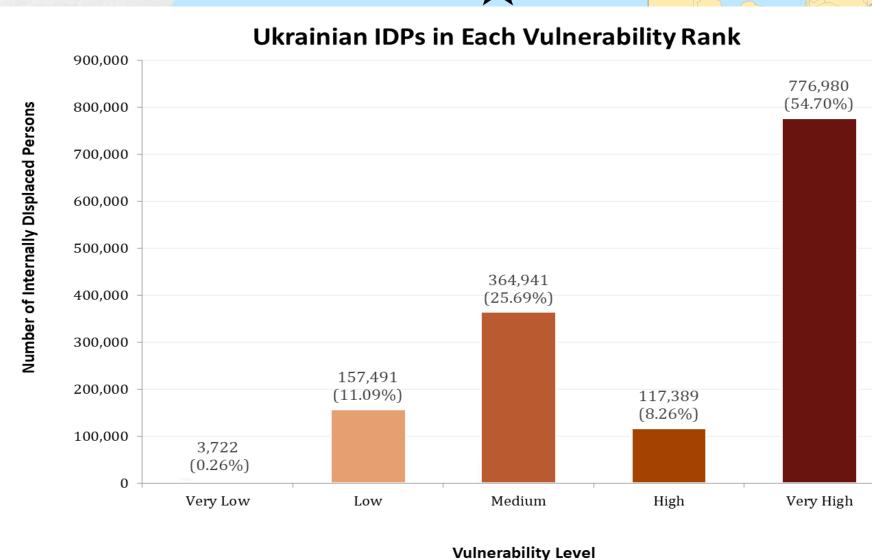
In summary, 8 out of 24 Ukrainian *oblasts* have either high or very high vulnerability score, while 4 *oblasts* as well as Kyiv have either high or very high IDP concentrations. Additionally, over half of the total IDP population lives in areas with very high vulnerability levels.





Vulnerability Assessment Ukraine, 2017





Cartographer: Lisa May

% of Unemployed

6.1 - 7.5%

7.6 - 9.1%

9.2 - 11.2%

11.3 - 12.5%

12.6 - 16.6%

Temporarily Occupied Territories

by Oblast

Class: DHP P207: GIS for International Applications

Date: December 12, 2019 (Fall 2019)

Projection: Ukraine 2000 3 Degree GK Zone 9 **Data Sources:** State Statistics Service of Ukraine, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) in Ukraine, the United Nations High Commissioner for Refugees in Ukraine (UNHCR), ESRI

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