

# Faculty of Social and Humanitarian Master's Studies Educational Program "Urban Studies and Post-War Reconstruction"

#### Master's Thesis

"Designing a Digital Self-Assessment Methodology for Evaluating and Strengthening Spatial Planning Capacities of Ukrainian Hromadas"

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#### ABSTRACT

This research addresses the critical need to evaluate and strengthen spatial planning capacities of Ukrainian hromadas, essential for decentralization, recovery, and sustainable development. Currently, local self-governments face significant capacity challenges, and a standardized assessment methodology is absent. The study develops a digital self-assessment tool: a quantitative questionnaire with tailored questions for diverse stakeholders (leadership, technical specialists, representatives of municipality departments related to spatial planning, CSOs, inhabitants) using 5-point Likert scale responses and multi-choice questions. Structured around key capacity dimensions, its automated scoring pinpoints strengths and weaknesses, thereby informing targeted capacity development recommendations for hromadas.

**Keywords:** spatial planning, capacity, hromada, Ukraine, capacity assessment, capacity development, post-war recovery, decentralization, self-assessment.

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#### INTRODUCTION

The capacity of Ukrainian hromadas for effective spatial planning is of critical importance, particularly in the context of ongoing decentralization and the urgent needs of post-war recovery and sustainable development. Spatial planning involves the efforts of a hromada to legally, strategically, and technically guide the development and organization of its physical environment. Across key activities it is possible to highlight: creating spatial development plans, managing land use, controlling urban sprawl, promoting area revitalization, coordinating service delivery, and considering demographic, social, economic, geographical, and environmental factors. This requires a comprehensive and spatially aware approach. A hromada that excels in these areas is equipped with the necessary attributes, skills, resources, and organizational structures to effectively manage and oversee its territorial growth.

Existing literature (Anisimov, Smirnova, and Dulko 2024), along with broader policy and public discourse, highlights that the spatial planning capacity of local self-governments in Ukraine remains a significant challenge.

Notably, there is no single, widely accepted or standardized methodology currently in use for assessing capacity in spatial planning across all hromadas. It results in fragmented evaluations that fail to capture the full spectrum of local governance capabilities. A comprehensive understanding of the existing strengths, constraints, and specific needs of hromadas — across multiple dimensions — is critical for informing effective urban development strategies and post-conflict recovery planning.

The present understanding of these capacity gaps often derives from problemfocused research, analyses of systemic performance, consultations with experts and stakeholders, and the observation of practical challenges such as attracting qualified specialists, managing data effectively, and securing adequate funding.

Despite the importance of capacity assessment as a diagnostic tool (European Commission 2007) and a crucial initial stage in any capacity development initiative, the absence of a standardized tool specifically for spatial planning capacity hinders systematic diagnosis and the implementation of targeted interventions across diverse hromadas. This lack of a consistent and structured approach to assessing spatial planning capacity represents a significant analytical problem.

Stemming from this analytical problem, the central analytical question guiding this research is: How can a structured capacity assessment tool effectively diagnose the spatial planning strengths and weaknesses of Ukrainian hromadas to inform capacity development recommendations? This question involves exploring the key dimensions of capacity relevant to the Ukrainian context and determining how a quantitative tool can capture nuanced perspectives of hromada representatives for spatial planning process.

This research employs a structured quantitative self-assessment design. The deliberate selection of a strictly quantitative format is intended to facilitate efficient data collection, standardized measurement, and numerical analysis of capacity levels which are fundamental for subsequent analysis and comparison. This approach is utilized to develop a capacity assessment tool designed to evaluate spatial planning capacity across key dimensions. The tool is implemented as a quantitative questionnaire using closed-ended questions with defined scales, tailored for administration to a range of individuals with varying roles and perspectives in the local spatial planning process. These respondents include hromada's leadership, technical specialists involved in spatial planning, representatives of other hromada's departments, representatives of CSO and inhabitants. This quantitative design allows for automatic scoring and the identification of specific areas of strength and weakness (gaps). While a purely quantitative tool has inherent limitations in capturing the full qualitative context surrounding capacity, its advantages in terms of standardized, scalable data collection and numerical diagnosis of capacity levels align with the pressing need to systematically assess hromada capacity across multiple dimensions.

#### Key chapters of the Thesis include:

- o Literature Review, exploring the academic and professional discourse surrounding spatial planning and capacity assessment frameworks.
- o Terminology Glossary, identifiying key terms.
- Analytical Framework, including the conceptualization and the theoretical basis for understanding spatial planning capacity.

- Methodological Design, outlining the research approach, the operationalization of variables, data collection procedures using the quantitative tool, and the methods planned for data analysis.
- o Results derived from the application of the assessment tool.
- Discussion, which will interpret the results, reflect on the limitations of the chosen approach, integrate the findings into the broader academic and professional discourse, and propose avenues for future research. Based on the Results and the Methodological Design key principles of the recommendations system and identification of the Capacity levels are described in this section.
- The work includes a list of References and Appendices containing empirical materials relevant to the study.

#### LITERATURE REVIEW

The effective management of territorial development is a cornerstone for Ukrainian hromadas, particularly as they navigate the complexities of ongoing decentralization reforms and confront the profound challenges of post-war recovery and the pursuit of sustainable development.

In Ukrainian legislation, spatial planning is not defined as a standalone legal concept but is embedded within the broader category of city planning activity (містобудівна діяльність), as regulated by the Law of Ukraine "On Regulation of City Planning Activity." This activity includes the planning and development of territories (планування і забудова територій). While the law does not explicitly define "spatial planning" (просторове планування) as a general field, the term appears in the form of "spatial development" in the title of a key planning document — the Comprehensive Plan of Spatial Development of the Territory of a Territorial Community (комплексний план просторового розвитку території територіальної громади), which combines elements of both city planning documentation and land management documentation, along with the continuous renewal of data, effective work with geospatial information, the formulation of climate change adaptation strategies, and the robust implementation, evaluation, and monitoring of various development initiatives. Other legally binding city planning documents include the General Plan of a Settlement (генеральний план населеного пункту) and the Detailed Plan of a Territory (детальний план mepumopii), all of which are mandatory for implementation by all subjects of city planning activity (Law of Ukraine 2011).

This broad domain of city planning activity encompasses the array of legal, strategic, and technical processes through which a hromada endeavours to shape the physical form, spatial organization, and functional characteristics of its territory.

Furthermore, it involves prudent management of land use and development patterns, alongside a careful consideration of demographic trends, sociogeographical specificities, and critical environmental factors, all aimed at fostering equitable and sustainable development outcomes.

The legislative framework regulating spatial planning in Ukraine is characterized by its complexity and fragmentation, which presents practical challenges for local authorities and professionals. In addition to the Law of Ukraine "On Regulation of Urban Development Activity," Spatial planning activities are currently governed by multiple legal acts, including, the Land Code, and relevant State Building Norms (DBN). At the state level, the principal planning document is the General Scheme of Planning the Territory of Ukraine, which sets strategic development priorities. Regional planning relies on schemes developed for oblasts and raions, while local planning is implemented through Comprehensive Plans of Spatial Development of Territorial Communities, General Plans of Settlements, and Detailed Territory *Plans.* The *Comprehensive Plan* is currently promoted as the most advanced and integrated form of urban planning documentation, simultaneously serving as land management documentation and designed to support sustainable, long-term territorial development. It is developed with consideration of the Concept of Integrated Development, which serves as a foundational input that reflects the existing conditions, prospects, and stakeholder interests of the territorial community. In response to the urgent needs of post-war recovery, a separate type of planning instrument — the *Program of Comprehensive Recovery* — was introduced. Although not classified as urban planning documentation, this program defines socio-economic and spatial recovery priorities for oblasts and communities, aligning them with sustainable development goals and potentially serving as a future basis for planning strategies. However, despite the growing role of these instruments, the system continues to face significant obstacles, including outdated surveying standards, a decentralized and unsystematized urban planning cadastre, and the resource-intensive nature of developing high-quality documentation, which requires multidisciplinary expertise and coordination. (Shterndok, Dobrokhodova, and Kasyanov 2024)

**Capacity**, in its broadest conceptualization, refers to the inherent ability of individuals, organizations, and indeed society as a whole, to successfully manage their affairs and achieve their objectives (OECD 2006). More specifically within an organizational context, capacity manifests as the ability to perform requisite tasks, produce desired outputs, effectively define and resolve problems, and make well-informed choices (The World Bank 2005).

It is an inherently context-specific attribute, residing within the boundaries of an organization or a network of organizations, and is shaped by a dynamic interplay of both internal and external factors (Pearson 2018). When applied to the domain of spatial planning within Ukrainian hromadas, spatial planning capacity denotes the

hromada's overall capability to effectively govern its territory through systematic planning processes and the diligent implementation of adopted plans.

This capacity is multidimensional, drawing upon strengths across several interrelated levels: individual, organisational and enabling environment (OECD 2006).

Interpreting these levels for the current research purposes, "Individual" or "human" level encompasses the skills, knowledge, and professional expertise of the staff and leadership directly involved in planning activities – such as urban planners, architects, land management specialists, and GIS technicians – and is maintained through continuous professional development.

Secondly, "organizational" level pertains to the effectiveness of the administrative structures, operational processes, and internal systems established within the hromada administration for undertaking planning functions; this includes human resource management institutional arrangements, clarity of leadership, strategic and operational planning abilities, internal coordination mechanisms, and the systems for monitoring and evaluation.

Thirdly, Relational level, often intertwined with the broader Enabling Environment, reflects the hromada's proficiency in interacting effectively with a range of external actors. These actors include central and regional government bodies, neighbouring hromadas, private sector entities, civil society organizations (CSOs), and, crucially, the active engagement of citizens in planning processes. This dimension also encapsulates the influence exerted by the prevailing legal and regulatory framework, the degree of political will and support for robust spatial planning, existing power dynamics, and the overarching socio-economic and political climate.

The practice of capacity assessment is widely acknowledged within both academic and practitioner circles as a critically important, albeit often complex, undertaking for guiding effective urban development and facilitating recovery processes. It functions primarily as a diagnostic and learning tool, forming an indispensable component of the broader cycle of capacity development.

An evaluation of World Bank support for capacity building in Sub-Saharan Africa between 1995 and 2004 offers valuable evidence on the foundational role of capacity assessment in designing effective development interventions. In contexts marked by poverty, institutional weakness, and limited human capital, the absence of proper diagnostic efforts led to ill-defined project objectives, unrealistic plans, and underestimation of implementation constraints. Projects frequently overlooked political and institutional dynamics, which weakened relevance and hindered results. For instance, public financial management reforms in Ghana and decentralized service delivery efforts in Ethiopia faltered partly because they lacked comprehensive upfront capacity assessments. In contrast, initiatives that were grounded in detailed diagnostics—such as the roads sector projects and health

system reforms in Malawi — achieved more coherent and sustainable outcomes. These successful interventions integrated human resource development and organizational change based on clearly identified needs. The evaluation thus emphasizes that capacity development must begin with a systematic assessment of existing capacities and constraints, ideally incorporating stakeholder participation and contextual political analysis. Without such groundwork, even well-intentioned reforms risk failure due to unrealistic design and poor alignment with actual institutional capacities (The World Bank 2005).

Case studies from fragile and conflict-affected settings demonstrate the critical importance of assessing existing capacity and context prior to designing capacity development interventions. A synthesis of experiences in countries such as Afghanistan, Cambodia, Nepal, Pakistan, the Philippines, and Sri Lanka reveals that standard technical approaches often fail when they do not adequately account for political dynamics, local governance deficits, or the varying credibility of state and non-state actors. In Cambodia and Afghanistan, for example, the success of hybrid solutions that engaged both government institutions and civil society depended on recognizing local constraints and perceptions of legitimacy. Similarly, in post-crisis settings like Malakand (Pakistan) and tsunami-affected Sri Lanka, rapid assessments helped balance short-term service delivery with long-term capacity strengthening of local authorities. Other cases underscore the need to evaluate the roles of NGOs and state institutions carefully, particularly in contested regions, as seen in the Philippines and Nepal. These examples illustrate six core dilemmas in fragile contexts — such as external versus local capacities and planned versus emergent approaches — all of which require continuous monitoring, political analysis, and tailored strategies informed by capacity assessments. Across all cases, understanding the local context and institutional landscape enabled more adaptive and effective interventions, reinforcing the broader argument that capacity development efforts are unlikely to succeed without a prior, systematic assessment of local conditions (GIZ 2015).

A large-scale study on disaster risk management (DRM) in Serbia exemplifies how comprehensive capacity assessment serves as a foundational step for effective capacity development, particularly at the local government level. Conducted between 2014 and 2017, the research evaluated 105 municipalities and towns through a structured self-assessment using questionnaires directed at local leaders and disaster management personnel. The study revealed that despite legislative obligations introduced by the 2009 Law on Emergency Situations and the 2018 Law on Disaster Risk Reduction and Emergency Management, many local self-governments lacked the necessary institutional, strategic, and human capacities to implement proactive DRM measures. Notably, only 36.8% of localities had completed a threat assessment, and just 16.7% had developed protection and rescue plans — documents regarded as essential for integrating disaster risk reduction into spatial planning and urban development. The research found that local responses

were largely reactive, with key obligations — such as civil protection systems, early warning infrastructure, and public education — only partially fulfilled due to resource and knowledge constraints. Municipalities also reported significant needs for support across legal, institutional, educational, and operational domains. This assessment underscores the importance of diagnosing local capacities and gaps before designing or implementing DRM policies. Without such groundwork, the integration of risk management into spatial and urban planning remains limited and fragmented, further impeding resilience-building efforts (Cvetković et al. 2021).

In the context of Ukraine's post-war recovery, the need for accurate and contextsensitive spatial planning capacity assessment has become more critical than ever. The decentralization reform has granted territorial communities greater responsibility over spatial development, yet the war has exposed deep structural and institutional vulnerabilities. As Ukraine embarks on large-scale reconstruction and advances toward European Union integration, local self-governments must demonstrate not only formal planning mandates but also the operational capacity to deliver on them. Self-assessment of spatial planning capacity provides a strategic tool for diagnosing institutional readiness, identifying resource and knowledge gaps, and guiding targeted capacity development initiatives. These assessments are essential for aligning local planning systems with EU spatial governance standards and for ensuring coherence with the Sustainable Development Goals (SDGs), particularly those related to resilient infrastructure, inclusive urban development, and climate adaptation. Without a clear understanding of existing planning capacities — across legal, technical, human, and organizational dimensions recovery efforts risk may become fragmented or misaligned. A robust, participatory self-assessment process enables communities to build realistic, integrated spatial development strategies that respond to current needs while preparing for long-term sustainability and resilience.

Scholarly and professional literature offers varied but largely overlapping descriptions of capacity assessment, defining it as the systematic identification of existing capacity assets and prevailing needs, the measurement of baseline conditions and subsequent progress, and a structured method for discerning the strengths and weaknesses inherent in relevant institutional structures or operational processes.

When such an assessment is conducted internally by the entity itself, it is often termed a capacity self-assessment, as described previously in a Cvetković paper. This process typically involves the organization scrutinizing its own capacities across individual, organizational, and relational levels, while giving due consideration to both external influences and internal characteristics.

A range of capacity assessment frameworks and specialized tools have been developed internationally to guide and structure this diagnostic process. The initial step in such an assessment frequently involves clearly defining the key actors and

stakeholders involved and articulating a contextually relevant definition of "capacity" for the specific domain under consideration – in this instance, spatial planning at the hromada level as described previously in (Pearson 2018).

The assessment process itself, particularly when designed to be participatory and inclusive, is regarded as being as important as its outcomes, primarily for its potential to foster constructive dialogue, build shared understanding, and secure political buy-in for subsequent actions.

