DIGITAL CAPACITY AND DATA ASSESSMENT FOR RECOVERY & DEVELOPMENT

INSIGHTS FROM THE COMMUNITY-LEVEL ASSESSMENT

12 March 2025

Objectives

- Understand the **current capabilities and needs** of communities in using digital tools for **data collection, spatial analysis, and recovery planning**.

- Identify **gaps, challenges, and best practices** in municipal data collection.

- Inform the **Knowledge Hub for Recovery and Development (Knowledge Hub)** to support **standardized data collection and digital adoption** approaches.

Methodology - Timeline

Dec 2024	Jan/Feb 2025	Mid Feb 2025	Mar 2025
Survey Design	**Data Collection**	**Data Compilation**	**Analysis & Findings**
• Questionnaire development • Consult with stakeholders	• Pilot • Digital survey disseminated through oblast regional administrations • Follow-up with communities for increased participation	• Data cleaning and verification • Removing inconsistencies, duplications and preparing datasets for analysis	• Initial insights presented to key stakeholders • Identification of gaps, trends, and best practices • Community selection for the Knowledge Hub engagement

Methodology - Questionnaire

Structured questionnaire, covering the following categories:

1. Community profile and demographics

- Population breakdown (men/women/households)
- Internally displaced persons (IDPs)
- People with disabilities (PWDs)
- Exposure to mine action risks

2. Recovery planning and data readiness

- Availability of comprehensive recovery plans and spatial planning strategies
- Status of debris management and infrastructure restoration planning
- Inclusion of gender-disaggregated data in recovery plans

3. Digital tools and data management

- Use of GIS / digital tools for spatial analysis
- Engagement with national data systems (DREAM, Geoportal)
- Availability of specialists (GIS)

4. Community capacity

- Level of GIS knowledge,
- Specific training needs in data collection, analysis and GIS

5. Spatial data use

- damage estimation and reporting

6. Institutional challenges

- Barriers to adopting standardized recovery data management approaches

Response Demographics & Participation Rates

952

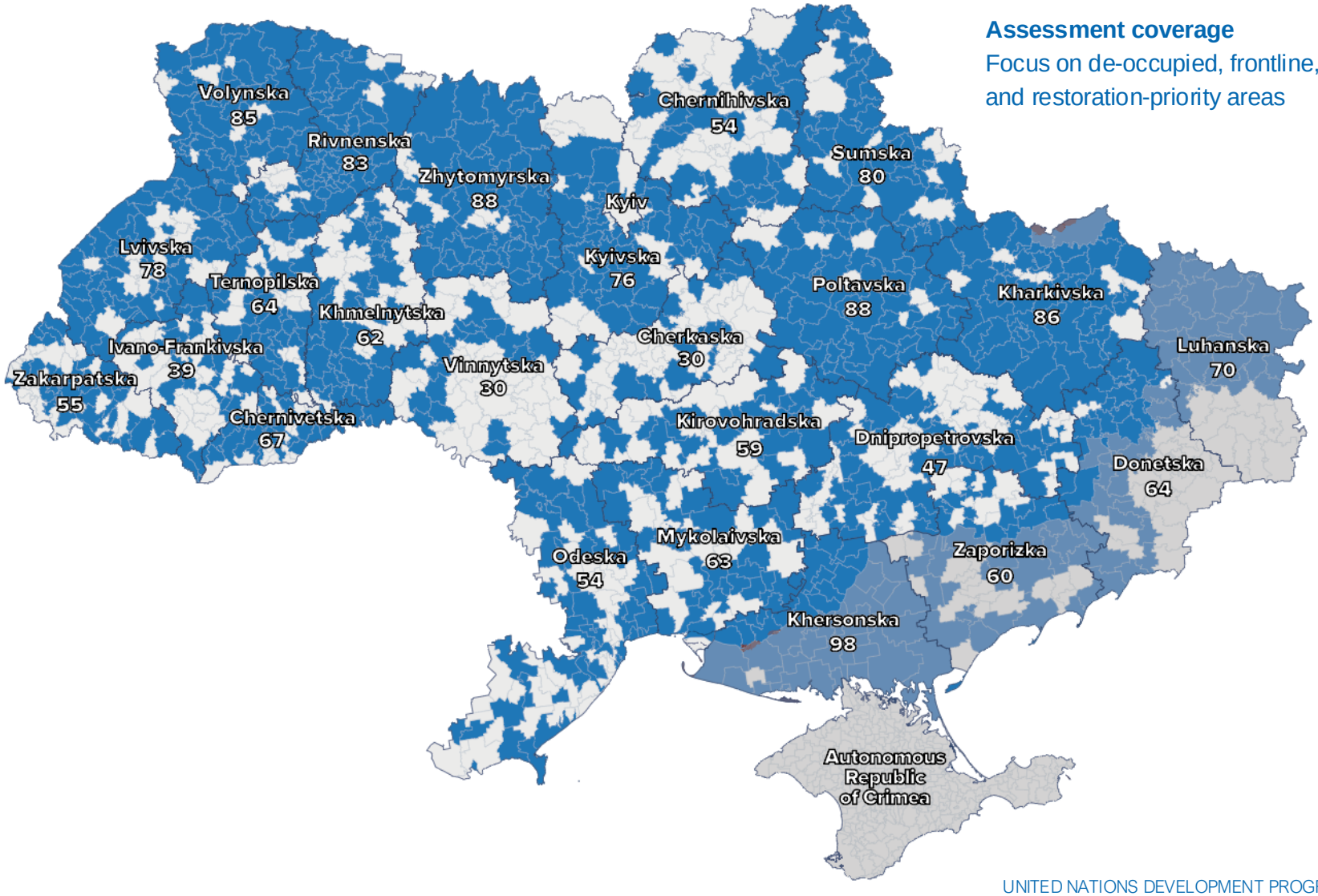
communities participated in the assessment

