ASEAN Journal of Educational Research and Technology

Journal homepage: https://ejournal.bumipublikasinusantara.id/index.php/ajert

Rethinking the Third Mission of Ukrainian Universities in Wartime: Innovation, Social Resilience, and Postwar Reconstruction

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ABSTRACT

This study examines how the third mission of Ukrainian universities has transformed under wartime conditions and how it contributes to social resilience, innovation, and post-war reconstruction. The study used a qualitative comparative design based on 186 institutional documents from 30 Ukrainian universities. The analysis identified three interconnected dimensions of third-mission transformation: social responsibility and humanitarian support, innovation and regional development, and reconstruction-oriented engagement. The findings show that Ukrainian universities have expanded beyond teaching and research to become platforms for community support, knowledge mobilization, institutional cooperation, and recovery planning. The study contributes to third-mission scholarship by conceptualizing the university as a crisis-adaptive institution embedded in social and reconstruction processes.

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ARTICLE INFO

Article History:
Submitted/Received 28 Jan 2026
First Revised 27 Apr 2026
Accepted 29 Apr 2026
First Available online 09 May 2026
Publication Date 01 Dec 2026

Keyword:
Innovation;
Post-War Reconstruction;
Resilience;
Social Responsibility;
Third Mission;
Ukrainian Universities;
Wartime Higher Education.

1. INTRODUCTION

Russia's full-scale invasion of Ukraine has profoundly disrupted the national higher education system, forcing universities to operate under conditions of displacement, damaged infrastructure, resource scarcity, security threats, and social instability (Sanders, 2023). In this context, Ukrainian universities have had to preserve teaching and research while also responding to urgent social needs, supporting internally displaced students and staff, assisting local communities, and contributing to recovery-oriented initiatives (Orzhel *et al.*, 2023; Orzhel, 2022; Petrushenko *et al.*, 2023). These circumstances have intensified the relevance of the university's third mission, which refers to institutional activities that extend beyond education and research toward social engagement, innovation, knowledge transfer, and cooperation with external stakeholders (Benneworth *et al.*, 2016; Davey *et al.*, 2017).

The third mission has traditionally been associated with universities' contribution to economic development, regional innovation systems, entrepreneurship, and university-business cooperation (Benneworth *et al.*, 2016; Davey *et al.*, 2017; Gaffaro Garcia and Naranjo Tuesta, 2025). This interpretation reflects the growing expectation that universities should transform knowledge into social and economic value through partnerships with industry, government, and local communities (Adamakou *et al.*, 2021). However, the wartime context demonstrates that this economic and innovation-oriented understanding is not sufficient to capture the broader role of universities in large-scale societal crises (Petrushenko et al., 2023). Under such conditions, universities are also expected to function as social institutions that sustain human capital, support vulnerable groups, mobilize knowledge for public needs, and participate in reconstruction processes (Orzhel et al., 2023).

Recent scholarship has increasingly emphasized the social dimension of the third mission, including university social responsibility, community engagement, civic participation, and sustainable development (Hou et al., 2025). This literature shows that universities can act as mediating institutions between the state, society, and the economy, particularly when communities face social disruption or institutional uncertainty (Flitsch and Menzel, 2026). In wartime Ukraine, this mediating role has become especially important because higher education institutions are involved not only in maintaining academic continuity but also in supporting communities affected by war, contributing to innovation partnerships, and preparing specialists for recovery and reconstruction (Petrushenko *et al.*, 2023).

Despite growing academic interest in the third mission, several gaps remain in the literature. First, many studies still emphasize knowledge transfer, commercialization, entrepreneurship, and university-industry cooperation, while the social and resilience-oriented dimensions of the third mission remain less systematically conceptualized (Gaffaro Garcia and Naranjo Tuesta, 2025). Second, research on universities in crisis settings often focuses on separate issues such as academic mobility, institutional resilience, international collaboration, or emergency adaptation, rather than examining how social support, innovation, and reconstruction become interconnected components of one institutional function (Błaszczyk *et al.*, 2025). Third, empirical studies of the third mission in wartime remain limited, especially studies based on systematic analysis of institutional documents across a broad sample of universities (Orzhel et al., 2023; Petrushenko et al., 2023).

This study addressed these gaps by examining how the third mission of Ukrainian universities has transformed under wartime conditions. It focuses on three interrelated dimensions: social responsibility and humanitarian support, innovation and regional

development, and participation in post-war reconstruction. The study is based on a qualitative comparative analysis of 186 institutional documents from 30 Ukrainian universities. The central argument is that wartime conditions have transformed the third mission from a primarily innovation-oriented function into a multidimensional, crisis-adaptive institutional role that combines social resilience, knowledge mobilization, and reconstruction-oriented engagement.