The significance of capacity assessment is underscored by its multifaceted contributions: it aids in diagnosing the root causes of poor performance or identified capacity deficits, rather than merely addressing symptoms; it assists diverse stakeholders in arriving at a common understanding of their specific capacity challenges; its findings directly inform the formulation of targeted capacity development strategies and appropriate interventions; it establishes crucial baselines for monitoring progress and evaluating the effectiveness of capacity-building efforts over time; it promotes a sense of ownership over the findings and a commitment to addressing identified priorities; and, ultimately, it aims to enhance overall performance and improve the delivery of essential services by the hromada.

The identification of weak capacity through a rigorous assessment may also carry important implications for resource allocation, potentially suggesting that fewer funds can be effectively absorbed without a concomitant focus on strengthening underlying capacities.

One illustrative example of an internationally recognised structured capacity assessment methodology is the Metropolitan Capacity Assessment Methodology (MetroCAM), developed jointly by GIZ and UN-Habitat. MetroCAM is a flexible, modular framework designed to help metropolitan regions evaluate their governance capacity in relation to specific challenges that require collaborative, multi-stakeholder solutions. A core principle of the methodology is the importance of beginning with a clear understanding of existing governance capacity before identifying what additional capacities are needed. It defines capacity as the collective ability of stakeholders to mobilize institutional systems, resources, and relationships to deliver sustainable and equitable public services. The framework encompasses both "soft" capacities—such as leadership, trust, adaptability, and inter-institutional cooperation—and "technical" capacities, including legal structures, fiscal systems, participation mechanisms, and service quality.

MetroCAM is implemented in phased stages, beginning with stakeholder identification and problem definition, followed by the design of a customized assessment framework, data collection and analysis, and the development of a capacity development strategy. The process incorporates tools for stakeholder mapping, urban diagnostics, and various forms of participatory consultation, such as interviews, workshops, and focus groups. A distinguishing feature of the methodology is its focus on identifying "windows of opportunity" — strategic entry

points for change based on local dynamics. Ultimately, MetroCAM aims to foster consensus among stakeholders around a shared strategy for capacity development. Its adaptable design makes it particularly suitable for application in varied urban and regional contexts, offering valuable insights for capacity assessment practices in the field of spatial planning (Pearson 2018).

Another notable example is the UN-Habitat Capacity Self-Assessment Methodology (UN-Habitat, 2012), that was specifically developed for local government training institutions. This method is tailored for organizations that provide training to local governments on urban issues. It acts as a participatory and internally driven diagnostic tool that helps training institutions assess and enhance the capacities needed for their own development and for delivering high-quality training services. The methodology assists organizations in reflecting on their performance and identifying capacity gaps on three key levels: individual, organizational, and relational (enabling environment). It is organized around four core capacity areas: resources (both physical and human), organization and management, training, and relational capacities/enabling environment. The methodology includes selfassessment tables that describe four different levels of capacity. These tables guide discussions and encourage dialogue among participants, facilitating collective reflection and prioritization. A participatory process is emphasized to promote ownership of the results. Engaging stakeholders is considered crucial for effective capacity development, particularly in nurturing relational capacities essential for networking, empowering relationships, and inter-institutional cooperation. Ultimately, this methodology results in actionable capacity development plans that are rooted in the institutional context and driven by internal discourse, adhering to the principle that capacity development should emerge from within rather than being imposed externally.

The European Commission's framework for institutional and capacity assessment offers a comprehensive, systems-based approach that is particularly suitable for analyzing the public sector. While it is not specifically designed for spatial planning, its principles are highly relevant. This framework adopts an open systems perspective, emphasizing that organizations — including local governments — are embedded within broader contexts and must be understood in relation to their environment. It promotes a step-by-step process that starts with a focus on outputs, context, and resources, rather than beginning with internal diagnostics. This approach encourages a shift from merely identifying technical gaps to exploring the underlying institutional and political dynamics that influence capacity. The framework differentiates between functional and rational dimensions — such as procedures, skills, and resources — and political dimensions, including informal power relations, interests, and stakeholder dynamics. Both dimensions are essential for a meaningful diagnosis. Significantly, it positions capacity development as a locally driven and endogenous process, with external support acting as a catalyst rather than a directive force. (European Commission 2007). For local selfgovernments, this framework may serve as a valuable tool for conducting capacity self-assessments that are context-sensitive, output-oriented, and strategically actionable.

The UNDP Capacity Assessment Methodology provides a systematic yet flexible framework for identifying existing and necessary capacities in relation to defined development goals. While it is broadly applicable, this methodology is particularly insightful for assessing public sector capacity in areas such as spatial planning. According to UNDP Capacity Assessment Methodology (UNDP 2008) the approach consists of a three-step process: mobilizing and designing the assessment, conducting the assessment, and interpreting the results. It emphasizes stakeholder engagement throughout the process. The methodology operates on three levels enabling environment, organization, and individual — and utilizes a set of core issues such as institutional arrangements, leadership, knowledge, and accountability as diagnostic lenses. Both functional and technical capacities are examined. Functional capacities include the ability to engage stakeholders, define a strategic vision, implement policies, and evaluate outcomes. A key strength of this methodology is its combination of quantitative rankings for comparison and benchmarking, along with qualitative inputs that provide contextual nuances. The ultimate goal is to use the assessment findings as a foundation for a tailored and prioritized capacity development strategy. This methodology aligns well with the needs of self-assessment in spatial planning institutions by enabling a comprehensive understanding of structural gaps, performance issues, and strategic planning needs.

While these various methodologies differ in their primary focus, intended target users, specific procedural steps and tools, conceptual origins, desired outcomes, and principal levels of analysis, a common thread among many is the acknowledgement of capacity as a multi-level construct, encompassing individual, organizational, and enabling environment dimensions. The array of tools often employed or suggested within these methodologies includes quantitative questionnaires, qualitative surveys and interviews, focus group discussions, SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, benchmarking against comparable entities, and the development of composite capacity indices.

In the Ukrainian context, despite the presence of international frameworks, the prevailing understanding of local spatial planning capacities and their limitations is often derived from indirect sources. These include problem-oriented research, systemic performance analyses, and extensive consultations with stakeholders and experts. Insights from such consultations — involving local government officials, professionals, and representatives of civil society organizations (CSOs) — reveal a range of persistent and practical challenges that serve as informal indicators of underlying capacity gaps.

The Ministry of Development developed recommendations for the capacity assessment of hromadas, but this methodology captures only indicators such as population size, area, tax capacity index, and share of local taxes. The methodology provides a framework for determining whether a community meets the minimum thresholds required to be considered viable for self-governance and long-term development (Ministry for Communities and Territories Development of Ukraine 2019). However, the methodology doesn't capture any of the dimensions or capacity levels, that are described in international frameworks.

While international methodologies are sometimes discussed as potential sources of inspiration or as elements that could be integrated into a blended approach suitable for Ukraine, their widespread, standardized application for the specific purpose of spatial planning capacity assessment across all Ukrainian hromadas is not reported as current standard practice. This situation points to a significant gap in the systematic and comparable diagnosis of spatial planning capacity at the local government level in Ukraine.

The spatial planning capacity of Ukrainian hromadas is currently influenced, and often constrained, by a multitude of significant challenges, particularly within the dynamic context of ongoing decentralization reforms and the pervasive impacts of war.

The full-scale invasion has sharply intensified pre-existing challenges in Ukrainian hromadas, disrupting socio-economic baselines and creating urgent new demands. Longstanding issues — such as population decline, labor shortages, and weak planning systems — have been exacerbated by displacement, infrastructure destruction, and reduced local revenues. Over 13% of housing stock has been damaged, and real GDP has fallen significantly, while the construction sector and agricultural production have contracted. These impacts have generated acute needs for infrastructure reconstruction, housing repair, and psychosocial support. Addressing community trauma, restoring livelihoods, and ensuring social cohesion are now as critical as physical recovery, with both state and civil society actors mobilizing to respond amid constrained resources and institutional capacities (Government of Ukraine; European Union; United Nations; World Bank 2025).

Hromadas across the country face vastly different starting points in their recovery efforts, depending on the extent of physical destruction and population displacement they have endured. Moreover, martial law provisions can, at times, restrict certain activities, such as aerial surveys, which are necessary for the preparation of up-to-date planning documentation.

Additional gaps include: the acute difficulty many hromadas face in recruiting qualified specialists, such as urban planners, architects, land managers, and even non-technical staff like project coordinators or psychologists; limited capacity to manage complex land relations, particularly in smaller communities where the lack of land management professionals is pronounced; persistent obstacles in accessing

and using digital data, exacerbated by the fragmentation of damage registries and the absence of unified data methodologies; and the significant shortage of funding, with state financial support described as minimal and slow-moving. Furthermore, implementation of spatial and recovery projects is often delayed by bureaucratic inefficiencies, lack of strategic guidance at the national level, and the scarcity of ready-to-implement project estimates. These barriers are especially pronounced for communities with limited institutional experience or international connections, highlighting the structural inequalities that shape access to resources and external support (Kyiv International Institute of Sociology (KIIS) 2023).

One more challenge — the complexity of Comprehensive Spatial Planning Development Plans. As of 2020, during the early stages of Ukraine's decentralization reform — formally initiated in 2014 — a total of 1,469 territorial communities (hromadas) were established. However, to date, only a small number of these communities have successfully approved Comprehensive Plans of Spatial Development. While comprehensive official data on the current approval rates of Comprehensive Spatial Development Plans remains limited or unavailable, recent public discourse and expert discussions have indicated that only a small number of hromadas have successfully completed and adopted such plans. This low uptake suggests persistent systemic challenges and capacity constraints at the local level, particularly in meeting the complex technical, legal, and financial requirements associated with plan development and approval. The preparation of a Comprehensive Plan can cost anywhere from several million to tens of millions of Ukrainian hryvnias, a financial burden that many communities are currently unable to afford. Moreover, weaknesses in existing legal frameworks can hinder effective plan enforcement and may limit the legitimate authority of local self-governments in managing territorial development. Certain inherited features from the Soviet-era planning system, such as prescriptive State Construction Norms (DBNs), continue to pre-define many planning decisions, contributing to a process that can be highly technical and somewhat rigid.

Finally, there is a notable unevenness in capacity among hromadas. Communities across Ukraine exhibit a wide variety of previous experiences with planning, differing significantly in their existing capacity levels, and operating within diverse local socio-economic and geographical contexts, now further complicated by postwar challenges. Some hromadas are demonstrably more capable of planning and implementing recovery and development initiatives than others. This disparity leads to legitimate concerns that a "one-size-fits-all" approach to capacity development or recovery support may be unsuitable, and that those hromadas most in need of assistance may paradoxically lack the requisite capacity to effectively engage with donors or to develop the necessary plans to guide their recovery.

The complex and evolving challenges facing Ukraine highlight the urgent need for a capacity assessment approach specifically tailored to its unique spatial planning

context. Given the multifaceted nature of planning capacity — encompassing both technical and political dimensions — any diagnostic tool must be able to address a broad spectrum of factors. These include not only functional aspects such as skills, data infrastructure, and planning procedures, but also political realities like power dynamics, institutional incentives, and levels of political commitment.

Such a tool must also be responsive to the layered challenges of decentralization, post-war recovery, and regional diversity. Although the importance of assessing capacity is widely acknowledged, current practices often rely on general observations or one-off studies. There remains a lack of a standardized, scalable methodology to systematically evaluate planning capacities across Ukraine's hromadas.

Developing a robust diagnostic instrument is essential for identifying both strengths and weaknesses in local capacities. This is particularly critical because a hromada's planning capacity directly affects its ability to define strategic territorial visions, allocate resources effectively, foster inclusive participation, navigate legal frameworks, and adapt to dynamic post-conflict conditions.

A structured, evidence-based assessment can lay the groundwork for targeted and context-sensitive capacity development efforts. These interventions are vital to improving outcomes in areas such as sustainable development, fair resource distribution, and "build back better" approach in reconstruction. This research aims to address this gap by designing and piloting a digital self-assessment methodology specifically adapted to the Ukrainian spatial planning context.

Stemming from the identified analytical problem of absent standardized diagnostic tools and the evident gap in structured assessment methodologies tailored to the Ukrainian context, the central analytical question guiding this research is: How can a structured capacity assessment tool effectively diagnose the spatial planning strengths and weaknesses of Ukrainian hromadas to inform targeted capacity development interventions?

#### TERMINOLOGY GLOSSARY

The terminology employed in this research is grounded in existing academic literature and adapted to the specific context of spatial planning and capacity assessment in Ukrainian hromadas. Some of the terms are combined and interpreted by the author of the research. The following glossary defines key terms as they are understood and utilized throughout this thesis:

**Hromada (Territorial Community):** A fundamental administrative-territorial unit of local self-government in Ukraine. According to author's interpretations in the context of this research, the hromada serves as the primary entity for which spatial planning is conducted and whose capacities for these functions are evaluated, particularly within the framework of ongoing decentralization, post-war recovery, and sustainable development objectives.

**Spatial Planning:** Although there is no single legal definition of "spatial planning" in Ukrainian legislation, the term is commonly understood — based on a review of relevant literature — as the set of legal, strategic, and technical processes used by a *hromada* to shape the physical structure, functional organization, and sustainable development of its territory. Spatial planning includes forecasting future development, guiding land use, making regulatory decisions, implementing plans and projects, and monitoring outcomes. It aims to create a coherent and integrated vision for a community's growth, balancing economic sustainability, social inclusion, and environmental protection. Core activities involve preparing and executing spatial development plans (such as the Comprehensive Plan for the Spatial Development of the Territory of the Territorial Community), managing land use effectively, controlling urban sprawl, revitalizing built environments, coordinating sectoral policies, addressing climate resilience, enhancing mobility, and ensuring fair access to public spaces and services.

Capacity: According to the OECD framework, capacity refers to the ability inherent in individuals, organizations, and society as a whole to successfully manage their affairs, perform functions, and achieve objectives. More specifically stated in the EU framework within an organizational context, it is the demonstrated ability to undertake tasks effectively, produce desired outputs, define and resolve problems through informed choices, and adapt to changing circumstances. Capacity is understood to reside within the boundaries of an organization or network of organizations, is shaped by a combination of internal and external factors, and is always context-specific.

Capacity for Spatial Planning: Based on other identification of terms "capacity" and "spatial planning", the author interpretation of capacity for spatial planning refers specifically to a hromada's collective capability to effectively plan, manage, and govern its territory through robust spatial planning processes and the successful implementation of adopted spatial plans. This multifaceted capacity encompasses various interconnected dimensions and operates across multiple levels (individual, organizational, and relational). An ideal, capable hromada in this domain would combine strong technical and professional expertise among its personnel with effective and transparent organizational structures and processes, adequate financial and technical resources, and well-developed relational abilities for collaboration and engagement. Such a hromada leverages digital tools and data for evidence-based and strategic decision-making, ensuring that planning is participatory, adaptable, and aligned with sustainability principles and the specific needs of the community, all while operating within, and actively contributing to, a supportive enabling environment. This capacity is of critical importance for both the hromada's ongoing development and its ability to implement effective post-war recovery and reconstruction strategies.

Capacity Assessment: According to EU and UNDP frameworks, capacity assessment refers to a systematic and primarily diagnostic process designed to identify and analyze the existing strengths (assets) and weaknesses (needs) of an entity's capacity in a specific area. It serves as an integral and often foundational component of the broader capacity development cycle. Capacity assessment involves a structured examination of capabilities against desired benchmarks or objectives, helping to understand the underlying causes of performance gaps or limitations. When conducted by the organization or entity itself, it is referred to as a capacity self-assessment. The insights gained from a capacity assessment are crucial for informing the design of targeted capacity development strategies and actions, guiding decision-making and resource allocation, establishing baselines for monitoring future progress, and fostering ownership and commitment to improvement, particularly when participatory approaches are employed.