64.8%

response rate out of 1,469 total communities

59.2%

of respondents were women

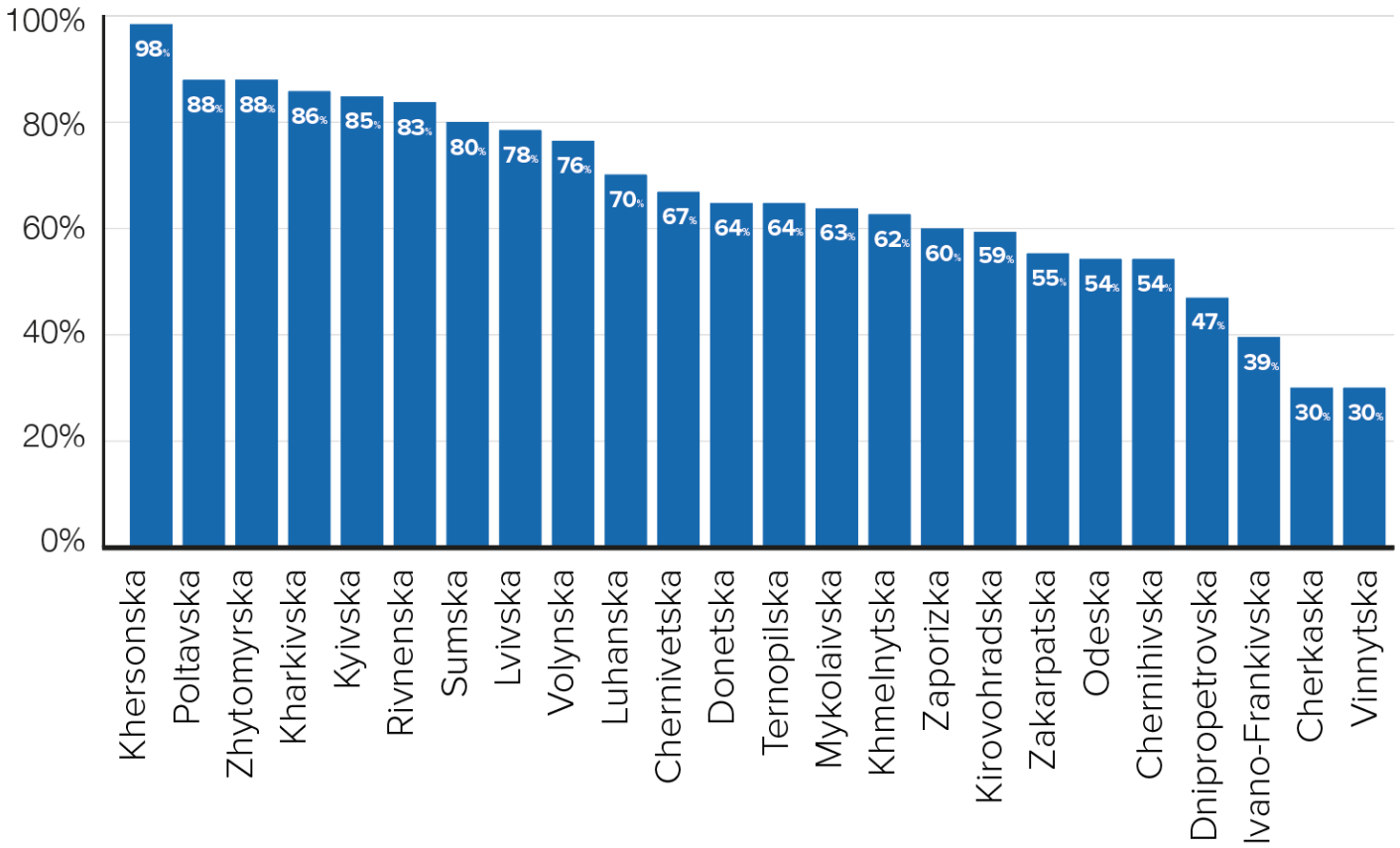


Assessment coverage

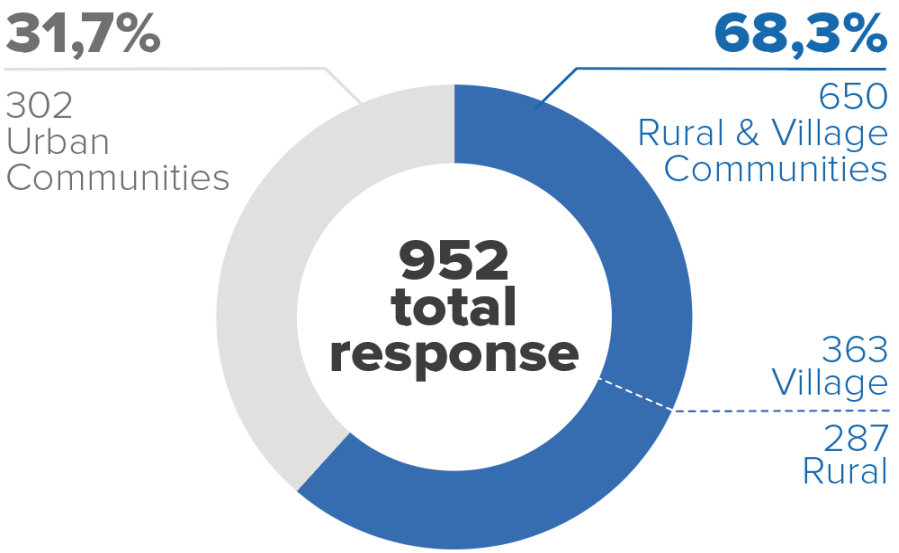
Focus on de-occupied, frontline, and restoration-priority areas

Response Demographics & Participation Rates

Oblast Response Rate



Urban / Rural & Village Communities Assessed



Challenges in Data Completeness and Standardization

- **44%** of communities provided incomplete or inconsistent responses to critical indicators, such as population and gender disaggregation
- Challenge: lack of complete, consistent, and standardized datasets disrupts effective policy-making, planning, and resource allocation

Recommendation:

Provide technical assistance to align municipal data systems with national statistical standards

Train community staff in digital data collection, GIS mapping, and monitoring tools

Issues with Availability of Population Figures & Gender Disaggregation

- Total population covered in assessment: **20.6m** people (**21.5m** pre-2022)
- Women represent **53%** of the population
- **44%** of communities reported on women-headed households (79% of those reported are Rural/Village)
- Challenge: Lack of gender-sensitive planning for recovery and development efforts

Recommendation:

Standardize gender-disaggregated data collection and integrate into recovery and dev planning/ policies

Data on Persons with Disabilities (PWD)/ Inclusion

- **78%** of communities reported PWD data
  - **5.7%** PWD of the total population (within reported communities)
  - **52%** of reported PWD are women
  - **39%** of communities reported increase of PWD since the start of the full-scale invasion
- Challenge: Limited accessibility in public services & recovery and dev plans

Recommendation:

Develop a unified municipal data collection framework aligned with national statistical standards and international best practices, ensuring consistent PWD data collection across communities

Key Finding: Debris Estimates & Coordination Needs

- Only **54** communities provided estimated amount (m3) of debris
- Challenge: Lack of centralized debris monitoring and removal coordination

Recommendation:
Develop a debris tracking system linked to relevant available national platforms, e.g., DREAM, for effective planning