The objective of this study is to reconceptualize the third mission of Ukrainian universities in the context of wartime challenges and to identify their role in strengthening social resilience, supporting innovation, and contributing to post-war recovery. The study examines how Ukrainian universities implement social responsibility initiatives, how they participate in innovation and regional development, and how they contribute to reconstruction-oriented activities. By doing so, the study contributes to third-mission scholarship by offering an empirically grounded framework for understanding universities as crisis-adaptive institutions embedded in broader social and recovery processes.

2. LITERATURE REVIEW

The third mission of universities refers to institutional activities that extend beyond teaching and research and connect universities with society, the economy, public institutions, and local communities. In the literature, this mission is commonly associated with knowledge transfer, innovation, academic entrepreneurship, regional engagement, and the practical application of research for social and economic development (Benneworth et al., 2016; Davey et al., 2017). This view reflects the broader transformation of universities from relatively autonomous academic institutions into organizations expected to contribute directly to regional and national development (Adamakou *et al.*, 2021).

A major strand of third-mission research focuses on universities as actors in innovation ecosystems. Universities contribute to innovation by producing knowledge, supporting entrepreneurship, developing research partnerships, and cooperating with industry, government, and civil society (Carayannis and Campbell, 2009; Davey *et al.*, 2017). The Quadruple Helix model expands this understanding by emphasizing the interaction of universities, government, business, and civil society in the production and circulation of knowledge (Carayannis and Campbell, 2009). This model is especially relevant for understanding university engagement in complex social environments because it treats citizens and communities not only as beneficiaries of innovation but also as participants in knowledge-based development (Carayannis and Campbell, 2009).

Regional engagement is another central dimension of the third mission. Universities can support regional development by cooperating with local authorities, businesses, community organizations, and civic actors (Adamakou *et al.*, 2021). Such cooperation allows universities to become platforms for knowledge exchange, talent development, applied research, and innovation-oriented problem solving (Benneworth *et al.*, 2016; Davey *et al.*, 2017). The effectiveness of regional engagement depends on institutional capacity, stakeholder coordination, governance arrangements, and the ability of universities to align academic priorities with local development needs (Adamakou *et al.*, 2021).

More recent scholarship has broadened the third mission beyond economic and innovation-oriented functions. The social third mission emphasizes university social responsibility, civic engagement, community support, inclusion, sustainability, and the

contribution of higher education institutions to social transformation (Asemah *et al.*, 2013; Hou *et al.*, 2025). This perspective is important because it recognizes that universities generate public value not only through commercialization and innovation but also through educational access, community partnerships, public service, and support for vulnerable groups (Biloslavo and Schaebs, 2025).

The social dimension of the third mission has become increasingly relevant under conditions of crisis, when universities are expected to respond to urgent social needs and help sustain community resilience (Petrushenko *et al.*, 2023). The concept of university social responsibility provides a useful framework for analyzing this broader role. University social responsibility links institutional activity with ethical responsibility, public accountability, sustainable development, and community well-being (Hou *et al.*, 2025). It also highlights the need for universities to embed social engagement into institutional strategies rather than treat it as a peripheral or occasional activity (Biloslavo and Schaebs, 2025). In this sense, the third mission is not limited to isolated outreach programs but involves a systematic reorientation of university functions toward social value creation (Flitsch and Menzel, 2026).

The third mission also requires attention to institutional change. Universities operate within multiple and sometimes conflicting expectations from the state, society, business, academic communities, and international partners (Flitsch and Menzel, 2026). These pressures create organizational tensions between traditional academic autonomy and external demands for measurable social, economic, and civic impact (Flitsch and Menzel, 2026). The third mission can therefore be understood as a dynamic institutional process rather than a fixed set of activities, because universities continuously negotiate their roles in response to changing political, social, and economic conditions (Flitsch and Menzel, 2026).

Crisis conditions intensify these institutional tensions. During war, displacement, infrastructure destruction, and social instability, universities are required to maintain core academic functions while also responding to humanitarian, social, and developmental needs. Research on higher education in conflict settings shows that universities can serve as centers of continuity, resilience, social mobilization, and international cooperation when other institutions are weakened or disrupted.

This role is particularly relevant in Ukraine, where universities have had to adapt educational processes, support displaced students and staff, preserve research activity, and participate in recovery-oriented partnerships (Błaszczyk *et al.*, 2025; Orzhel *et al.*, 2023). The Ukrainian case demonstrates how wartime conditions can transform the third mission into a crisis-adaptive institutional function. Ukrainian universities have expanded their social role by supporting communities, assisting internally displaced persons, providing psychological and educational support, and sustaining human capital under conditions of war (Orzhel *et al.*, 2023).