Capacity Self-Assessment: According to the UN-Habitat capacity self-assessment methodology, the term refers to a specific type of capacity assessment wherein an organization or entity takes the lead in evaluating its own capacities. This process typically involves internal stakeholders identifying strengths and weaknesses across various levels, such as individual competencies, organizational systems, and relational dynamics with the external environment. It is inherently a participatory process driven by the institution being assessed.

**Capacity Development:** According to the frameworks by OECD and UNDP, the capacity development is an overarching and ongoing process through which individuals, organizations, and societies obtain, strengthen, and maintain the capabilities to set and achieve their own development objectives over time. Capacity assessment is considered an essential first stage in this process, as its findings directly inform the identification, prioritization, and design of effective capacity development interventions and strategies.

**Structured Digital Self-Assessment:** The author's core methodological approach in this research for evaluating spatial planning capacities. It involves the use of a systematically designed, quantitative questionnaire administered through a digital platform. This method allows for standardized measurement of capacity indicators, numerical analysis of responses, and the potential for adapting questions based on the roles of different respondents. The digital nature facilitates efficient data collection, automatic scoring of responses, and the generation of analytical reports and visualizations to highlight strengths and weaknesses.

**Enabling Environment:** According to the OECD framework this term describes the broader context of external factors that influence an organization's or entity's capacity to perform its functions. It is considered a key component of Relational Capacity and encompasses aspects such as the prevailing legal and regulatory frameworks, the level of political will and support for certain initiatives, governance

structures, socio-economic conditions, and cultural norms, as described in the GIZ and UNDP frameworks.

**Functional-Rational Dimension (of Capacity):** According to the OECD framework this refers to the tangible and often technical aspects of capacity, including the availability of specific skills and knowledge among personnel, the effectiveness of established systems and procedures, and the adequacy of technological resources. It is often considered in conjunction with, and sometimes contrasted against, the political dimension of capacity.

**Political Dimension (of Capacity):** According to the OECD framework this encompasses aspects of capacity related to power dynamics, stakeholder interests, political will, leadership commitment, and the ability to navigate and manage political processes effectively. Political will and supportive leadership are considered a critical sphere of capacity for ensuring effective spatial planning within hromadas.

GIS (Geographic Information Systems): Author's interpretation of the GIS importance in the Ukrainian context, is that it's helps to capture, store, manipulate, analyze, manage, and present all types of geographical data. GIS technology and methods are identified as critically important for effective contemporary spatial planning, data management, and evidence-based decision-making. The availability of GIS specialists and the effective utilization of GIS technology are considered important components of a hromada's technical capacity for spatial planning.

Cadastre (Land Cadastre): According to the Planning Law Assessment Framework (UN-Habitat 2018) a comprehensive register of the real estate or land parcels within a jurisdiction, including details of their ownership, tenure, precise location, dimensions, cultivation (if rural), and value. Accurate and accessible land cadastre information and integrated property registries are vital data sources for spatial planning. Author's interpretations is that the ability to access, manage, and integrate cadastral data should be assessed as a component of a hromada's capacity. Cadastre specialists are also considered as important qualified staff.

Comprehensive Plan for the Spatial Development of the Territory of the Territorial Community (Comprehensive Plan): According to the author's interpretation of the literature overview, this document is a new generation key statutory and legally binding document in the Ukrainian spatial planning system. It is designed to integrate various aspects of spatial planning and land management documentation for the entire territory of a hromada, aiming to establish a long-term strategic vision for its desired development. The ability to successfully develop, adopt, and implement such plans is a core function of spatial planning, and the rate of their approval and effective use can serve as an indicator of systemic capacity at the different levels.

#### ANALYTICAL FRAMEWORK

The analytical framework serves as the theoretical foundation of this research, constructed upon a comprehensive literature review. It aims to delineate the author's underlying assumptions regarding societal phenomena (theoretical paradigm) and to present and substantiate the anticipated and investigated phenomena, behaviors, causal relationships, mechanisms, and conditions among the studied elements.

**Core Relationship:** The central proposition is that the levels of capacity across the various dimensions (human, organizational, resources, legal, data, strategic, adaptability, political will, and relational) directly determine a hromada's overall capacity for spatial planning. These dimensions have been identified based on both theoretical frameworks and the challenges of Ukrainian spatial planning system mentioned in the literature overview and public discourse. Dimensions reflect the full spectrum of factors that collectively shape a hromada's ability to plan and manage its territory effectively. Human and organizational capacities ensure that qualified professionals and well-functioning institutional structures are in place. Financial resources and legal capacities relate to the availability of funding and the ability to navigate and apply the legal framework. Data and information capacities are critical for evidence-based planning, while strategic capacity reflects the ability to formulate and implement long-term development visions. Adaptability is vital in the dynamic post-war context, enabling hromadas to respond to uncertainty and change. Political will drives commitment to implementation, and relational capacity captures cooperation with external stakeholders. Together, these dimensions form the backbone of spatial planning capacity, and weaknesses in any one area can significantly undermine the planning process as a whole. It is anticipated that deficiencies in one or more of these dimensions will impede effective spatial planning. For instance, insufficient financial and human resources, often falling short of legal mandates, are expected to constrain a hromada's ability to execute planning tasks.

Influence of the Enabling Environment: The broader context, encompassing the legal framework and political will, is expected to substantially shape a hromada's spatial planning capacity. Challenges posed by a complex and rigid legal framework alongside the critical importance of political will and leadership, are highlighted. Furthermore, effective external relationships and cooperation (relational capacity) are anticipated to enhance a hromada's ability to leverage external support and navigate the complexities of the planning system.

**Contextual Factors:** The framework acknowledges the specific Ukrainian context, particularly the ongoing decentralization reform and the impacts of the war. Decentralization is expected to empower hromadas but simultaneously introduce challenges related to new responsibilities and potentially disparate capacity levels. The war is expected to create disrupted baseline conditions,

generate emergent needs (such as recovery and reconstruction planning), and necessitate heightened adaptability and resilience in spatial planning endeavors. These factors are posited to significantly influence both the required capacities and the complexities of assessing and developing them.

**Interconnectedness of Dimensions:** The theoretical framework posits that the various capacity dimensions are interdependent. For example, access to and utilization of data and digital tools (Data dimension) are contingent upon human resources (e.g., availability of GIS specialists). Similarly, effective strategic planning necessitates strong political will, robust data, and professional expertise.

**Functional-Rational versus Political Dimensions:** The framework recognizes the interplay and potential tension between the "functional-rational" aspects of capacity (technical skills, established systems, procedures) and the "political" aspects (power dynamics, stakeholder interests, political will). Effective spatial planning is expected to require navigating both technical exigencies and political realities.

**Role of Assessment:** Capacity assessment is posited as a crucial initial step for understanding the current state of these conceptualized capacities. It serves to diagnose limitations and inform subsequent capacity development interventions. The chosen methodology, such as a structured digital self-assessment with quantitative scoring, is expected to enable standardized measurement and analysis across these dimensions and potentially across different respondent roles within the hromada.

In essence, the Analytical Framework establishes that a hromada's spatial planning capability is a complex, multi-dimensional construct. This capability is shaped by internal resources and structures, external relationships, political factors, and the demanding context of decentralization and post-war recovery. The framework explicitly anticipates that deficiencies in specific capacity dimensions or an unfavorable enabling environment are the primary factors limiting effective spatial planning within Ukrainian hromadas.

Together, these components enable not only the identification of capacity limitations but also the differentiation of capacity levels across hromadas. This creates the basis for a structured typology of spatial planning capacity, allowing for the classification of communities according to their development stage and the formulation of targeted, context-specific recommendations for capacity strengthening.

#### METHODOLOGICAL DESIGN OF THE RESEARCH

This research employs a quantitative approach, centred on a structured digital self-assessment methodology. The primary aim is to evaluate the spatial planning capacities of individuals and organizations operating at the local level within Ukrainian hromadas. This section details the rationale for the chosen approach, the

methods for data collection and analysis, the operationalization of key concepts, the definition of the target audience and sample, and discusses the inherent advantages and limitations of the selected design.

## Choice of Approach and Methodology

The selection of a quantitative approach, specifically through a structured digital self-assessment, is principally guided by the research objective to establish a scalable and systematic method for capacity evaluation. This methodological choice facilitates efficient data collection across potentially numerous respondents and hromadas. It allows for standardized measurement, yielding numerical data amenable to statistical analysis. Such analysis is crucial for objectively identifying specific strengths, weaknesses, and patterns in spatial planning capacities.

It is acknowledged that a singular, universally applied capacity assessment methodology for spatial planning is not currently standard practice across all Ukrainian hromadas. Existing understanding often derives from problem-focused research, system performance analysis, and expert consultations. Recognizing this, and drawing inspiration from established global frameworks, such as the UNDP Capacity Assessment, the EU, MetroCam and UN-Habitat Frameworks, this study implements a purpose-built, tailored methodology. This takes the form of a Structured Digital Self-Assessment questionnaire for the spatial capacity assessment, designed to capture the nuances of the Ukrainian context, particularly concerning decentralization and post-war recovery needs.

## **Method for Data Collection**

The principal instrument for data collection is a strictly quantitative questionnaire. This instrument is composed exclusively of closed-ended questions. Responses are captured using numeric or agreement scales, predominantly 5-point Likert-type scales. For instance, scale anchors range from '1' (indicating a very low level of capacity, complete absence of a feature, or strong disagreement with a statement) to '5' (representing a very high level of capacity, full presence, or strong agreement). The meaning of each scale's anchor points (e.g., "1 = Very Low Understanding", "5 = Very High Understanding", or "1 = Never", "5 = Very Often") is explicitly defined for each relevant question or set of questions to ensure clarity and consistency in interpretation by respondents. This approach yields quantifiable data points for each specific aspect of spatial planning capacity under investigation. The questions are formulated to prompt respondents to rate current conditions, the availability of necessary resources, or the extent to which specific practices and procedures are implemented, all according to the predefined scales. Also, several multi- and singlechoice questions present to identify particular capacity gaps in different capacity dimensions.

# Operationalization of Concepts

The central concept of this research, 'capacity for spatial planning within a hromada,' is operationalized by disaggregating it into several interconnected dimensions, referred to as 'spheres' in the questionnaire. These dimensions have been adapted from international best practices and theoretical frameworks to reflect the specific administrative, legal, and socio-economic context of Ukrainian hromadas. Each dimension is further broken down into specific, measurable aspects, which are subsequently translated into the individual quantitative questions within the questionnaire.

The dimensions (spheres) assessed by the self-assessment tool include:

- Policy Understanding and Application
- o Strategic Vision and Planning
- Data and Information Management
- o Financial Resources
- o Stakeholder Engagement and Public Participation
- o Cross-department Cooperation and Partnerships
- o Technical Expertise and Professional Skills
- o Political Will and Leadership
- o Adaptability and Resilience

Within these spheres, specific questions (e.g., "Rate your overall understanding of the current legal and regulatory frameworks...", "How consistently are spatial planning laws and bylaws applied...", "How effectively is GIS technology utilized...") function as the measurable indicators. Respondents' answers, captured on the defined numeric scales, constitute the primary data. The data generated are predominantly numerical, with the exception of a couple of multiple-choice questions.

## General Population and Sample

The general population for this research encompasses all Ukrainian hromadas and the diverse array of individuals, administrative bodies, and other entities involved in, or affected by, spatial planning processes within these communities. The sample for this study is drawn from this general population. It is designed to include a range of individuals possessing varied roles and responsibilities within the local spatial planning ecosystem of selected hromadas. The sampling strategy aims to engage respondents from several key categories to ensure a multifaceted perspective:

**Hromada Leadership:** This category includes Mayors, Deputy Mayors, and Heads of Local Council Committees or departments directly responsible for planning and development. Their responses offer insights into strategic priorities, governance aspects, and resource allocation decisions.

**Technical Specialists:** This group comprises professionals such as Urban Planners, Architects, Land Management Specialists, GIS Specialists, Cadastre

Specialists, and Engineers employed by the hromada. Their input provides crucial data on operational capacities, technical resource availability, and adherence to professional standards and procedures.

**Other Hromada Departments:** Representatives from municipal departments whose work significantly intersects with or is impacted by spatial planning (e.g., economy, environment, social protection, infrastructure, emergency services) are included to capture inter-sectoral perspectives.

Representatives of Civil Society Organizations (CSOs) / Non-Governmental Organizations (NGOs): Individuals from local or national non-governmental and civil society organizations actively engaged in the hromada concerning urban development, community advocacy, environmental protection, or provision of expert support. They offer valuable external perspectives, particularly on inclusivity and public participation. The first version of the questionnaire was not shared with participants representing this role, hovewer, this role could be

**Habitants of the Hromada:** Regular citizens or community members who are directly affected by spatial planning decisions. Their input helps to gauge the perceived impact and inclusivity of planning processes.

considered for future iterations of the self-assessment tool.

**External Experts or Consultants:** Individuals providing ongoing external technical assistance or consultancy services to the hromada on spatial planning may also be included to offer a comparative perspective. This role was not present in the first version of the questionnaire, however, it's important to help consultants and external experts to assess the capacity of the hromada, so the role will be included in the next versions of the online tool.

To enhance the relevance and accuracy of the collected data, the digital questionnaire incorporates an adaptive logic. Based on the respondent's self-identified role, specific sets of questions are presented, or the phrasing of certain questions is subtly adjusted to align with their particular scope of work and expertise. Questions deemed not applicable to a respondent's specific role can be marked as such by the respondent, or are automatically filtered, and are subsequently excluded from their individual scoring and overall analysis for that particular question.

The first sample of hromadas identified from the list of all hromadas by the ChatGPT using this prompt:

"Out of this list please choose for me 50 hromadas, they should be from different locations and different sizes, most likely to respond to my email and conduct the questionnaire (attached). They shouldn't be occupied, but could be not far from the frontline. Use their official hromada email from the spreadsheet."

# Justification of the digital format selection

The decision to deploy the self-assessment as an online questionnaire, rather than a traditional paper-based survey, is motivated by three interconnected considerations — efficiency, adaptability, and inclusivity.

First, digital delivery markedly reduces the administrative burden on respondents: the instrument has been deliberately calibrated so that a typical participant can complete it in no more than fifteen minutes. A concise digital format maximises the likelihood of completion while still capturing the breadth of information required for a meaningful capacity assessment and recommendations.

Second, the online environment lends itself to iterative refinement — a critical feature given the rapidly changing context, especially in the circumstances of the war and ever-changing legal environment. During the pilot phase, initial responses and expert feedback prompted minor wording and sequencing adjustments; future rounds will follow the same learn-and-adapt logic. Because the questionnaire is hosted on a flexible platform, new items can be added, redundant ones removed, and branching logic fine-tuned without reprinting costs or distribution delays. In subsequent iterations the tool is also expected to auto-populate publicly available indicators (e.g. demographic data, fiscal statistics) directly into each hromada's report, allowing recommendations to be ever more tailored and evidence-driven.

Third, the digital modality lowers participation barriers. Access requires only an internet-enabled device — no specialised software, paid licences, or on-site experts. Consequently, even hromadas with limited budgets, modest staffing, or minimal external donor attention can engage with the assessment, obtain an immediate visual profile of their strengths and gaps, and receive targeted recommendations for improvement. The absence of printing, mailing, or external consultancy fees keeps overall costs low, enhancing scalability across Ukraine's 1 469 communities.