Key Finding: Capacity Gaps in Digital Tool Adoption

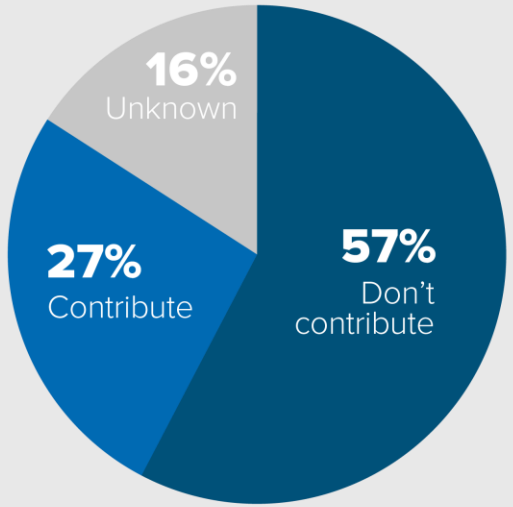
- **40%** of communities use GIS and spatial data tools
- **54%** have trained personnel
- Only **2%** of communities have personnel with Advanced level of GIS tools use
- **7%** rely on manual data collection

Recommendation:

Scale up GIS training and data management programs through Knowledge Hub

Key Finding: Metadata & Engagement with National Data Systems

- Only **27%** of communities contribute to the National Geoportal metadata registry
  - Out of which **48.7%** of communities have less than **25%** of data completed in the National geoportal
- Barriers to metadata completeness limit understanding of the data layers and details



Recommendation:

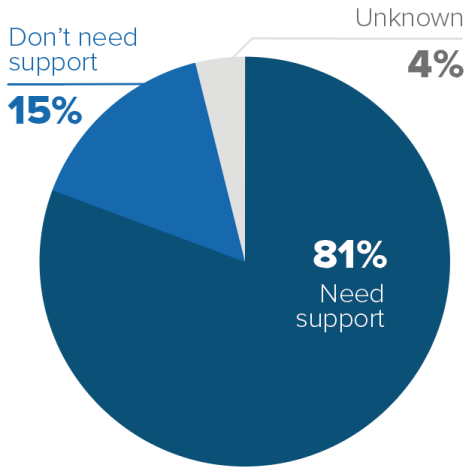
Standardize metadata reporting and provide technical support to communities

Key Finding: Capacity Development Needs

- **81%** of communities requesting support in digital tools for recovery planning
- **96%** of communities in need of specialised training for personnel

Capacity Gap
% of communities in need of specialised training for personnel

Demand for Digital Tools Support
% of communities requesting support in digital tools for recovery planning



Key Finding: Overall

- High rate of incomplete or inconsistent responses
- Gaps in gender and Persons with Disabilities (PWD) data
- Issues with availability of war-related damages and debris data at community level
- Low level of integration with national platforms
- Disparities in digital tool (GIS) adoption
- Lack of trained personnel (spatial analysis)

Policy Recommendations & Stakeholder Opportunities

Develop national guidelines for municipal/community data collection & standardization

Invest in IM/GIS training & digital adoption programs

Strengthen metadata reporting & integration with national recovery platforms

Ensure gender-disaggregated & disability-inclusive data collection

Enhance coordination on debris removal & mine action data sharing

KNOWLEDGE HUB FOR RECOVERY AND DEVELOPMENT

SUPPORTING MUNICIPALITIES IN EVIDENCE-BASED RECOVERY PLANNING

12 March 2025

Project Background

Strengthening Evidence-Based Recovery in Ukraine

Ukraine's recovery demands a structured, data-driven approach to addressing the complex challenges resulting from the 2022 full-scale invasion. UNDP, through its “Strengthening Evidence-based Recovery in Ukraine” project, funded by the Government of Germany, is empowering national authorities to implement effective recovery and development measures based on reliable data and evidence.

Our Data-Driven Approach: The project leverages comprehensive data sources, including digital maps from building damage assessments, satellite imagery, and orthophoto plans to enhance the sustainability and efficiency of recovery planning efforts.

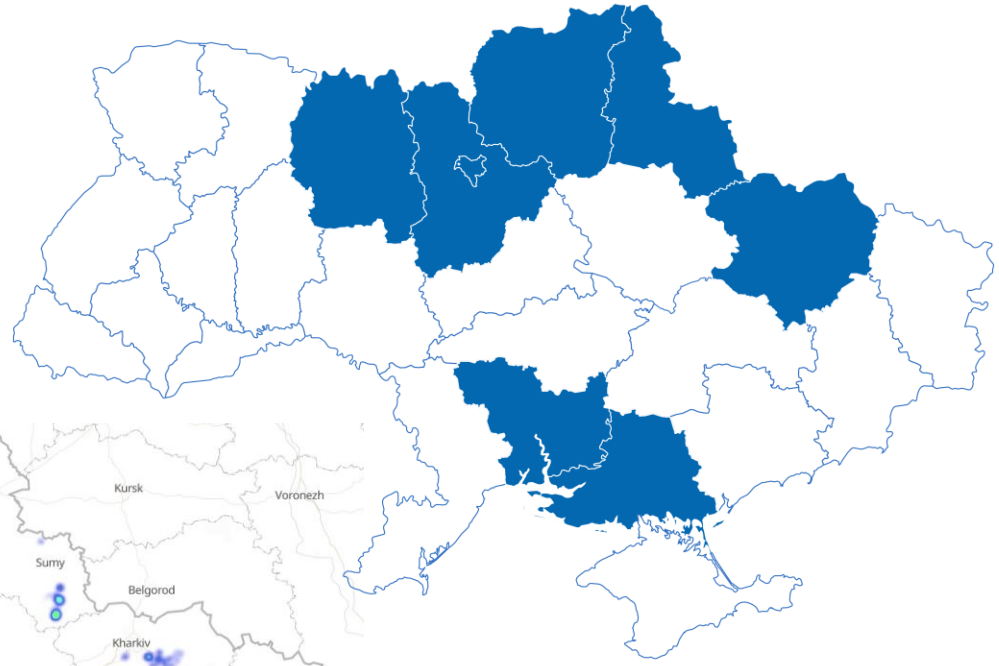
Project Background
Building Damage Assessment (BDA)