Taken together, these factors position the online self-assessment as a pragmatic and future-proof solution: it is quick enough to encourage participation, dynamic enough to stay relevant as circumstances change, and accessible enough to reach those hromadas most in need of structured yet affordable capacity insight.

#### **Data Collection Procedure**

The data collection procedure involves the administration of the structured digital self-assessment questionnaire. This questionnaire is disseminated to individuals identified within the target respondent categories in participating hromadas. Access to the self-assessment is provided through a dedicated web portal — a lightweight interface that walks respondents step-by-step, instantly will render interactive charts and tailored recommendations upon submission, and can automatically email a full PDF report to any designated e-mail address. However, the first version of visual report is prepared manually by the author.

The process is designed to be self-administered by the respondents, allowing them to complete it at their convenience within a specified timeframe. Anonymity and

confidentiality of responses are ensured to encourage candid and honest selfreflection.

## Data Analysis and Visualization

The quantitative data points collected from the scaled responses form the bedrock for the subsequent analysis. Each response on a scale is assigned a numerical value. This allows for the automatic calculation and aggregation of scores. The analysis involves several steps:

- Calculation of descriptive statistics (e.g., mean scores, frequencies, distributions) for individual questions.
- Aggregation of scores to generate composite scores for each of the assessed capacity dimensions (spheres).
- Where applicable and data allows, comparative analysis of scores across different respondent groups within a hromada, or potentially across different hromadas (if a sufficient and comparable sample is achieved).
- Visual output in the form of a **radar chart** that summarises the composite scores across all spheres, making imbalances immediately visible.

This quantitative evaluation facilitates the identification of specific capacity strengths and areas requiring development or intervention.

# Advantages and Limitations

The adopted quantitative, structured digital self-assessment approach offers several distinct advantages. Its primary strength lies in efficiency and scalability, providing a standardized instrument to measure and numerically analyze capacity across diverse respondents and potentially multiple hromadas. The structured format, based on predefined dimensions and indicators, aids in systematically identifying specific strengths and weaknesses within a hromada's spatial planning system. The tailoring of the questionnaire to different respondent roles is intended to enhance the relevance and accuracy of the data collected from each participant group. Furthermore, as a self-assessment tool, the process has the potential to promote ownership, dialogue, and buy-in among participants regarding the findings and subsequent capacity-strengthening initiatives.

It is equally important to recognise that Ukraine's operating environment is evolving at an exceptional pace, which means both the questions and the resulting recommendations must be revisited and refined as conditions change. The digital format therefore plays a critical role in keeping the tool relevant over the long term — enabling rapid content updates and allowing respondents to return periodically and track shifts in their own spatial-planning capacity.

However, certain limitations are inherent in a predominantly quantitative approach. While this methodology excels at providing measurable indicators and identifying levels of capacity, it may not fully capture the complex underlying

reasons, contextual nuances, or intricate power dynamics that can significantly influence spatial planning effectiveness. Qualitative data, which is not the primary focus of this specific tool, often provides richer context and elaborates on the "why" behind the quantitative scores. The complex, and often highly localized, nature of capacity challenges in Ukrainian hromadas, involving both functional-rational aspects (e.g., technical skills, systems) and critical political dimensions (e.g., local political will, vested interests), requires a deeply nuanced understanding. Although the questionnaire attempts to cover these multifaceted aspects through tailored questions across different spheres, a purely quantitative format might oversimplify certain realities. Several multi-choice questions are a part of the questionnaire. They're not taken into account for the radar chart visualization, but could be used for specific recommendations and general observations of capacity gaps in Ukrainian planning system, that may inform future legal changes and capacity development activities.

It is therefore acknowledged that future research could benefit from a mixed-methods approach, comparing or complementing the insights from this digital self-assessment tool with qualitative methods, such as in-depth interviews or case studies, to provide a more holistic and grounded understanding of spatial planning capacities.

#### **RESULTS**

The initial data collection process involved distributing the self-assessment questionnaire via email to Ukrainian hromadas. All hromada email addresses were systematically extracted from the Dream.gov.ua platform.

The distribution strategy evolved during the data collection phase. Initially, 42 emails were sent directly to designated contact persons listed on the Dream platform. Following a low response rate, the approach was modified to target official hromada email addresses (e.g., <a href="rada@hromadaname.gov.ua">rada@hromadaname.gov.ua</a>), resulting in an additional 149 emails being distributed. This adjustment in strategy reflects the challenge of identifying the most effective communication channels for reaching spatial planning stakeholders within Ukrainian local governments.

Two completed responses were excluded from the final analysis: one respondent identified a hromada located in temporarily occupied Crimea, while another failed to specify any hromada affiliation. These exclusions ensure the validity and geographical relevance of the analyzed data.

The relatively low response rate (3.3%) warrants consideration. This may reflect several factors inherent to the current Ukrainian context: the ongoing war's impact on administrative capacity, competing priorities for local government staff, and potential survey fatigue. Additionally, the finding that 4.7% of official email addresses were invalid suggests that not all hromadas maintain up-to-date contact

information on the Dream.gov.ua platform, highlighting a potential barrier to digital communication and capacity assessment initiatives.

## **Data Processing Methodology**

Initial results were processed and visualized manually to ensure accuracy and allow for iterative refinement of the assessment tool. Future iterations of this methodology will incorporate automated processing and visualization capabilities. It should be noted that some questions underwent minor modifications based on early responses, resulting in slight variations in the question sets presented to initial respondents. However, these modifications were minimal and do not compromise the validity of the current results or the overall assessment framework.

## Respondent Profile

The 16 analyzed responses were received from 14 hromadas across 10 oblasts, demonstrating broad geographic representation despite the limited sample size. Table 1 presents the distribution of participating hromadas by oblast.

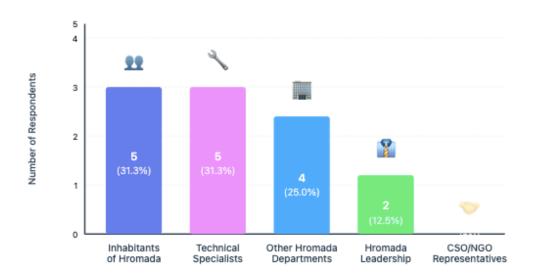
Table 1. Geographic Distribution of Survey Respondents by Oblast and Hromada		
Oblast	Hromada	Number of Responses
Dnipropetrovsk	Dniprovska	2
	Pidhorodnenska	1
Chernihiv	Bobrovytska	1
Chernivtsi	Chernivetska	1
Kharkiv	Lozivska	1
	Chuhuivska	1
Kherson	Chornobaivska	1
	Khersonska	1
Kyiv	Velykodymerska	1
Lviv	Drohobytska	1
Sumy	Romenska	1
Ternopil	Kozivska	1
Zhytomyr	Zhytomyrska	2
	Berezivska	1
Total	14 hromadas	16 responses

Note 1. Survey results, received by the author

This geographic diversity encompasses hromadas from eastern (Kharkiv, Dnipropetrovsk), western (Lviv, Ternopil, Chernivtsi), northern (Chernihiv, Zhytomyr, Sumy), and southern (Kherson) regions of Ukraine, including areas near the frontline (Kharkiv, Kherson oblasts), providing varied perspectives on spatial planning capacities under different security and administrative conditions.

### Roles of respondents:

Figure 1. Distribution of Respondents by Role in Spatial Planning Capacity Assessment



Note 2: Author's own calculations based on the Spatial Planning Capacity Assessment questionnaire (n = 16); June 2025

The distribution of respondents by role reveals next characteristics of the sample composition. Technical specialists and inhabitants each represent 31% of responses (5 respondents each), while representatives from other hromada departments account for 25% (4 respondents). Hromada leadership constitutes the smallest group at 13% (2 respondents).

The questionnaire was not distributed to representatives of civil society organizations (CSOs) or non-governmental organizations (NGOs), which explains the absence of responses from this stakeholder category. While the questionnaire design included this role option for future iterations, the current data collection phase focused on municipal stakeholders and community members.

The subsequent aggregated analysis excludes responses from inhabitants (5 respondents), as the specific multi-choice questions for identifying capacity gaps in dimensions related to municipal functional-relational and political aspects of spatial planning were tailored for hromada administration stakeholders. This methodological decision ensures that the institutional capacity assessment remains focused on those directly involved in spatial planning processes within the hromada

administration. Therefore, the aggregated institutional analysis is based on responses from representatives of 10 hromadas (11 individual responses from hromada leadership, technical specialists, and other department representatives).

## Overview of Aggregated Results

The aggregated analysis of responses from 10 hromadas (excluding inhabitants) reveals significant patterns in spatial planning capacity that align with the challenges identified in the literature review and reflect the complex realities of Ukrainian local governance during wartime.

Strategic Planning Documentation Status

The assessment of approved planning documents demonstrates the limited implementation of comprehensive spatial planning instruments across participating hromadas:

- 3 hromadas have approved Comprehensive Recovery Programs (CRP)
- 1 hromada has a Concept of Integrated Development (CID)
- 1 hromada has both CRP and CID
- 1 hromada has a Comprehensive Spatial Development Plan
- 1 hromada lacks any strategic planning documents

Particularly concerning is the finding that representatives from 3 hromadas (comprising 1 technical specialist and 2 representatives from other departments) were unaware of their community's planning document status. This knowledge gap within municipal administrations suggests weak internal communication and potentially limited practical application of existing planning frameworks, echoing the concerns raised about the disconnect between formal planning requirements and actual implementation capacity.

## Data and Information Management Challenges

Analysis of barriers to spatial data access reveals systemic challenges across multiple capacity dimensions. As illustrated in Figure 2, respondents identified several critical gaps:

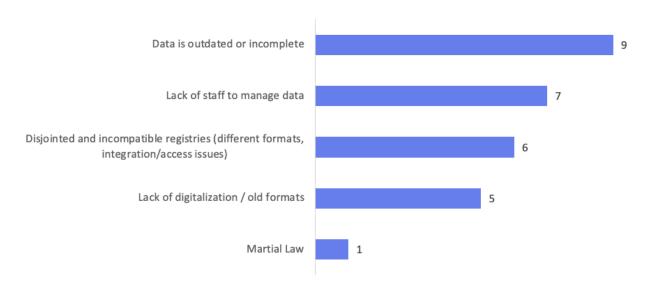


Figure 2. Reported Reasons for Limited Access to Spatial Data

Note 3: Author's own calculations based on the Spatial Planning Capacity Assessment questionnaire; June 2025.

The predominance of "outdated or incomplete data" (9 responses) as the primary barrier aligns with the fragmented data infrastructure challenges documented in the literature. The significant concerns about "lack of staff to manage data" (7 responses) and "disjointed and incompatible registries" (6 responses) reflect the systemic issues inherent in Ukraine's spatial data ecosystem, where multiple registries operate without effective integration mechanisms.

Notably, martial law received minimal recognition as a barrier (1 response), suggesting that the fundamental challenges lie not in temporary wartime restrictions but in structural deficiencies within the enabling environment and organizational capacities. This finding indicates that capacity development interventions should prioritize systemic improvements to data infrastructure and human resource development rather than focusing solely on war-related constraints.

#### **Human Resource Constraints**

The analysis of skilled staff shortages reveals two dominant factors impeding spatial planning capacity at the local level:

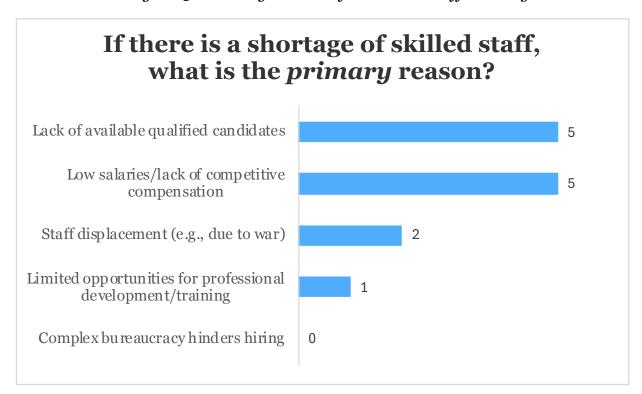


Figure 3. Primary Reasons for Skilled-Staff Shortages

Note 4 Author's own calculations based on the Spatial Planning Capacity Assessment questionnaire; June 2025.

It should be noted that due to an oversight in the first version of the questionnaire distributed to hromadas, this question was not included for technical specialists, only for "Hromada Leadership" and "Other Hromada Departments" respondents. This limitation will be addressed in future iterations of the assessment tool to capture the perspectives of technical specialists on staffing challenges.

Despite this limitation, the responses reveal that equal numbers of respondents (5 each) identified "lack of available qualified candidates" and "low salaries/lack of competitive compensation" as primary barriers to adequate staffing. These findings directly support the literature's emphasis on the acute difficulty many hromadas face in recruiting qualified specialists, such as urban planners, architects, land managers (Kyiv International Institute of Sociology 2023). The human resource crisis reflects both supply-side constraints (insufficient numbers of qualified professionals produced by educational institutions) and demand-side limitations (inability of local governments to offer competitive compensation).

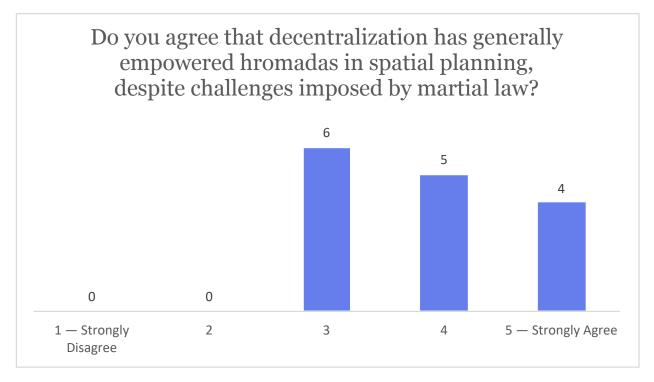
# **Enabling Environment Assessment**

Several questions assessed perceptions of the broader institutional and regulatory context for spatial planning:

Educational System Effectiveness: When asked to rate how effectively Ukraine's vocational education system prepares specialists for community-level spatial planning (1-5 scale), responses were limited but revealing: 3 respondents rated it "2" (low effectiveness), while only 2 respondents provided positive ratings (4 and 5). Though the sample size precludes definitive conclusions, this pattern suggests significant skepticism about the alignment between educational outputs and practical spatial planning needs.

**Decentralization Impact**: Despite the challenges of wartime governance, a clear majority of respondents (9 out of 15) agreed that decentralization has empowered hromadas in spatial planning:

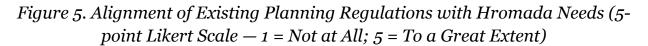
Figure 4. Distribution of Responses on the Empowering Effect of Decentralization (5-point Likert Scale -1 = Strongly Disagree; 5 = Strongly Agree)

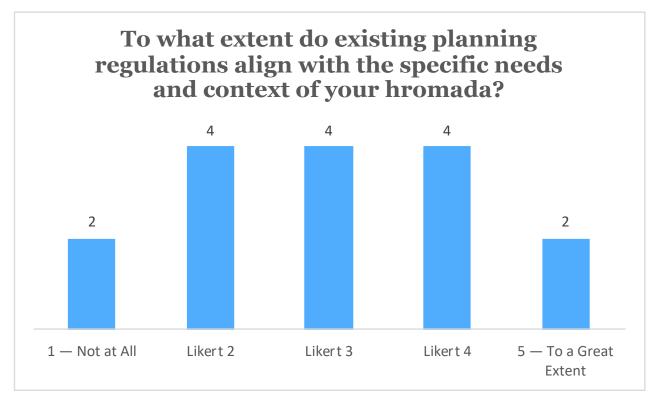


Note 5. Author's own calculations based on the Spatial Planning Capacity Assessment questionnaire; June 2025.

This positive assessment of decentralization's impact, even under martial law conditions, validates the reform's fundamental premise while acknowledging its implementation challenges. The concentration of responses in the "agree" to "strongly agree" range (scores 4-5) suggests that local stakeholders value their increased autonomy despite the capacity constraints and new responsibilities identified in the literature.

**Regulatory Framework Alignment**: Assessment of how well existing planning regulations align with local needs reveals a nuanced picture:





Note 6. Author's own calculations based on the Spatial Planning Capacity Assessment questionnaire (n = 16); June 2025.

The predominance of moderate responses (scores 2-4) indicates that while the regulatory framework is not entirely misaligned with local needs, gaps remain. This finding resonates with characterization of Ukraine's planning legislation as complex and fragmented, presenting practical challenges for local authorities and professionals. The bimodal distribution suggests varied experiences across hromadas, potentially reflecting differences in capacity, resources, or local contex

## Synthesis of Findings

The aggregated results reveal a spatial planning system characterized by significant capacity constraints across multiple dimensions, validating the multi-dimensional framework drawn from international capacity assessment methodologies (OECD 2006; UNDP 2008; European Commission 2007). The limited adoption of comprehensive planning documents, combined with widespread data management challenges and acute human resource shortages, confirms that Ukrainian hromadas face capacity gaps at individual, organizational, and enabling environment levels. These findings underscore the need for integrated capacity development approaches that address not only technical skills and resources but also systemic issues within the enabling environment, including data infrastructure modernization, educational system reform, and regulatory simplification.

## **Individual Capacity Assessment Results**

The individual capacity assessments employed radar chart visualizations as the primary analytical tool, offering an intuitive and comprehensive representation of each respondent's evaluation of their hromada's spatial planning capacity across nine key dimensions. This visual approach serves multiple purposes: it immediately highlights areas of strength and weakness, facilitates comparison across different respondents and roles, and provides a diagnostic foundation for targeted capacity development recommendations. All radar chart visualisations were created using Claude 4 Oppus model by Anthropic.

## **Results Analysis Considerations**

Several methodological decisions shaped the analysis of individual responses:

Response Completeness: All Likert-scale questions were designed as optional to reduce respondent burden and allow participants to skip questions they found irrelevant or difficult to assess. When respondents skipped individual questions, these were excluded from the calculation of that sphere's average score. If an entire sphere was skipped, it was omitted from the radar chart visualization entirely. This approach reflects a pragmatic balance: while missing data limits comprehensive assessment, forcing responses to irrelevant questions would compromise data quality. The pattern of skipped questions itself provides valuable information — systematic omissions may indicate that certain capacity dimensions are poorly understood, considered irrelevant to local contexts, or represent areas of such significant challenge that respondents struggle to assess them accurately.

**Scale Adjustments**: Several questions were intentionally designed with reverse scaling, where higher scores indicated negative conditions. For example, the question regarding stakeholder interference in participatory planning used a scale where 1 = "Does not interfere at all" and 5 = "Significantly interferes." These responses were mathematically inverted for visualization consistency, ensuring that higher scores consistently represent better capacity across all dimensions.

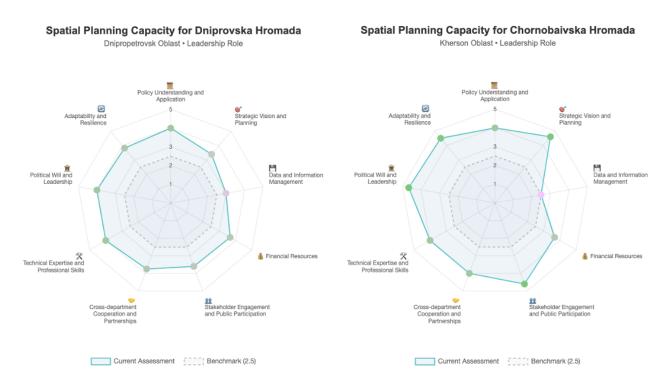
**Benchmarking Approach**: The current analysis employs a threshold of 2.5 (the midpoint of the 5-point scale) as the benchmark for adequate capacity in each sphere. This fixed reference point provides a clear standard for identifying capacity gaps. As the dataset expands through future assessments, this benchmark can be refined using empirical distributions, potentially incorporating percentile-based thresholds or sector-specific standards that reflect the actual distribution of capacities across Ukrainian hromadas.

## Patterns by Respondent Role

Analysis of the radar charts reveals distinct patterns when responses are grouped by role:

**Hromada Leadership** (2 responses): Leadership respondents generally provided more optimistic assessments across most dimensions. However, even leadership responses revealed consistent gaps in data management dimension, suggesting awareness of this systematic challenge in 2 representing hromadas.

Figure 6. Spatial Planning Capacity Assessment Visualisations — Leadership Representatives of Two Hromadas (Dniprovska, Chornobaivska)



Note 7. Author's own calculations and visualisation; June 2025.

**Technical Specialists** (5 responses): Technical specialists demonstrated more varied capacity assessments that suggested more difference in the spatial planning capacity among different hromadas.

Figure 7. Spatial Planning Capacity Assessment Visualisations — Technical-Specialist Respondents from Five Hromadas (Romenska, Bobrovytska, Chuhuivska, Pidhoronenska, Lozivska)



Note 8. Author's own calculations and visualisation; June 2025.

**Other Department Representatives** (4 responses): This group exhibited the heterogeneous response patterns, likely reflecting the diverse departmental perspectives and varying degrees of involvement in spatial planning processes.

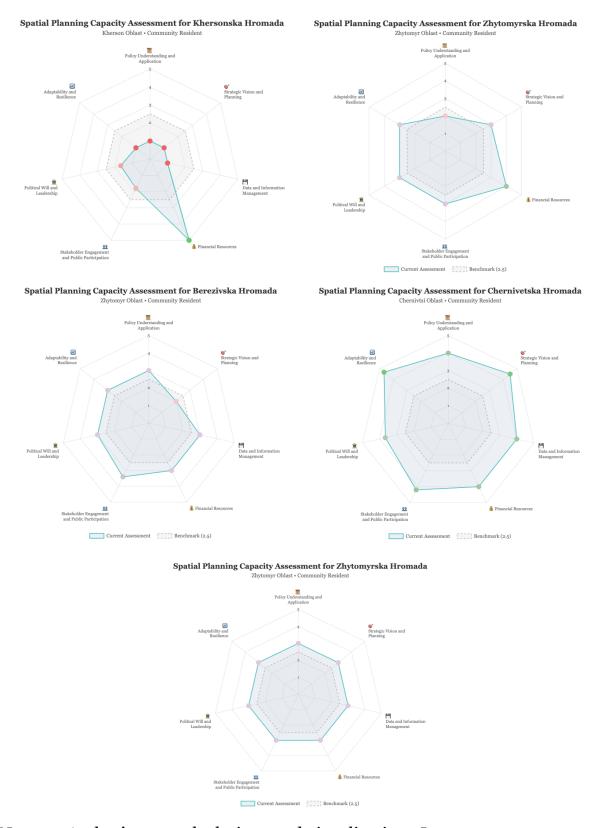
Figure 8. Spatial Planning Capacity Assessment Visualisations — Representatives of other departments, related to spatial planning (Kozivska, Drohobytska, Velykodymerska, Dniprovska)



Note 9. Author's own calculations and visualisation; June 2025.

**Inhabitants** (5 responses): Community members provide crucial external validation of the self-assessment methodology, often revealing blind spots in municipal self-perception.

# Figure 9 Spatial Planning Capacity Assessment Visualisations — Community residents (Khersonska, Zhytomyrska — 2 respondents, Berezivska, Chernivetska)



Note 10. Author's own calculations and visualisation; June 2025.

#### Multi-Stakeholder Assessment Value

The cases where multiple respondents from the same hromada completed assessments (Dniprovska and Zhytomyrska) demonstrate the methodology's potential for revealing intra-organizational perspectives. For instance, comparing leadership and technical specialist assessments from the same hromada may reveal divergent views on political will, resource availability, or other dimensions. These differences are not merely measurement error but reflect legitimate variations in organizational experience and position-based perspectives, which can help to design future capacity development interventions.

Such multi-stakeholder assessments offer several advantages: they reduce the risk of individual bias, provide a more comprehensive picture of organizational capacity, and can reveal internal communication gaps when respondents from the same organization provide markedly different assessments of basic factual conditions (such as the existence of planning documents). Future iterations of this methodology should actively encourage multiple responses per hromada to leverage these analytical benefits.

### Visual Communication of Capacity Profiles

The radar charts effectively communicate complex multi-dimensional data in an accessible format. The visual metaphor of a "capacity profile" allows stakeholders to immediately grasp overall capacity levels (represented by the total area covered) and the balance between different dimensions (shown by the shape regularity or irregularity). Irregular, "spiky" profiles indicate uneven capacity development, while smaller overall areas signal general capacity constraints.

This visualization approach serves both diagnostic and motivational purposes. For participating hromadas, seeing their capacity profile can stimulate internal discussions about priority areas for improvement and provide a baseline for tracking progress over time. For capacity development practitioners and policymakers, these profiles enable rapid identification of common patterns and systemic challenges that require sectoral interventions.

#### **CONCLUSIONS AND DISCUSSIONS**

This research addressed the critical gap in systematic capacity assessment for spatial planning within Ukrainian hromadas by developing and piloting a digital self-assessment methodology. The study's findings, while based on a limited sample of 16 responses from 14 hromadas, provide valuable insights into both the current state of spatial planning capacity and the viability of structured self-assessment as a diagnostic tool for capacity development.

### **Key Findings and Their Implications**

The research confirms that Ukrainian hromadas face multidimensional capacity constraints that align closely with the challenges identified in the literature. The assessment revealed significant gaps in strategic planning documentation, with only scattered adoption of Comprehensive Recovery Programs, Concepts of Integrated Development, and Comprehensive Spatial Development Plans across participating hromadas. Particularly concerning was the finding that representatives from three municipalities were unaware of their community's planning document status, suggesting weak internal communication and potentially limited practical application of existing planning frameworks.

The predominance of "outdated or incomplete data" as the primary barrier to spatial planning (reported by 9 of 11 municipal respondents) directly supports the fragmented data infrastructure challenges documented in post-war recovery assessments (Government of Ukraine; European Union; United Nations; World Bank 2025). However, the minimal recognition of martial law as a barrier suggests that capacity constraints are fundamentally structural rather than circumstantial — a finding with important implications for capacity development strategies.

The human resource crisis identified through the assessment — with equal numbers of respondents citing lack of qualified candidates and uncompetitive compensation — corroborates the acute staffing challenges documented by the Kyiv International Institute of Sociology (2023). This dual constraint reflects both supply-side limitations in Ukraine's educational system and demand-side failures in local government employment conditions, suggesting that capacity development must address both educational reform and compensation structures.

#### Theoretical Contributions and Framework Validation

The application of international capacity assessment frameworks (OECD 2006; UNDP 2008; European Commission 2007) to the Ukrainian context demonstrates their relevance while highlighting necessary adaptations. The multi-level capacity construct — encompassing individual, organizational, and enabling environment dimensions — is an effective way in capturing the complexity of spatial planning challenges. The research shows that international academic approaches and methodologies can be successfully adapted for the Ukrainian context, acknowledging the deeper importance of capacity assessment before capacity development activities.

The finding that 9 of 15 respondents agreed that decentralization has empowered hromadas despite wartime constraints validates the reform's fundamental premise while acknowledging implementation challenges. This positive assessment, even under martial law conditions, suggests that local stakeholders value increased autonomy despite capacity limitations — a finding that enriches our understanding of capacity development in transitional governance contexts.

#### Digital Methodology and Visualization Effectiveness

The digital self-assessment methodology demonstrated several strengths that validate its potential as a scalable diagnostic tool. The radar chart visualizations is an effective way in communicating complex multidimensional data, providing immediate visual feedback that enables stakeholders to grasp their capacity profile at a glance. These visualizations successfully highlight areas of strength and weakness, making capacity gaps immediately apparent and facilitating prioritization discussions within hromadas.

The adaptive questionnaire design, which tailored questions to different stakeholder roles, successfully can capture varied perspectives within the spatial planning ecosystem. This multi-stakeholder approach can reveal important differences in perception between leadership, technical specialists, and other departments — insights that single-respondent assessments would miss. The digital format's efficiency, with completion times of approximately 15 minutes, balanced comprehensiveness with respect for participants' time constraints.

Critically, the digital nature of the tool enables continuous adaptation to Ukraine's ever-changing legal environment and post-war context. Unlike static assessment instruments, this methodology can be updated in real-time to reflect new legislation, emerging challenges, or refined understanding of capacity needs. The tool will be publicly accessible at web address *ukrainecapacity.com.ua/self-assessment-tool*, ensuring broad availability to all hromadas regardless of their access to external support.

# Capacity Level Assignment System

The development of a six-level capacity classification system represents a significant methodological contribution to the field. This system builds directly on the conceptual framework outlined in the methodological chapter while introducing a refined structure for translating questionnaire results into meaningful and comparable capacity profiles. The system ensures consistent interpretation across all participating hromadas and enables systematic identification of capacity gaps and development priorities.

The assignment model operates on three core principles. First, it adopts a fixed reference point of 2.5 (the mid-point of the five-point response scale) as the benchmark for sufficient performance. This value functions as a stable anchor for interpretation, clearly separating insufficient from acceptable performance across all levels. While this initial benchmark will remain fixed for consistency, future iterations may incorporate empirical benchmarks based on accumulated data from a larger sample. Second, progression through the capacity levels follows specific entry conditions reflecting a logical developmental sequence—from basic legal compliance and leadership support toward strategic, coordinated, and adaptive planning practices. Third, the thresholds increase incrementally, with each higher

level introducing additional requirements, ensuring advancement reflects balanced development rather than exceptional performance in isolated areas.

**Level 1 (Initial Capacity)**: This Level describes a situation where the basic legal obligations are either not met or fulfilled only in formal terms. The leadership support for planning is weak, and there is little institutional or political commitment to developing capacity. A hromada falls into this category if the overall average score is below 2.5, or if either the Legal Framework or Political Will scores fall below this value.

**Level 2 (Basic Capacity)**: At this stage, legal rules are generally followed, and the leadership expresses visible support for planning-related activities. Basic staff and funding conditions are starting to take shape, but they remain fragile and inconsistent. A hromada reaches this Level if the overall mean score is at least 2.5, the scores for both Legal Framework and Political Will are 2.5 or higher, the Human Resources score is at least 2.5, and the Financial Resources score reaches a minimum of 2.5.

**Level 3 (Functional Capacity):** This Level signals that the hromada has started to move beyond formal compliance. Strategic documents are being developed, and some form of data is being used to support planning. There is early evidence of structured planning efforts. To qualify for this Level, the hromada must meet all criteria for Level 2, and additionally, achieve a score of at least 2.5 in Strategic Planning and at least 2.5 in Data and Digitalisation.

**Level 4 (Operational Capacity**): Here, planning becomes more embedded in routine practices. Public participation is more systematic, and different departments or sectors within the hromada begin to work together effectively. Coordination and openness to stakeholders become part of daily operations. A hromada is assigned to this Level if it meets all Level 3 requirements and scores at least 2.5 in both Public Participation and Inter-departmental Coordination.

**Level 5 (Strategic Capacity)**: This Level reflects a mature organization that can anticipate risks and manage change. The hromada applies its plans in practice, adapts to challenges, and shows consistent performance across all capacity spheres. No major gaps remain. To reach this Level, the hromada must meet all Level 4 criteria, score at least 2.5 in Adaptation and Resilience, have no sphere below 2.5, and achieve scores of 3.5 or higher in at least five out of the nine assessed spheres.