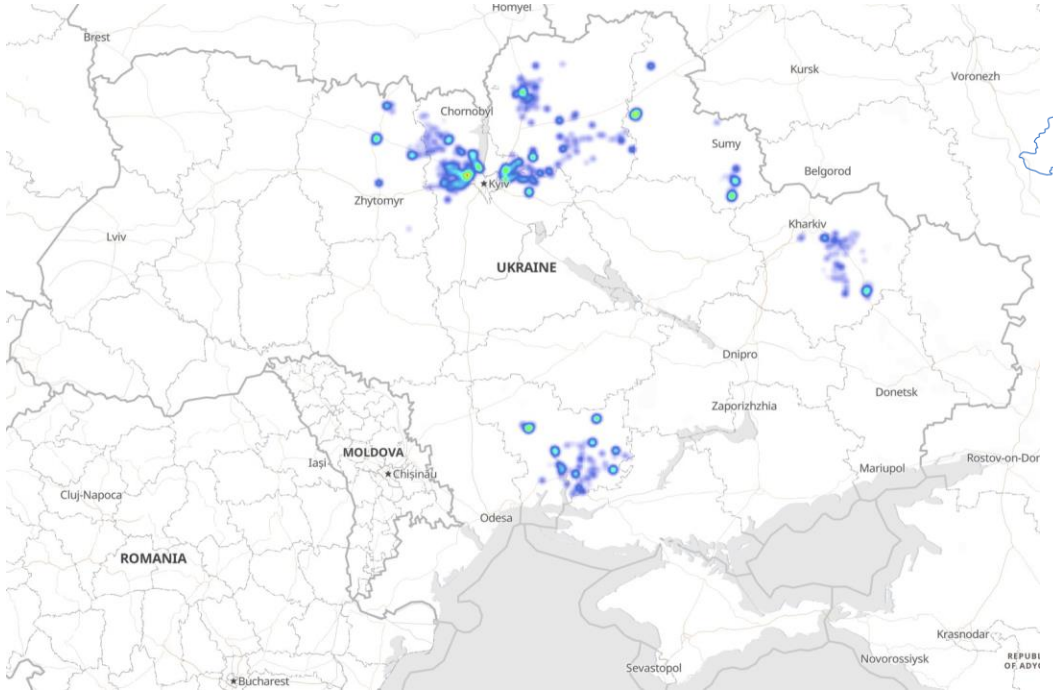
426
settlements assessed

1,314,595
buildings analysed
and digitalised

~ 133,000
damaged and destroyed
buildings were identified

Kyiv, Sumy, Chernihiv, Zhytomyr, Kharkiv, Mykolaiv, and Kherson Oblasts





Project Outputs

OUTPUT 1:

Targeted war-affected communities empowered for comprehensive recovery programming through the utilization and analysis of data, with gender and disability considerations

	Strengthen the capacities of targeted communities to utilize data for recovery and development
	Support **the Knowledge Hub for Recovery and Development** establishment and functioning
	Support innovative solutions for community recovery and development (digital twins)
	Facilitate access of local communities to Orthophoto maps through existing national-level portal(s) and further utilization for enhanced comprehensive recovery and development programming

OUTPUT 2:

National and/or municipal authorities have enhanced their capacity to analyse and utilize geospatial data for recovery and reconstruction

	Provide advanced remote sensing and analytics-driven assessment technical support to the Ministry for Communities and Territories Development and StateGeoCadastre
	Development of analytical products and information management services
	Conduct thematic war-related impact monitoring and analysis using remote sensing, aerial imagery and analytics

What is the Knowledge Hub for Recovery and Development

- Established under the project
- **Technical support and coordination mechanism** to enhance communities' capacity in data-driven recovery and development processes
- Bridges the gap between local recovery efforts and national data standards, ensuring communities have the knowledge, and best practices needed for effective planning

Key Activities

The Knowledge Hub serves as a facilitator for collaboration by providing the following support:

- Conduct community-level digital capacity and data assessment
- Provide training and capacity development on GIS, and data management (including the use of BDA)
- Test recovery tools (data management and analysis tools) in pilot communities
- Develop guidelines on data integration and standards (based on national and regional standards and methodologies)
- A platform for replicating best practices, allowing communities to scale successful recovery models (documentation and sharing)
- Targeted technical support for five pilot communities

Set Up of the Knowledge Hub

- Dedicated full time focal point with technical backstopping from UNDP
- Selection of the pilot communities to provide direct technical support

The pilot phase, which will run until August 2025, will focus on five selected communities to refine these methodologies for wider scalability across Ukraine

How Knowledge Hub Supports Communities

Data Standardization

Develop **templates and methodologies** for consistent data collection

GIS & Spatial Analysis Training

Provide **technical workshops** on open-source tools

Replication of Best Practices

Supports scaling of proven **community recovery planning models**

Pilot Communities - Selection Criteria

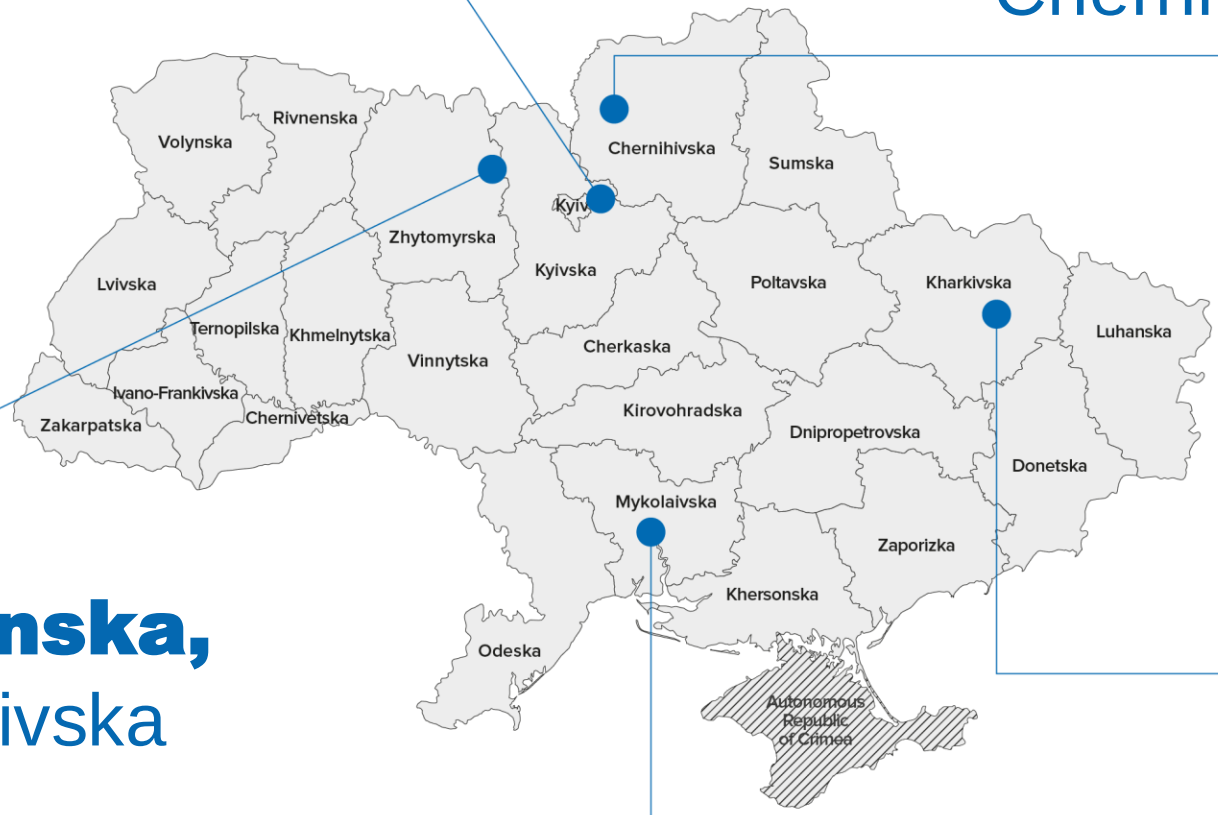
- Communities were assessed based on the results of the Community-level assessment of digital tools for data collection and spatial analysis conducted by UNDP during January-February 2025. The analysis also considered whether communities had received relevant support, including involvement in Building Damage Assessment (BDA), recovery planning supported by UNDP, and similar assistance from USAID, according to available information.
- Each indicator was assigned a normalized numerical score from 0 to 1 based on weighted criteria, with bonus scores applied where relevant.
- Communities with the lowest aggregate scores (Total Ranking) were shortlisted for final selection.
- From the list of shortlisted communities, one community will be selected per Oblast (lowest within the Oblast)
- Final selection will involve consultations with stakeholders, including the Ministry for Communities, Territories, and Infrastructure Development, the State Geo-Cadaster and UNDP experts.