**Level 6 (Leadership Capacity):** This is the highest Level and describes a hromada that demonstrates consistently strong performance across all dimensions. It serves as a national example of best practice and is in a position to support and mentor other communities. Every sphere must score at least 3.5, and at least three spheres must reach a score of 4.5 or above.

As a core contribution of this research, I propose a comprehensive recommendations algorithm that transforms assessment results into actionable capacity development guidance. This algorithm operates through a systematic three-stage process:

**Stage 1: Capacity Level Determination** The system first calculates the arithmetic mean for each of the nine capacity spheres based on relevant question responses. It then evaluates these scores against level-specific criteria, progressing sequentially from Level 1 upward until the hromada no longer meets requirements for the next level. This ensures accurate placement within the capacity hierarchy and identifies the specific barriers preventing advancement.

**Stage 2: Gap Analysis and Prioritization** The algorithm conducts multilayered gap analysis: (a) identifying all spheres scoring below 2.5 as critical gaps requiring immediate attention; (b) for spheres scoring between 2.5 and 3.5, examining individual questions to pinpoint specific weaknesses within otherwise adequate spheres; (c) analyzing patterns across spheres to identify systemic issues—for instance, simultaneous weaknesses in Human Resources and Technical Expertise might indicate comprehensive workforce challenges rather than isolated skill gaps.

**Stage 3: Recommendations Generation** Based on the gap analysis, the system generates tailored recommendations from a structured library organized by:

- Capacity sphere and specific sub-components
- Implementation complexity (quick wins vs. long-term initiatives)
- Resource requirements (financial, human, technical)
- Expected impact timeline (immediate, short-term, long-term)
- Prerequisites and interdependencies with other recommendations

The recommendations prioritization follows a strategic logic: addressing foundational gaps before advanced capabilities, maximizing impact within resource constraints, tackling interdependent gaps simultaneously, and balancing quick wins with sustained capacity building efforts. For example, a hromada scoring low in Data and Information Management due to "outdated or incomplete data" would receive a package including immediate actions (establishing data update protocols), medium-term initiatives (staff training on data management), and long-term solutions (implementing integrated GIS systems).

#### Comprehensive Recommendations System

Beyond diagnostic assessment, the research establishes a recommendations system that links identified gaps to specific capacity development interventions. This system generates three types of outputs for each participating hromada: visual radar charts showing capacity profiles and gaps, assigned capacity level with clear advancement requirements, and specific recommendations from a growing library of interventions tailored to identified weaknesses.

The recommendations system acknowledges that capacity limitations exist at multiple levels — from individual technical skills and GIS expertise to organizational challenges in attracting qualified staff and fostering interdepartmental cooperation. Given that only a portion of Ukraine's 1,469 hromadas receive external support from international organizations, government programs, or NGOs, this self-assessment tool provides a practical solution for independent capacity diagnosis and development planning.

The system's digital architecture enables continuous expansion as more hromadas complete assessments and share successful capacity development experiences. Future iterations can incorporate case studies of hromadas that have successfully developed specific capacities, creating a knowledge repository accessible to all communities. This approach democratizes access to capacity development resources, enabling communities to learn from peers facing similar challenges.

### **Practical Applications and Scalability**

The research demonstrates that this tool can serve multiple stakeholder groups effectively. For hromadas themselves, it provides immediate, visual feedback on capacity strengths and gaps, empowering evidence-based advocacy for support and internal priority-setting. The tool's accessibility — requiring only internet access and minimal time investment—ensures that even resource-constrained communities can benefit from systematic capacity assessment.

For consultants and experts conducting local capacity development workshops, the tool offers a standardized yet flexible framework for initial assessment and progress monitoring. The consistent methodology enables comparison across communities while the role-based questionnaire design captures diverse perspectives within each hromada.

As data accumulates, the tool will enable identification of systemic trends and benchmarks that can inform state programs, regulatory changes, and capacity development initiatives by Ukrainian organizations and international partners. This evidence base will support more targeted and effective resource allocation, moving beyond generic interventions to address specific, empirically identified capacity gaps.

# Limitations and Methodological Considerations

Several limitations warrant acknowledgment. The sample size of 16 responses prevents broad generalization, though the geographic diversity and multistakeholder perspectives provide valuable preliminary validation. The absence of civil society organization respondents represents a gap in stakeholder coverage that limits understanding of the tool's relevance for this important constituency.

The current methodology relies primarily on self-reported quantitative data supplemented by limited multiple-choice questions. While this approach enables

efficient data collection and standardized analysis, it cannot fully capture the underlying reasons for capacity gaps or the complex political dynamics influencing spatial planning. However, the tool's primary purpose — providing immediate diagnostic feedback and actionable recommendations — is well-served by this focused approach.

The capacity level assignment system currently lacks integration with objective indicators such as population size, fiscal capacity, or staffing numbers. Volodymyr Kondziolka, Head of Drohobych City Institute and founder of the Drohobych Smart Community Project, proposed for this research an alternative approach that warrants consideration for future development. His recommendation involves establishing initial capacity categories based on population size: Basic Level (A1–A2) for hromadas with populations under 10,000; Average Level (B1–B2) for those with 10,000–50,000 residents; and Advanced Level (C1–C2) for communities exceeding 50,000 inhabitants. Within each population category, a secondary dimension (the numeric designation 1 or 2) would reflect the actual skills and resources available to the hromada.

This population-based approach offers several advantages for future implementation. It acknowledges that larger hromadas typically have access to more diverse revenue sources, larger professional staff pools, and more complex planning challenges requiring different capacity configurations. By establishing population-based peer groups, the system could provide more relevant benchmarking and recommendations tailored to the specific challenges facing hromadas of different sizes. For instance, a small rural hromada might receive recommendations focused on resource-sharing arrangements with neighboring communities, while a larger urban hromada might receive guidance on managing complex multi-stakeholder planning processes.

Implementation of Kondziolka's approach could involve a hybrid model where hromadas are first assigned to a population-based category, then complete the self-assessment to determine their position within that category. This would enable both absolute capacity measurement (against universal standards) and relative assessment (against similar-sized peers). The recommendations algorithm could be refined to consider both dimensions, providing guidance that is both ambitious and realistic given the hromada's structural constraints. Future research could explore optimal population thresholds for Ukrainian contexts, validate whether population size correlates with capacity patterns observed in the assessment data, and develop category-specific recommendation libraries that acknowledge the different starting points and development trajectories of various-sized hromadas. This approach can be further explored as an alternative approach to the offered in author's current research.

# **Future Development Pathways**

The research establishes a foundation for expanding structured capacity assessment across all Ukrainian hromadas. Key development priorities include growing the recommendations library through documented case studies, refining question design based on accumulated response data, and establishing sector-specific benchmarks as the dataset expands.

The tool's evolution should maintain its core strengths: accessibility, visual clarity, and immediate actionability. Integration with complementary capacity development interventions — such as targeted training programs, peer learning networks, and technical assistance matching — can create a comprehensive ecosystem supporting local spatial planning capacity.

The digital platform's adaptability positions it to respond to Ukraine's dynamic context, including ongoing legal reforms, post-war reconstruction needs, and climate adaptation requirements. Regular updates based on user feedback and emerging challenges will ensure continued relevance and effectiveness.

#### **Conclusion**

This research successfully demonstrates how international capacity assessment methodologies and academic frameworks can be adapted to create practical solutions for the Ukrainian context. The digital self-assessment tool represents more than a diagnostic instrument—it embodies a vision for democratizing access to capacity development resources and empowering hromadas to drive their own institutional strengthening.

By making capacity assessment visual, accessible, and immediately actionable, the methodology contributes to more effective use of existing and future community resources. This approach supports Ukraine's goals of faster and better reconstruction while building adaptive capacity for future challenges, including climate change impacts.

The positive reception from participating hromadas, evidenced by their willingness to complete detailed assessments despite significant time constraints and ongoing wartime challenges, validates both the need for and the viability of this approach. As Ukraine continues its recovery and European integration journey, systematic capacity assessment becomes not just useful but essential for ensuring that all hromadas — regardless of size, location, or access to external support — can strengthen their spatial planning capabilities.

The path forward is clear: expand the user base, refine the methodology based on accumulated data, and build a comprehensive ecosystem of capacity development resources accessible to all Ukrainian communities. This research provides the foundation for transforming how spatial planning capacity is assessed, understood, and developed across Ukraine, contributing to more resilient, sustainable, and effectively governed territories in the post-war period and beyond.

#### **BIBLIOGRAPHY**

- Anisimov, Oleksandr, Maria Smirnova, and Ievgeniia Dulko. 2024. "Establishment of a New Planning System in Ukraine: Institutional Change Between Europeanization and Post- Socialist Path Dependence." *Planning Theory & Practice 2024* 25:4 (November):482–501. https://doi.org/10.1080/14649357.2024.2414973.
- Cvetković, Vladimir M., Jasmina Tanasić, Adem Ocal, Želimir Kešetović, Neda Nikolić, and Aleksandar Dragašević. 2021. "Capacity Development of Local Self-Governments for Disaster Risk Management." *International Journal of Environmental Research and Public Health* 18 (19): 10406. https://doi.org/10.3390/ijerph181910406.
- European Commission, ed. 2007. Institutional Assessment and Capacity Development: Why, What and How? Luxembourg: Publications Office.
- GIZ. 2015. "Capacity Development in Situations of Conflict and Fragility: Synthesis Report." Eschborn, Germany: GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit).
- Government of Ukraine; European Union; United Nations; World Bank. 2025. "Fourth Rapid Damage and Needs Assessment (RDNA4)." Kyiv, Ukraine.
- Kyiv International Institute of Sociology (KIIS). 2023. "A Study of Recovery Initiatives in Ukraine." Research Report. Kyiv, Ukraine: ISAR Ednannia Consortium.
- Law of Ukraine. 2011. "On Regulation of City Planning Activity." Verkhovna Rada of Ukraine. https://zakon.rada.gov.ua/laws/show/en/3038-17#Text.
- Ministry for Communities and Territories Development of Ukraine. 2019. "Методичні рекомендації щодо оцінки рівня спроможності територіальних громад." Директорат з питань розвитку місцевого самоврядування, територіальної організації влади та адміністративнотериторіального устрою.
- OECD. 2006. "The Challenge of Capacity Development: Working Towards Good Practice." In *DAC Guidelines and Reference Series*.
- Pearson, Jenny. 2018. "Metropolitan Governance: A Framework for Capacity Assessment. Guidance Notes and Toolbox." Eschborn, Germany: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); UN-Habitat.
- Shterndok, E. S., O. V. Dobrokhodova, and V. V. Kasyanov. 2024. Планування та ефективне використання територій: навчальний посібник. Kharkiv: O. M. Beketov National University of Urban Economy in Kharkiv. https://eprints.kname.edu.ua/66566/1/2024\_%Do%Ao%Do%95%Do%9F%Do%9F%Do%97\_167%Do%9B\_%Do%A8%D1%82%Do%B5%D1%80%Do%

- BD%D0%B4%D0%BE%D0%BA%20%D0%95.%20%D0%A1.%2C%20%D1%82%D0%B0%20%D1%96%D0%BD.pdf.
- The World Bank. 2005. *Capacity Building in Africa: An OED Evaluation of World Bank Support*. The World Bank. https://doi.org/10.1596/0-8213-6241-0.
- UNDP. 2008. "Capacity Assessment Methodology: User's Guide." New York. http://content-ext.undp.org/aplaws\_publications/1670209/UNDP%20Capacity%20Assess ment%20Users%20Guide.pdf.
- UN-Habitat. 2012. "Capacity Self-Assessment Methodology for Local Government Training Institutions." UN-Habitat. https://unhabitat.org/sites/default/files/download-manager-files/Capacity%20Self%20Assessment%20Methodolgy.pdf.
- UN-Habitat. 2018. "Planning Law Assessment Framework." United Nations Human Settlements Programme (UN-Habitat).

Text-refinement and editorial polishing for this thesis benefited from the use of three large-language-model tools: **ChatGPT (OpenAI), NotebookLM (Google) and Claude (Anthropic)**. These tools were employed strictly for linguistic clarity; all analysis, interpretations and conclusions remain the sole responsibility of the author.

#### **ANNEX 1: QUESTIONNAIRE**

The self-assessment tool incorporates flexibility to ensure its relevance and effectiveness across different individuals involved in the spatial planning process. Questions deemed not applicable to a respondent's specific role can be marked as such and excluded from their scoring.

The self-assessment tool will be tailored based on the respondent's role to enhance relevance, presenting a specific set of questions or adapting phrasing. The identified roles are:

- Hromada Leadership: Individuals holding leadership positions such as Mayor, Deputy Mayor, or Head of a Local Council Committee responsible for planning.
- **Technical Specialists:** Individuals with specific technical expertise related to spatial planning, such as Urban Planners, Architects, Land Management Specialists, GIS Specialists, Cadastre Specialists, or Engineers.
- Other Hromada Departments: Representatives from other departments within the hromada whose work relates to or is impacted by spatial planning, such as those dealing with economy, environment, social protection, or infrastructure.
- Representatives of Civil Society Organizations (CSOs) / Non-Governmental Organizations (NGOs): Individuals representing local or national non-governmental or civil society organizations active in the hromada, particularly concerning development, advocacy, or expert support.
- **Habitants of the Hromada:** Regular citizens or community members living in the hromada who are affected by spatial planning decisions.

Here are the proposed questions, grouped by sphere, with indicated roles and scale definitions

# **Initial Questions:**

- 1. Please select your role:
  - o Hromada Leadership
  - Technical Specialist
  - Representative from Other Hromada Department whose work relates to or is impacted by spatial planning
  - Representative of Civil Society Organization (CSO) / Non-Governmental Organization (NGO)
  - o Habitant of the Hromada
  - Applicable to: All Roles
  - Scale: Multiple choice
- 2. Your hromada is:
  - [Short text]

Applicable to: All RolesScale: Multiple choice

**Sphere 1: Policy Understanding and Application** (Focus: Evaluating the hromada's ability to understand and effectively apply relevant spatial planning laws and regulations and navigate the existing planning system).

- 3. Rate your overall understanding of the current legal and regulatory frameworks governing spatial planning in Ukraine.
  - o Applicable to: All Roles
  - Scale: Level of Understanding (1 = Very Low Understanding, 5 = Very High Understanding)
- 4. How consistently are spatial planning laws and bylaws applied in decision-making processes within the hromada?
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments
  - Scale: Level of Consistency (1 = Never Consistently, 5 = Always Consistently)
- 5. To what extent do existing planning regulations align with the specific needs and context of your hromada?
  - o Applicable to: All Roles
  - o Scale: Extent of Alignment (1 = Not at All, 5 = To a Great Extent)

**Sphere 2: Strategic Vision and Planning** (Focus: Assessing if the hromada has a clear long-term vision for development and the capacity to translate it into strategic spatial plans that address current needs and future challenges).

- 6. Does your hromada have an approved spatial development strategy or comprehensive plan?
  - Applicable to: All Roles
  - Multiple choice: a) Program of Comprehensive Recovery; b) Concept of Integrated Development; c) Comprehensive Spatial Development Plan;
    - d) None of the above; e)Unknown/Don't know
- 7. Rate the clarity and usefulness of your hromada's strategic spatial development documents (if they exist).
  - Applicable to: All Roles
  - Scale: Level of Clarity/Usefulness (1 = Very Unclear / Not Useful, 5 = Very Clear / Very Useful)
  - o (If answer to Q1 is No, select Not Applicable)
- 8. How well do current spatial plans address the long-term goals and challenges identified for the hromada (e.g., economic development, social needs, environmental protection)?

- Applicable to: All Roles
- Scale: Level of Address (1 = Not At All Well, 5 = Very Well)
- 9. To what extent does the hromada's strategic planning adequately address the needs and priorities for post-war recovery?
  - Applicable to: All Roles
  - o Scale: 1 (Not At All Adequately) to 5 (Very Adequately)
- 10. To what extent does the hromada actively use its strategic spatial documents to guide daily planning decisions and projects?
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments
  - Scale: Extent of Use (1 = Never Use, 5 = Always Use)
- 11. Do you believe the strategic vision for the hromada reflects the diverse aspirations and needs of its inhabitants?
  - Applicable to: All Roles
  - Scale: Agreement (1 = Strongly Disagree, 5 = Strongly Agree)

**Sphere 3: Data and Information Management** (Focus: Evaluating the availability, quality, accessibility, and use of essential data sources like cadastres, topographical maps, and GIS in spatial planning).

- 12. Rate the availability of up-to-date and accurate land cadastre information for spatial planning purposes in your hromada.
  - Applicable to: Technical Specialists, Other Hromada Departments, Hromada Leadership
  - Scale: Availability/Quality (1 = Very Poor / Not Available, 5 = Very Good / Widely Available)
- 13. How accessible is key spatial planning data (like maps, zoning information) to the public and external stakeholders?
  - Applicable to: Technical Specialists, Representatives of CSOs / NGOs, Habitants of the Hromada
  - Scale: Level of Accessibility (1 = Not Accessible At All, 5 = Very Easily Accessible)
- 14. How effectively is GIS (Geographic Information Systems) technology utilized in the hromada's spatial planning processes?
  - Applicable to: Technical Specialists, Hromada Leadership, Other Hromada Departments
  - Scale: Level of Effectiveness (1 = Not Used Effectively, 5 = Very Effectively Used)
- 15. Rate the quality and completeness of the hromada's topographical maps and base mapping data.
  - o Applicable to: Technical Specialists, Other Hromada Departments

- Scale: Quality/Completeness (1 = Very Poor / Incomplete, 5 = Very Good / Complete)
- 16. If access to spatial data is limited, what are the main reasons?

## Multiple choice:

- o Data is outdated or incomplete
- Lack of staff to manage data
- Disjointed and incompatible registries (different formats, integration/access is
- o Lack of digitalization / old formats
- Martial Law
- o Applicable to: Hromada Leadership, Technical Specialists
- 17. Are property registries and cadastres fragmented or difficult to integrate for comprehensive planning?
  - o Applicable to: Technical Specialists, Hromada Leadership
  - Scale: Agreement (1 = Strongly Disagree No Fragmentation, 5 = Strongly Agree - Significant Fragmentation)

**Sphere 4: Financial Resources** (Focus: Assessing the financial capacity of the hromada to fund planning activities, manage costs, attract investment, and utilize financial tools for development).

- 18. How sufficient are the hromada's own financial resources (tax revenues, local budget) for funding essential spatial planning activities and projects?
  - Applicable to: Hromada Leadership, Other Hromada Departments, Technical Specialists
  - Scale: Level of Sufficiency (1 = Very Insufficient, 5 = Very Sufficient)
- 19. How successful has the hromada been in attracting external funding (state subsidies, grants, private investment) for spatial development initiatives?
  - Applicable to: Hromada Leadership, Other Hromada Departments, Technical Specialists, Representatives of CSOs / NGOs
  - o Scale: Level of Success (1 = Not Successful At All, 5 = Very Successful)
- 20. To what extent does the hromada effectively use land taxation data to inform and support spatial planning decisions?
  - o Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments
  - o Scale: 1 (Not At All Effectively) to 5 (Very Effectively)
- 21. How effectively does the hromada utilize mechanisms like land value capture or similar financial tools linked to development for financing related infrastructure?
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments

- o Scale: 1 (Not At All Effectively) to 5 (Very Effectively)
- 22. How well do spatial planning decisions consider the long-term economic feasibility and maintenance costs of proposed developments and infrastructure?
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments
  - Scale: Level of Consideration (1 = Not Considered At All, 5 = Very Well Considered)
- 23. Do you agree that quick, less sustainable fixes are often prioritized over economically viable long-term planning due to financial constraints?
  - Applicable to: All Roles
  - Scale: Agreement (1 = Strongly Disagree, 5 = Strongly Agree)

# **Sphere 5: Stakeholder Engagement and Public Participation** (Focus:

Evaluating the inclusivity, frequency, and effectiveness of processes for engaging diverse stakeholders, including citizens, businesses, CSOs, and vulnerable groups, in spatial planning decisions).

- 24. How often does the hromada conduct public consultations or participatory processes on important spatial planning documents or projects?
  - Applicable to: All Roles
  - Scale: Frequency (1 = Never, 5 = Very Often)
- 25. Rate the effectiveness of the methods used by the hromada to involve *diverse* groups (e.g., women, youth, elderly, IDPs, people with disabilities) in planning discussions.
  - Applicable to: All Roles
  - Scale: Level of Effectiveness (1 = Very Ineffective, 5 = Very Effective)
- 26. To what extent do you feel that public input gathered through participation processes is genuinely considered and reflected in final planning decisions?
  - Applicable to: All Roles
  - Scale: Extent of Consideration (1 = Not Considered At All, 5 = To a Great Extent)
- 27. To what extent do you think that powerful stakeholder groups promoting their own interests hinder open and inclusive public participation in the planning process?
  - o Applicable to: All Roles
  - Scale: Agreement (1 = Not at all hindering, 5 = Very hindering)
- 28. How accessible and understandable are the materials and information provided to the public for participation in spatial planning?
  - Applicable to: All Roles
  - Scale: Level of Accessibility/Understandability (1 = Very Inaccessible / Difficult to Understand, 5 = Very Accessible / Easy to Understand)

## **Sphere 6: Cross-department Cooperation and Partnerships** (Focus:

Assessing the level and effectiveness of coordination and cooperation between different departments within the hromada, and with external actors like regional/central government, state enterprises, the private sector, and international partners).

- 29. How effectively do different departments within the hromada coordinate and share information on spatial planning projects?
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments
  - Scale: Level of Effectiveness (1 = Very Ineffective, 5 = Very Effective)
- 30. To what extent is there effective cooperation between the hromada and Oblast/central government bodies on spatial planning and development issues?
  - Applicable to: Hromada Leadership, Technical Specialists, Representatives of CSOs / NGOs
  - Scale: Extent of Cooperation (1 = Very Ineffective, 5 = Very Effective)
- 31. How actively is the private sector engaged in discussions and planning for urban development and recovery projects in the hromada?
  - Applicable to: Hromada Leadership, Technical Specialists, Representatives of CSOs / NGOs
  - Scale: Level of Activity (1 = Not Active At All, 5 = Very Active)
- 32. Do you believe that lack of horizontal communication and cooperation opportunities hinders effective spatial planning in Ukraine?
  - Applicable to: All Roles
  - Scale: Agreement (1 = Strongly Disagree, 5 = Strongly Agree)
- 33. Rate the level of successful collaboration with international organizations and experts on spatial planning initiatives in the hromada.
  - Applicable to: Hromada Leadership, Technical Specialists, Representatives of CSOs / NGOs
  - Scale: Level of Success (1 = No Collaboration, 5 = Very Successful Collaboration)

**Sphere 7: Technical Expertise and Professional Skills** (Focus: Evaluating the availability and skills of planning staff, access to professional development, knowledge of modern practices, and utilization of external expertise).

- 34. Rate the availability of skilled professionals (urban planners, architects, land managers, GIS specialists, etc.) within the hromada administration to handle complex spatial planning tasks.
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments

- Scale: Availability (1 = Very Low Availability / Significant Shortage, 5 =
   Very High Availability / Sufficient Staffing)
- 35. If there is a shortage of skilled staff, what is the *primary* reason?
  - o *Choose One:* a) Low salaries/lack of competitive compensation, b) Lack of available qualified candidates, c) Limited opportunities for professional development/training, d) Staff displacement (e.g., due to war), e) Complex bureaucracy hinders hiring.
  - Applicable to: Hromada Leadership, Other Hromada Departments, Tech specialists
- 36. How well-equipped is the hromada's staff with the necessary digital tools (e.g., GIS software, digital cadastre access) for spatial planning?
  - o Applicable to: Hromada Leadership, Technical Specialists
  - o Scale: 1 (Very Poorly Equipped) to 5 (Very Well Equipped)
- 37. How sufficient are the opportunities and resources for hromada planning staff to receive training in modern planning techniques, tools, and approaches (e.g., inclusive design, sustainability)?
  - o Applicable to: Hromada Leadership, Technical Specialists
  - Scale: Level of Sufficiency (1 = Very Insufficient, 5 = Very Sufficient)
- 38. How effectively does the hromada utilize external expertise (consultants, experts from NGOs, academia) when internal capacity is limited for spatial planning?
  - Applicable to: Hromada Leadership, Technical Specialists, Representatives of CSOs / NGOs
  - Scale: Level of Effectiveness (1 = Not Used Effectively, 5 = Very Effectively Used)
- 39. Do you believe the current professional education system in Ukraine adequately prepares specialists for the complexities of spatial planning at the hromada level?
  - Applicable to: Hromada Leadership, Technical Specialists, Representatives of CSOs / NGOs
  - Scale: Agreement (1 = Strongly Disagree, 5 = Strongly Agree)
- 40. How knowledgeable is the hromada's planning team about European best practices and international standards in urban development and spatial planning?
  - $_{\circ}$  Applicable to: Technical Specialists, Hromada Leadership
  - Scale: Level of Knowledge (1 = Very Low Knowledge, 5 = Very High Knowledge)

**Sphere 8: Political Will and Leadership** (Focus: Assessing the commitment of hromada leadership to prioritizing sound and sustainable spatial planning, managing conflicts, and ensuring accountability).

- 41. How strongly does the hromada leadership prioritize sustainable and longterm spatial planning in the overall development agenda?
  - o Applicable to: All Roles
  - Scale: Level of Priority (1 = Very Low Priority, 5 = Very High Priority)
- 42. To what extent does hromada leadership effectively manage conflicting interests (e.g., between developers, citizens, different departments) in spatial planning decisions?
  - Applicable to: All Roles
  - Scale: Extent of Effectiveness (1 = Very Ineffectively, 5 = Very Effectively)
- 43. Do you believe that the political will exists within the hromada leadership to implement spatial plans rigorously, even when facing pressure for quick or less sustainable solutions?
  - Applicable to: All Roles
  - Scale: Agreement (1 = Strongly Disagree, 5 = Strongly Agree)
- 44. Do you agree that decentralization has generally empowered hromadas in spatial planning, despite challenges imposed by martial law?
  - o Applicable to: All Roles
  - Scale: Agreement (1 = Strongly Disagree, 5 = Strongly Agree)

**Sphere 9: Adaptation and Resilience** (Focus: Evaluating the hromada's capacity to plan for recovery, incorporate sustainability, address the needs of displaced persons, and adapt to current and future challenges like climate change).

- 45. How well do the hromada's spatial planning efforts consider and address the needs of internally displaced persons (IDPs)?
  - o Applicable to: All Roles
  - Scale: Level of Consideration (1 = Not Considered At All, 5 = Very Well Considered)
- 46. To what extent are principles of sustainability (e.g., energy efficiency, green infrastructure, circular economy) integrated into new spatial planning projects?
  - Applicable to: All Roles
  - Scale: Extent of Integration (1 = Not Integrated At All, 5 = Fully Integrated)
  - o (Consider "Don't Know" for those unfamiliar with the terms)
- 47. How prepared is the hromada's planning system to assess and plan for risks related to climate change (e.g., floods, heatwaves)?
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments
  - Scale: Level of Preparedness (1 = Not Prepared At All, 5 = Very Well Prepared)

- o (Consider "Don't Know" for those unfamiliar with the terms)
- 48. How effectively does spatial planning incorporate measures for assessing damage and planning for the reconstruction of destroyed or damaged properties?
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments
  - Scale: Level of Effectiveness (1 = Very Ineffectively, 5 = Very Effectively)
- 49. Do you believe the current planning approach is sufficiently flexible to adapt to the rapid changes and uncertainties caused by the war?
  - o Applicable to: All Roles
  - Scale: Agreement (1 = Strongly Disagree, 5 = Strongly Agree)
- 50. How clear is the hromada's process for prioritizing and coordinating post-war recovery projects?
  - Applicable to: Hromada Leadership, Technical Specialists, Other Hromada Departments
  - o Scale: 1 (Very Unclear) to 5 (Very Clear)

#### Concluding Questions (Optional):

- 51. Would you like to receive a report summarizing your hromada's assessment results?
  - o Applicable to: All Roles
  - o Scale: Yes/No
- 52. If Yes, please provide your email address:
  - Applicable to: All Roles
  - Scale: Text input
- 53. Optional: Please provide your name or organization for context:
  - o Applicable to: All Roles
  - Scale: Text input