Selected Communities

Kalynivska,
Kyivska Oblast

Kyiinska,
Chernihivska Oblast

Malynska,
Zhytomyrska
Oblast

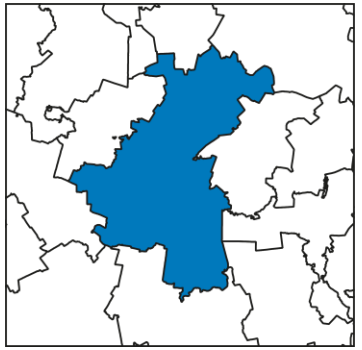


Balakliiska,
Kharkivska
Oblast

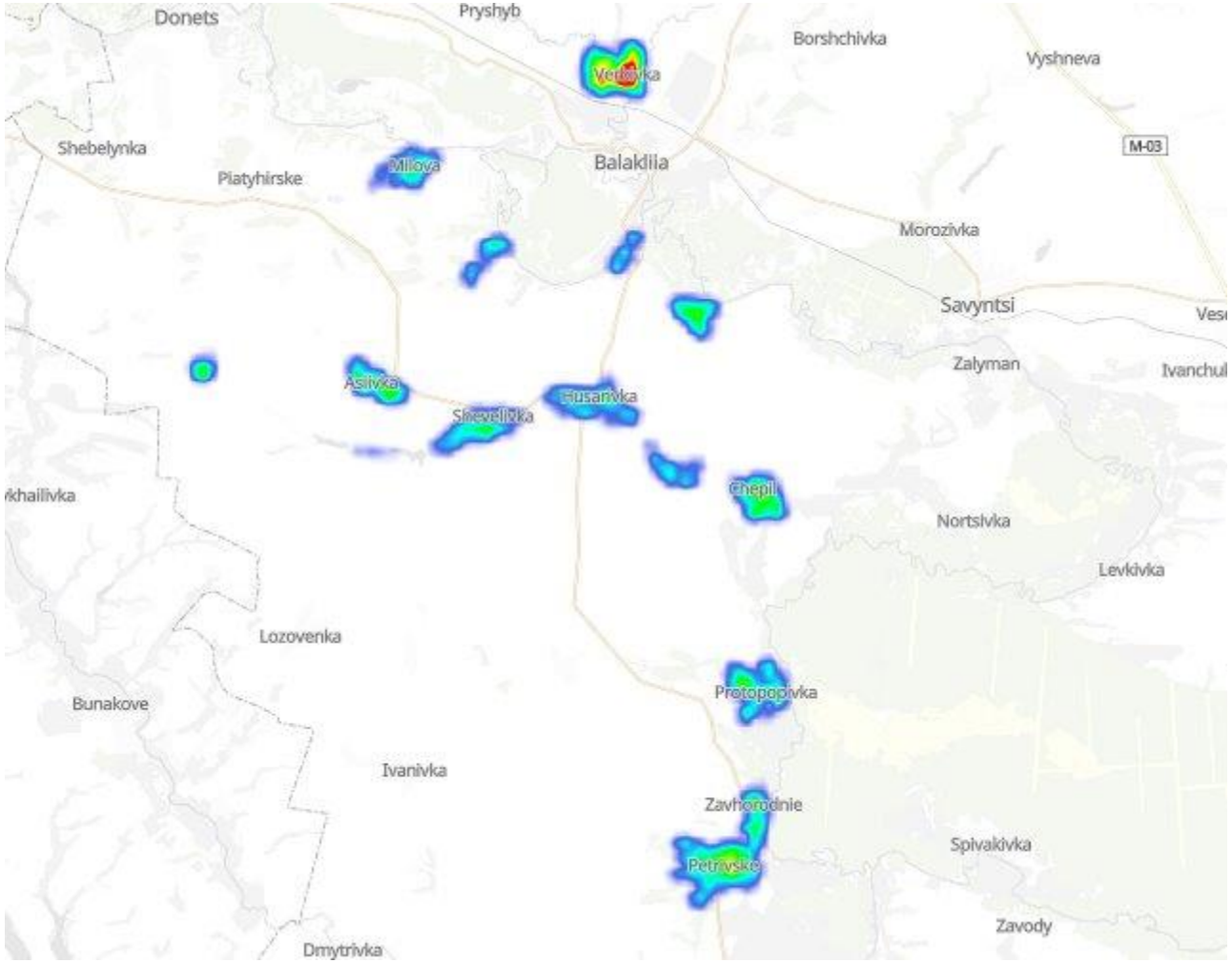
Olshanska,
Mykolaivska
Oblast

Balakliiska Territorial Community Profile

1. **Location:** Kharkivska Oblast, Iziumskyi District, Ukraine
2. **Community Type:** Urban
3. **Community Code:** UA6304001000010092
4. **Population:** 40,436 (Women: 20,834; Men: 19,602)
5. **Internally Displaced Persons:** 5,945 (Women: 3,860; Men: 2,085)
6. **Persons with Disabilities:** 1,935 (Women: 1,250; Men: 685)
7. **Military Situation:** Territory de-occupied; fully controlled by Ukrainian government
8. **Strategy or plan for spatial development of the territorial community?** No
9. **Orthophoto Mapping Needs:** Critical need due to post-conflict conditions, agricultural and forestry damage assessment, and mine risk evaluation
10. **GIS Capacity:** Basic GIS Training



Balakliiska Territorial Community Profile
BDA Shanpshot

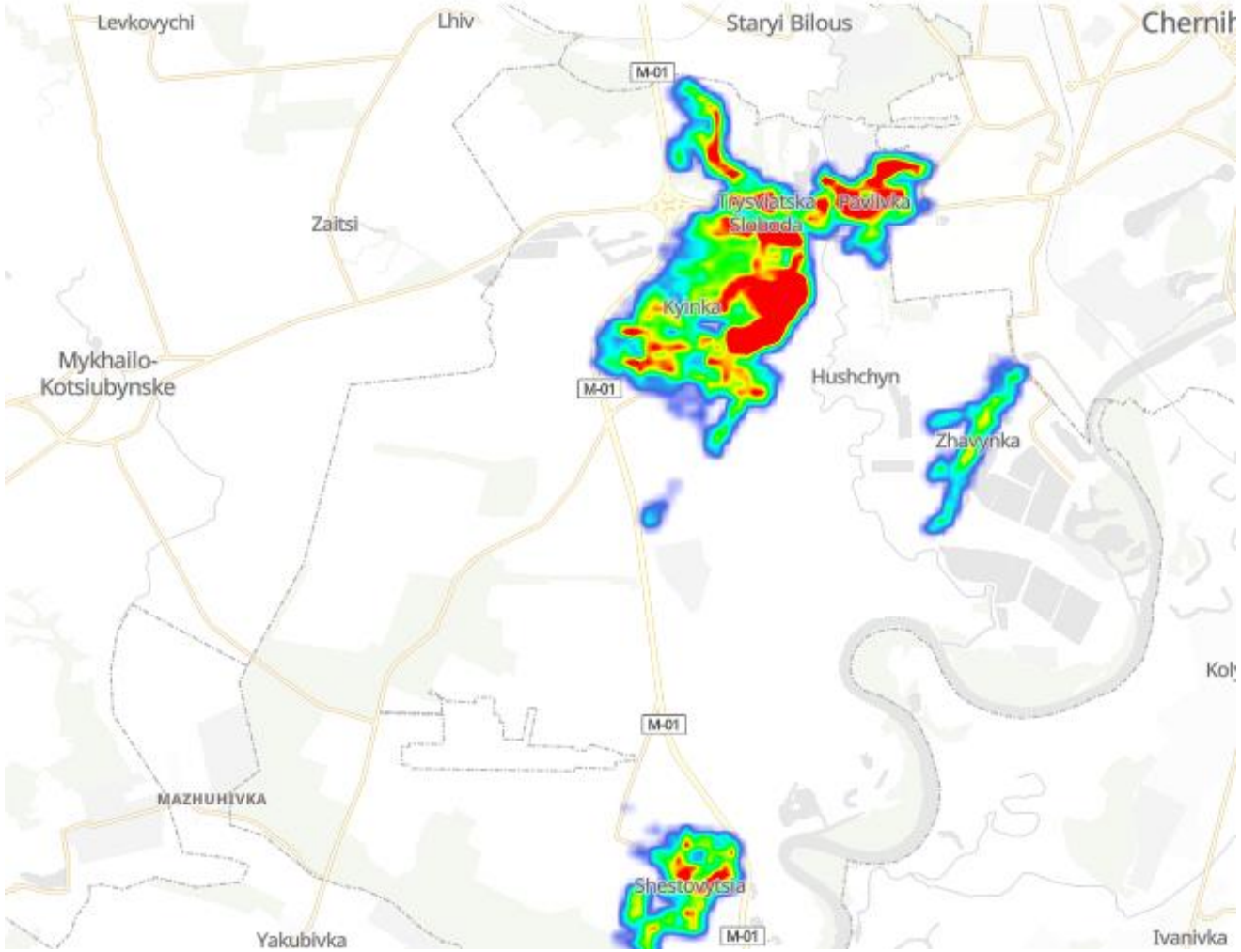


List of settlements covered under BDA	Code
Asiivka	UA63040010020071209
Bairak	UA63040010030034693
Verbivka	UA63040010070080766
Volobuivka	UA63040010120085736
Husarivka	UA63040010140065005
Zavhorodnie	UA63040010150012977
Milova	UA63040010200053795
Nova Husarivka	UA63040010210040302
Pervomaiske	UA63040010240062111
Petrivske	UA63040010250095332
Popivka	UA63040010260031272
Protopopivka	UA63040010270011460
Chepil	UA63040010320015857
Shevelivka	UA63040010340048183
Slobozhanske	UA63040010370092955

Kyiinska Territorial Community Profile

1. **Location:** Chernihivska Oblast, Chernihivskyi District, Ukraine
2. **Community Type:** Rural
3. **Community Code:** UA7410013000039404
4. **Population:** (Women: n/a; Men: n/a)
5. **Internally Displaced Persons:** (Women: n/a; Men: n/a)
6. **Persons with Disabilities:** (Women: n/a; Men: n/a)
7. **Military Situation:** Territory de-occupied; fully controlled by Ukrainian government
8. **Strategy or plan for spatial development of the territorial community?**
9. **Orthophoto Mapping Needs:** Required for cadastral work, land inventory, municipal management
10. **GIS Capacity:** Basic GIS skills present

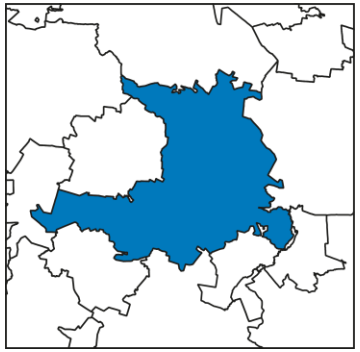
Kyiinska Territorial Community Profile BDA Shanpshot