# **ANNEX 2: CAPACITY ASSESSMENT RESULTS**

Part	s	1	2	: 3	. 4	5	6	7	8	9	10	11	12	13	14	15	16
Mathematical Property of the		Представни к іншого відділу громади, чия робота пов'язана з просторови м планування	Представни к іншого відділу громади, чия робота пов'язана з просторови м гланування			спеціаліст (архітектор,		спеціаліст (архітектор,				Керівництво	Представни к іншого відділу громади, чия робота пов'язана з пов'язана з м планування	Технічний спеціаліст (архітектор,	Технічний спеціаліст (архітектор,	Технічний спеціаліст (архітектор,	Представни к іншого відділу громади, чия робота пов'язана з просторови м планування
Part	Будь ласка, оберіть свою роль:(uUxb5rWR)	воно	воно впливає	Мешканець	(мер, заступники)							(мер, заступники)	воно впливає	спеціаліст,		тощо) Дніпропетро	воно впливає
Part		область - Дрогобицьк	Великодиме рська	область - Чернівецька	область - Чорнобаївс	область - Лозівська	а область - Житомирсы	область - Бобровицьк	а область - Березівська	а область - Житомирськ	область - Херсонська	вська область - Дніпровська	вська область - Дніпровська	область - Чугуївська	область - Роменська	Підгородне нська	ка область - Козівська
Part	Оцініть ваше загальне розуміння чинної нормативно-правової бази, що регулює просторове планування в			громада							громада						
Manusal part part	У тих рішеннях ради, що стосуються просторового розвитку, наскільки послідовно застосовуються закони та	3	3	4	4	5	3	3	3	2	1	4	5	4	3	4	3
Mary Control Processor P	планування?(rlep5TDK) Наскільки є зрозумілим для Вас	4	4		4	5		4				4	4	4	3	2	5
Part	планування?(HCv2Ml6g) В якій мірі чинне законодавство у сфері	4	2			5		3					4	3	4	4	3
Part	конкретним потребам та контексту	5	2	4	3	5	2	3	2	3	1	4	4	3	2	1	4
March   Marc	Явіз них покументів затвеплжені у	процесі		Не можу на	Комплексно го	Комплексно го		й План				Комплексно го Відновленн я. Концепція	Комплексно	Комплексно го	Жолного з		
Common property of the prope	вашій громаді?(5Вkc46yz)  Оцініть зрозумілість та корисність стратегічних документів просторового	ня	Невідомо	разі сказати	я		Невідомо	го Розвитку	Невідомо	Невідомо	Невідомо	го Розвитку	я	я		Невідомо	Невідомо
Content   Cont	<ul> <li>є). (Е7ијсХfо)</li> <li>Наскільки добре поточні просторові плани враховують довгострожові цілі та</li> </ul>	5		5	4	5	3	5	2	3	1	3	5	5		1	4
Part	(наприклад, економічний розвиток, соціальні потреби, захист довкілля)?(EKO1LmHH)	4		5	4	4	3	4	2	3	1	3	5	5	2	2	4
Management and proportion of	громади адекватно враховує потреби та пріоритети післявоєнного	4		4	5	4	3	3	2	3	1	3	5	4		1	5
Manufaction in conjugation in the content of the	використовує свої стратегічні просторові документи для прийняття щоденних рішень та реалізації																
Manual Public	Чи вважаєте ви, що стратегічне бачення громади відображає	2			5	4		4				4	4	3	5	1	4
Production of the production	мешканців?(Bz0gnmjl)  Оцініть доступність актуальної та	3		4	5	4	3	5	2	3	1	4	5	5	3	5	5
Page	інформації для цілей просторового планування у вашій громаді.(ОРНqvCoj) Оцініть відкритість даних для	2	2		3	5		3				3	5	3	4	1	4
роспрового гомируанием в гроспрового гомируанием дами. (LT rufe) 2 1 1 2 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	карти, інформація про зонування) для громадськості та зовнішніх зацікавлених сторін? (3XD367X7) Наскільки ефективно використовуються технології ПС (географічних			4		3	3	2	3		1			3	3	2	
Rapir propage   Rapir propag	просторового планування в громаді?(J6UaFVnA)	2	1		2	5		4				3	4	5		1	4
Oud-phose   Oud	карт громади та базових	2	1			5		5					5	3	5	1	4
βαρούτη αρ προστοροικα ματικό   διαστικό		оцифрован их даних / старі формати, Дані застарілі або неповні дані, Нестача персоналу для управління даними., Роз'єднані та несумісні реєстри (різні	оцифрован их даних / старі формати, Дані застарілі або неповні дані, Нестача персоналу для управління даними., Роз'єднані та несумісні реєстри (різні		оцифрован их даних / старі формати, Дані застарілі або неповні дані, Нестача персоналу для управління даними., Роз'єднані та несумісні реєстри (різні			та несумісні реєстри (різні				застарілі або неповні дані, Нестача персоналу для угравління даними., Роз'єднані та несумісні реєстри (різні		оцифрован их даних / старі формати,	Дані застарілі або неповні дані, Нестача	оцифрован их даних / старі формати, Дані застарілі або неповні дані, Нестача персоналу для управління даними., Роз'єднані та несумісні реєстри (різні	застарілі
проветия просторовито пилизуания/(ModRify)  3 4 3 3 5 5 2 3 5 3  Насілиму устини о громада залучев органия ор	обмежений, які основні причини? (Wco4nSWF) Наскільки достатніми є власні фінансові ресурси громади (податкові надходження, місцевий бюджет) для	відсутність інтеграції /	відсутність інтеграції /		відсутність інтеграції /	для управління		відсутність інтеграції /				відсутність інтеграції /	застарілі або неповні	застарілі або неповні	для управління	відсутність інтеграції /	дані, воєнний
убовдії, транти, привати і местиції у для реалізації інцівите просторового розвиту/(унілюди) 4 1 4 3 5 4 4 3 2 1 3 В між індутроворового подато для міжда ефективно подато для міжда пероторового подато для міжда пероторового податом для міжда перо	проектів просторового планування? (Nv8tfrRy) Наскільки успішно громада залучає зовнішнє фінансування (державні	3	4		3	3		5				3	5	2	3	5	3
sunopercrope, pair inpo звемличий податок для інформацения та підтримия рішене видра просторового податок для інформацения та підтримия рішене видра просторового 1 4 5 4 Hacinium edpermetor poxolaga випристирення пробедівня податок для на підтримині підтримині податок для на підтримині підтрим	субсидії, гранти, приватні інвестиції) для реалізації ініціатив просторового розвитку?(įvuh0qn0) В якій мірі громада ефективно	4	1		4	3		5				4	4	3	2	1	3
вартогі землі або подібні фізаносьі інструменти, рібізвані з розвитом, для фізаноування відповідної	використовує дані про земельний податок для інформування та підтримки рішень щодо просторового планування? (qbKZEsNA) Наскільки ефективно громада	3	1		4							4	5				4
	вартості землі або подібні фінансові інструменти, пов'язані з розвитком, для фінансування відповідної	4	1		4	4		5				4	4	3	2	2	4

Наскільки рішення з просторового планування враховують довгострокову економічну доцільність та витрати на утримання нових об'єхтів, будівель та інфраструктури?(8QB8Rsfr)		2		4	5		4				4	5	3	3	1	4
Наскільки ви згодні з наступним твердженням: "Через обмежені фінансові ресурси перевага часто надається швидиим, менш стійким рішенням замість економічно обґрунгованого довгострожового																
планування громади."(bPefhjdx) Як часто громада проводить громадські консультації або запучає зацікавлених сторін до проектів з просторового	4	3	2	3	3	3	4	3	2	1	3	5	2	4	2	3
планування?(vJQp6gQt)  Оцініть ефективність методів, які використовує громада для залучення різних груп населення (наприклад,	4		5	5	3	3	4	3	3	1	4	5	4	3	1	4
молоді, людей похилого віку, ВПО, людей з інвалідністю) до обговорення питань планування (bgmVFi6F) Якою мірою думки громадськості та заціязвлених сторін дійсно	4		4	4	5	3	4	3	3	1	4	4	5	3	1	4
враховуються та відображаються в остаточних рішеннях щодо планування? (BsUByKNe) У якій мірі, на вашу думку, впливові	4		5	5	4	3	4	4	4	1	3	5	4	4	2	5
учити, придости просувають власні інтереси (депутати, забудовним, бізнес-структури тощо), заважають відпритій та інклюзивній участі громадськості у процесі планування? (45LQspck)			4	2	4	3		2	4	1	3	5	2	4	2	1
Наскільки доступними та зрозумілими є матеріали та інформація, що надаються громадськості для участі у просторовому плануванні?(hMMNGezF) Наскільки ефективно різні підрозділи в	4		5	5	4	3	5	3	3	1	4	5	5	3	1	4
громаді координуються між собою щодо роботи над проектами з просторового планування?(yh8fLpdi)	4			4	3		5				4	5	4	3	1	5
Наскільки ефективною є співпраця між громадою та обласними/центральними органами влади з литань просторового планування та розвитку? (ftCNaoGI) Наскільки активно приватний сектор залучений до обговорення та				4	3		5				4		3		2	
планування проектів просторового розвитку та відновлення в громаді? (0XF63RW)  Чи вважаєте ви, що брак горизонтальної комунікації та				4	4		5				3		3	2	2	
можливостей співпраці перешкоджає ефективному просторовому	5		4	4	5	3	4	2		5	4	3	4	3	5	3
зовнішніми експертами щодо ініціатив просторового планування в громаді. (1Екхе1п3) Оцініть наявність кваліфікованих фахіяців (містопланувальників,				4	5		5				4		4	4	1	
архітекторів, землевпорядників, ГІС- спеціалістів тощо) в громаді для вирішення завдань просторового планування (BZhZXJD3)	4	1		3	4		5					4	4	2	1	2
		Низыка заробітна плата/відсут ність конкурентос проможної томпенсації, Переміщення я персонаго війну). Обмежені можливості для професійного о		Низька заробітна плата/відсут ність конкурентос							Низыка заробітна					Низька заробітна плата/відсут ність конкурентос компенсації, Переміщенн я персоналу
Яицо існує дефіцит кваліфікованих	кандидатів з	розвитку/на вчання, Брак кваліфікован их кандидатів з		проможної компенсації, Брак кваліфікован их кандидатів з							кваліфікован их кандидатів з	заробітна плата/відсут ність конкурентос				(наприклад, через війну), Брак кваліфікован их кандидатів з
кадрів, які основні причини цього?(РВQFВНС7)  Наскільки добре персонал громади забезпечений необхідними цифоовими	кваліфікован их кандидатів з необхідним и навичками	розвитку/на вчання, Брак кваліфікован их кандидатів з необхідним		проможної компенсації, Брак кваліфікован их							ність конкурентос проможної компенсації, Брак кваліфікован их	заробітна плата/відсут ність конкурентос проможної				через війну), Брак кваліфікован их
кадрія, які основні причини цьюгот/РВОЕВНАТТ)  Наскіїнькі добре персонал громади забезпечний необхідники цифровими забезпечний необхідники цифровими забезпечники ПС, доступом до задестру для парестрового паму размиті ў выбольть наскійны громада забезпечує преціяння відговідальних за преціяння відговідальних за забезпечний відговідальних забезпечний відговідальних забезпечний відговідальних забезпечни забезпечний відговідальних забезпечний відговідальних забезпечни забезпечний відговідальних забезпечний відговідальних забезпечний відговідальних забезпечний відговідальних забезпечний відговідальних забезпечний відговідальних забезпечни забезпечни	кваліфікован их кандидатів з необхідним и навичками	розвитку/на вчання, Брак кваліфікован их кандидатів з необхідним		проможної компенсації, Брак кваліфікован их кандидатів з необхідним и навичками и навичками	3		5				ність конкурентос проможної компенсації, Брак квалііфікован их кандидатів з необхідним и навичками	заробітна плата/відсут ність конкурентос проможної компенсації	3	2		через війну), Брак кваліфікован их кандидатів з необхідним
кадра, вк основні причини шногі/ПрОГВНУ  Насільки добре персонал громади забезнечній необідними щифровими вкотричетами (наприма, програми мадастру, для просторовно мадастру, для просторовно праціними, артопідальних за планування, ресурсами та мостивоства для просторовно планування, ресурсами та мостивоства для досяння сучення метода, встумента індосова ценоричал, вметода мостивоства для для метода, встумента індосова систеріта в мостивоства для для мостивоства для мостивоства мостивоства дл	кваліфікован их кандидатів з необхідним и навичками	розвитку/на вчання, Брак кваліфікован их кандидатів з необхідним		проможної компенсації, брак кмалікійнован им кмалікійнован им кандидатів з необхідним и навичизми 4	3		5				ність конкурентос проможної компенсації, Брак квалііфікован их кандидатів з необхідним и навичками	заробітна плата/відсут ність конкурентос проможної компенсації	3			через війну), Брак кваліфікован их кандидатів з необхідним и навичками
кадарь, вы сосновні причини карольного (РРОВРЕНКУ — Насобими добре птеропаві промада почноство проведня кароння проведня кароння проведня кароння проведня кароння проведня кароння проведня кароння насобими ромада забезпечує працівники, аргоння кароння	кваліфікован их кандидатів з необхідним и навичками	розвитку/на вчання, Брак кваліфікован их кандидатів з необхідним		Проможної компенсації. Брак компенсації. Брак жаліфікован их жаліфікован их жандидатів з необхідним и навичизми 4 4	4		5				ність конкурентос проможної компенсації, Брак кваліфіюван их кандидатів з необхідним и навичками и навичками	заробітна плата/відот ність компнурентос проможної компенсації	3	3	1 2	через війну), Брак кваліфікован их кандидатів з необхідним и навичками
кадра, вы сосновні причини цью гуровіться добре персонал громади забезнечникі необхідника цифромики забезнечникі необхідника цифромики забезнечникі промара забезнечнує працінення, вірпомідьник за забезнечникі ромада забезнечнує працінення, вірпомідьник за забезнечнує забезнечнує забезнечнує забезнечнує ромарами забезнечнує ромарами забезнечнує ромарами забезнечнує ромарами забезнечнує (натроила), інтосинаюто планування ча сталого ровачиту (монтультанть, ча сталого ровачиту (монтультанть, експертів з неумироми сромарами забезнечня забезнечник забезнечня забезнечня забезнечня забезнечня забезнечник за	кваліфікован их кандидатів з необхідним и навичками	розвитку/на вчання, Брак кваліфікован их кандидатів з необхідним		Громожної компенскої	4		5				ність коннурентос-проможний субентос-проможний с	заробітна плата/відот ність комнурентос проможної компенсації	3	3	1 2 2	через війну), Брак кваліфікован их кандидатів з необхідним и навичками
кадра, вы сосновні причени карот (РРФОПЕНТ).  Насільня добо гаросная і грасова продова кабення нейо передова забення нейо забення забення нейо передова забення нейо забення нейо забення забення нейо забення не	кваліфікован их кандидатів з необхідним и навичками	розвитку/на вчання, Брак кваліфікован их кандидатів з необхідним		произволен при	4	3	5 5 5	3	3	,	ність коннурентос проможне пр	аэробітна папата інісут іність папата інісут іність папата інісут іність папата інісут інісут інісут інісут інісут (4)	3	3 2 2	1 2 2 1 1	через війну), Брак кваліфікован их кандидатів з необхідним и навичками

В якій мірі керівництво громади ефективно управляє конфліктними інтересами (наприклад, між забудовниками, громадянами, різними відцілами) при прийнятті рішень щодо просторового планування?(DNITJHdB)	4		4	4	5	3	4	3	3	1	4	4	3		1	4
Наскільки ви эгодні з твердженням: «Керівництво громади має політичну волю послідовно дотримуватися затверджених просторових планів, навіть під тиском ухвалити швидія чи менш сталі рішення». (ОК65ісіт)	3		3	5	5	3	5	3	3	3	4	4	3	3	1	3
Чи эгодні ви з тим, що децентралізація загалом розширила можливості громад у просторовому плануванні, незважаючи на виктими, пов'язані з военним станом?(hFy9DwP5)	4		5	5	4	3	5	3	3	3	4	4	4	3	5	3
	3		4	5	4	3	4	3	3	1	4	5	4		1	4
В якій мірі принципи сталого розвитку (наприклад, енергоефективність, зелена інфраструктура, циркулярна економіка) інтегровані в нові проекти з просторового планування? (5nPZd0nB)	3		5	5	3	3	4	3	3	1	3	4	3		1	3
Наскільки система планування в громаді враховує ризики, пов'язаних зі зміною клімату (наприклад, повені, аномальна спека)?(XTyHOjC1)	3			4	4		4				4	5	3		1	4
Наскільки ефективно у вашій громаді просторові плани інтегрують оцінку збитків і заходи з відновлення зруйнованих чи пошкоджених об'єктів? (irQOzQ3h)	4			5	4		4				4	5	4		1	4
Чи вважаете ви, що нинішній підхід до планування є достатньо гнучими, щоб адаптуватися до швидих змін і невизначеностей, спричинених війною?(EhFsiDC3)	4		5	3	3	3			3			5	5			3
виною (ептошось) Наскільки эрозумілим є процес визначення пріоритетів та координації проектів післявоєнного відновлення в громаді? (5YVIXhij)	4		5	5	3	3	4	3	3	1	4	5	•		'	4
Бажаете отримати звіт з узагальненими результатами оціновання спроможності вашої громади до просторового планування? (6PXGO9lb) submitted at	Так 2025/05/23 08:57:02	Так 2025/05/29 12:45:55	Hi 2025/05/30 08:31:29	Так 2025/05/30 09:46:49	Так 2025/05/30 12:37:47	Hi 2025/05/30 13:47:36	Так 2025/05/30 15:34:14	Hi 2025/05/30 18:09:50	Hi 2025/05/30 18:34:30	Hi 2025/05/31 16:27:50	Hi 2025/05/31 17:01:12	Hi 2025/06/02 07:06:20	Tak 2025/06/02 07:53:43	Hi 2025/06/02 10:58:24	Так 2025/06/02 15:09:58	Так 2025/06/03 08:20:39
Formaloo Record ID	00.07.02	12.40.00	00.01.25	00.40.40	12.01.41	10.41.30	10.04.14	10.05.00	10.04.00	10.27.00	11.01.12	07.00.20	07.00.40	10.00.24	10.00.00	00.20.35