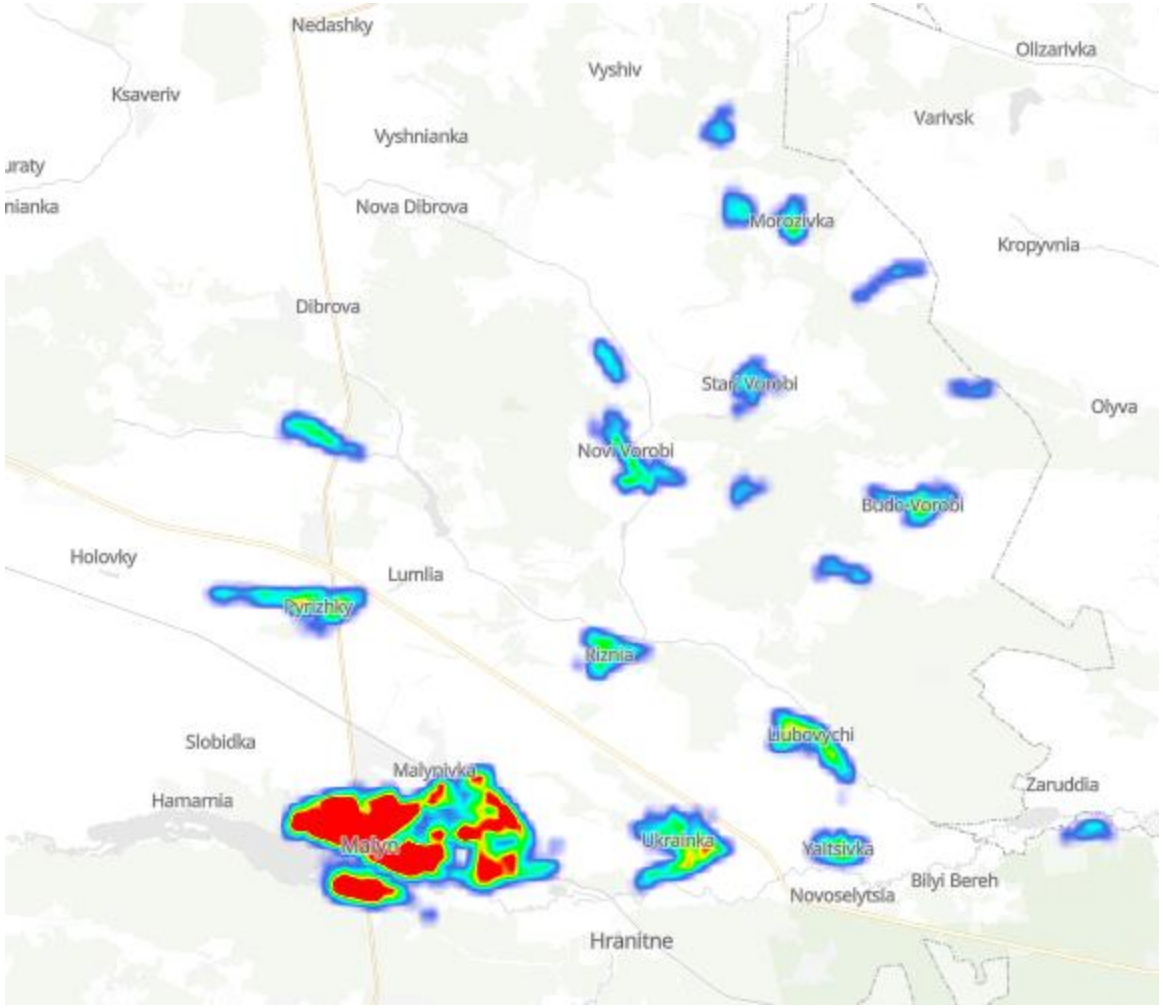
List of settlements covered under BDA	Code
Kyinka	UA74100130010068937
Zhavynka	UA74100130030073148
Pavlivka	UA74100130040071281
Trysviatska Sloboda	UA74100130050060660
Shestovytsia	UA74100130060029651

Malynska Territorial Community Profile

1. **Location**: Zhytomyr Oblast, Korosten District, Ukraine
2. **Community Type**: Urban
3. **Community Code**: UA1806013000061781
4. **Population**: 34,754 (Women: 18,678; Men: 16,053)
5. **Internally Displaced Persons (IDPs)**: 1,684 (Women: 742; Men: 510)
6. **Persons with Disabilities:** (Women: n/a; Men: n/a)
7. **Military Situation:** Fully controlled by Ukrainian government
8. **Strategy or plan for spatial development of the territorial community?** No
9. **Orthophoto Mapping Needs**: Required for monitoring construction and land-use changes
10. **GIS Training Needed**: Basic GIS training, advanced GIS and database management, mobile data collection training, data visualization, and reporting



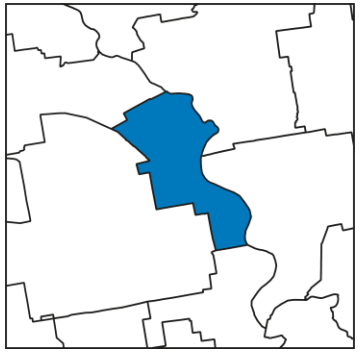
Malynska Territorial Community Profile
BDA Shanpshot



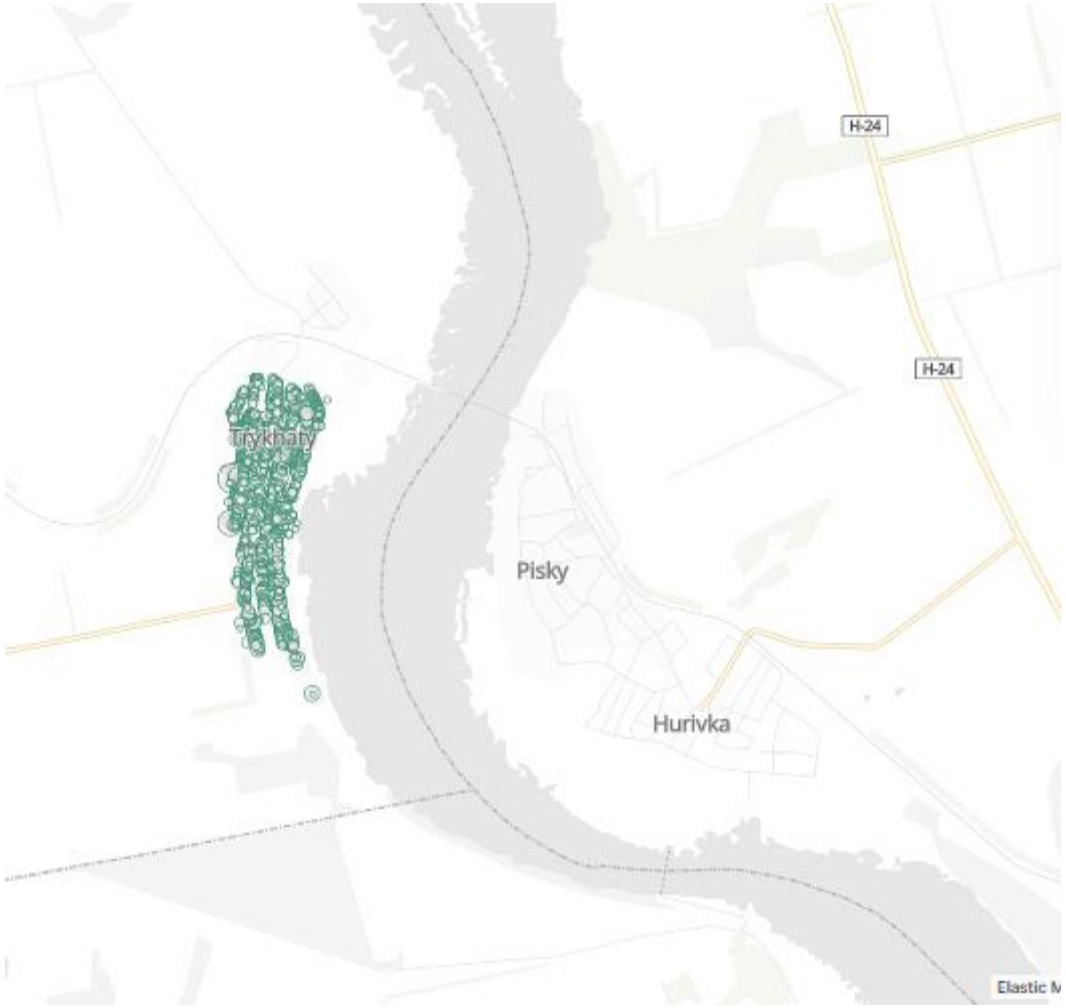
List of settlements covered under BDA	Code
Malyn	UA18060130010010134
Baranivka	UA18060130030053260
Budo-Vorobi	UA18060130060079541
Klitnia	UA18060130270019003
Liubovychi	UA18060130340037387
Morozivka	UA18060130370079281
Nova Huta	UA18060130390066142
Nova Rutvianka	UA18060130410070939
Nove Zhyttia	UA18060130420047680
Novi Vorobi	UA18060130430027697
Pyrizhky	UA18060130480033990
Riznia	UA18060130510080401
Svyrydivka	UA18060130580078691
Stara Huta	UA18060130620037390
Stari Vorobi	UA18060130630012223
Staseva	UA18060130640046982
Ukrainka	UA18060130690018236
Yurivka	UA18060130740017854
Yablunivka	UA18060130750020385
Yaltsivka	UA18060130760010677

Olshanska Territorial Community Profile

1. **Location:** Mykolaivska Oblast, Mykolaivskyi District, Ukraine
2. **Community Type:** Village
3. **Community Code:** UA4806023000098265
4. **Population:** 8,128 (Women: 4,263; Men: 3,865)
5. **Internally Displaced Persons:** 1,823 (Men: 683; Women: n/a)
6. **Persons with Disabilities:** 309 (Women: 192; Men: 117)
7. **Military Situation:** Territory de-occupied; fully controlled by Ukrainian government
8. **Strategy or plan for spatial development of the territorial community?** No
9. **GIS and Digital Needs:** Basic GIS training



Olshanska Territorial Community Profile
BDA Shanpshot

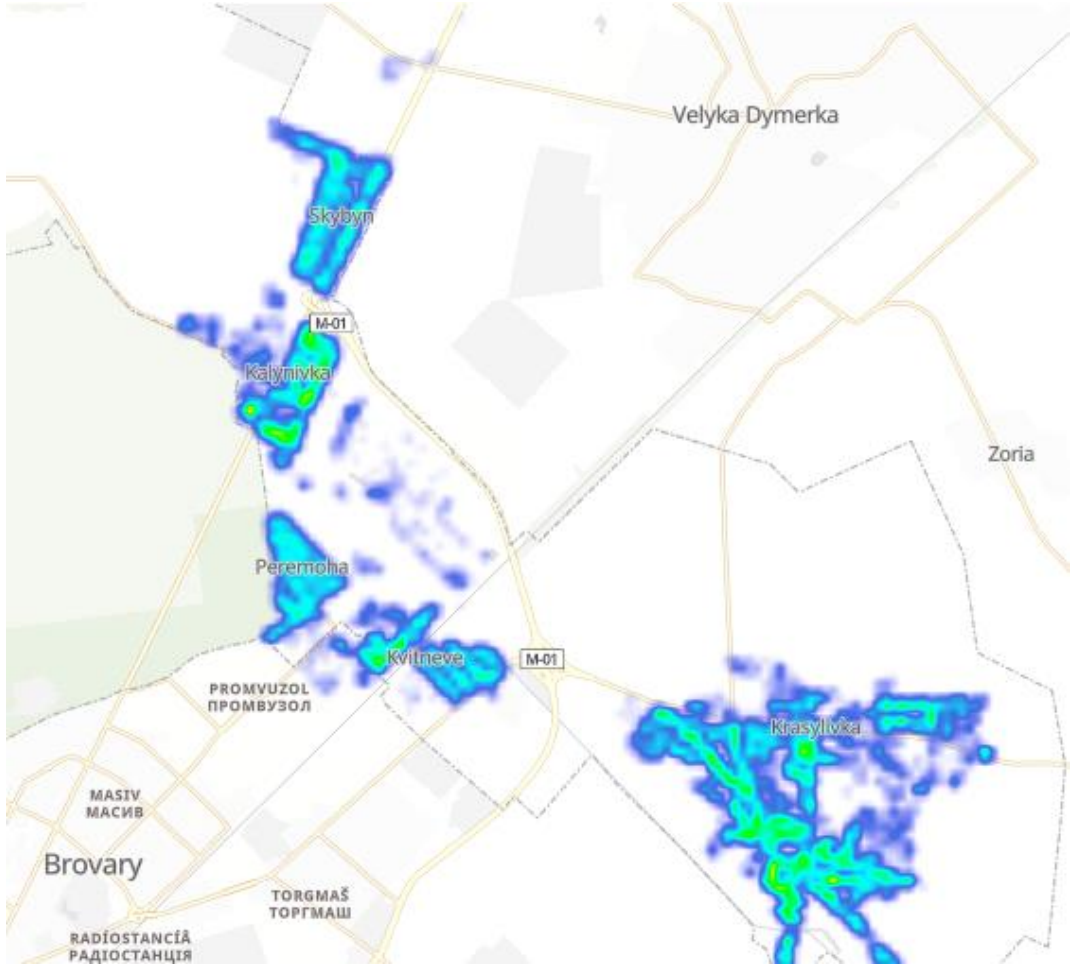


List of settlements covered under BDA	Code
Trykhaty	UA48060230100069218

Kalynivska Territorial Community Profile

1. **Location:** Kyivska Oblast, Brovarskyi District, Ukraine
2. **Community Type:** Village
3. **Community Code:** UA3206013000095223
4. **Population:** 9,597 (Women: 3,868; Men: 5,729)
5. **Internally Displaced Persons:** 216 (Women: 111; Men: 105)
6. **Persons with Disabilities:** 460 (Women: 230; Men: 230)
7. **Strategy or plan for spatial development of the territorial community?** No
8. **GIS and Digital Needs:** Basic GIS training, data visualization and reporting skills; lacks GIS specialists

Kalynivska Territorial Community Profile
BDA Shanpshot



List of settlements covered under BDA	Code
Kalynivka	UA32060130010033581
Kvitneve	UA32060130020035323
Krasylivka	UA32060130030075962
Peremoha	UA32060130040060216
Skybyn	UA32060130060068377

Stakeholders' Engagement

Government Ministries & Agencies	Guide data related policy alignment and national integration
Communities	Participate in pilot activities share insights, and drive local adoption
Development Partners & Donors	Fund scaling and provide technical expertise
Private Sector	Co-fund solutions and partner on innovation

Expected Outcomes

Improved community capacity in data-driven recovery planning

Stronger alignment with national recovery frameworks

Scalability of best practices to more communities

Enhanced multi-stakeholder collaboration

Thank You