They have also strengthened international cooperation and academic partnerships as part of broader efforts to preserve research capacity and support the higher education sector during wartime. These developments suggest that the third mission in Ukraine is not only an extension of innovation policy but also a mechanism of social resilience and institutional survival (Petrushenko *et al.*, 2023; Stoliaryk *et al.*, 2024).

Post-war reconstruction adds another dimension to the third mission. Recovery requires human capital development, infrastructure planning, applied research, innovation capacity, and cooperation among universities, government, local communities, and international

organizations. Universities are well-positioned to contribute to these processes through specialist training, regional development initiatives, research-based policy support, innovation ecosystems, and community engagement programs (Petrushenko *et al.*, 2023). This means that the third mission can function as a bridge between emergency response and long-term reconstruction (Orzhel *et al.*, 2023).

At the same time, the literature still contains important limitations. Many studies continue to focus primarily on knowledge transfer, entrepreneurship, commercialization, and university-industry cooperation, while the social and reconstruction-oriented dimensions of the third mission remain a less developed conceptually and empirically (Gaffaro Garcia and Naranjo Tuesta, 2025; Sopelana *et al.*, 2021). Studies on Ukrainian higher education during wartime often examine specific issues such as displacement, international cooperation, academic mobility, resilience, or publication activity, rather than integrating social support, innovation, and reconstruction into a single analytical framework (Błaszczyk *et al.*, 2025; Orzhel *et al.*, 2023). This creates a need for an empirical study that conceptualizes the third mission as a multidimensional institutional function shaped by wartime disruption and post-war recovery needs.

The present study understands the third mission of Ukrainian universities as a set of socially embedded, innovation-oriented, and reconstruction-focused activities that extend beyond teaching and research. This approach allows the third mission to be analyzed not only as a contribution to economic development but also as a mechanism through which universities support social resilience, mobilize knowledge, and participate in national recovery. The study therefore contributes to the literature by integrating three dimensions that are often examined separately: university social responsibility, innovation and regional engagement, and post-war reconstruction.

3. METHODS

This study used a qualitative comparative design to examine how the third mission of Ukrainian universities has transformed under wartime conditions. The analysis focused on institutional activities that extended beyond teaching and research and that were connected with social responsibility, innovation, regional engagement, support for internally displaced persons, and post-war reconstruction. This design was appropriate because the study aimed to interpret institutional patterns across universities rather than measure causal relationships or test statistical hypotheses. The empirical material consisted of 186 institutional documents collected from 30 Ukrainian universities during 2024-2025.

The documents included university strategies, annual reports, public descriptions of social responsibility initiatives, information on innovation and partnership projects, materials related to cooperation with local authorities and civil society organizations, and open information on university participation in reconstruction-oriented programs. Only publicly available and verifiable institutional materials were included in the dataset. The sample was selected purposively because the study focused on universities with documented evidence of third-mission activity during the period of full-scale war.

The inclusion criteria were: publicly available strategic or operational documents, documented evidence of social, innovation, or reconstruction-related initiatives during 2022-2025, and verifiable participation in regional development, humanitarian support, innovation, or recovery-oriented programs. Universities were excluded when credible information on

third-mission activities was unavailable, when relevant institutional documents could not be accessed, or when the available data were too incomplete to support classification. The empirical sample included classical, technical, specialized, economic, and private universities from different regions of Ukraine. The list of universities included in the study is presented in **Table 1**.

Table 1. List of universities included in the empirical sample.

No.	University	Type	Region
1	Taras Shevchenko National University of Kyiv	Classical	Kyiv
2	Ivan Franko National University of Lviv	Classical	Lviv
3	Lviv Polytechnic National University	Technical	Lviv
4	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	Technical	Kyiv
5	V. N. Karazin Kharkiv National University	Classical	Kharkiv
6	National University of Kyiv-Mohyla Academy	Classical	Kyiv
7	Odesa I. I. Mechnikov National University	Classical	Odesa
8	Sumy State University	Technical	Sumy
9	Uzhhorod National University	Classical	Uzhhorod
10	Oles Honchar Dnipro National University	Classical	Dnipro
11	National University of Life and Environmental Sciences of Ukraine	Specialized	Kyiv
12	National Technical University "Kharkiv Polytechnic Institute"	Technical	Kharkiv
13	Dnipro University of Technology	Technical	Dnipro
14	Kharkiv National University of Radio Electronics	Technical	Kharkiv
15	State University "Kyiv Aviation Institute"	Technical	Kyiv
16	National University of Water and Environmental Engineering	Technical	Rivne
17	National University "Yuri Kondratyuk Poltava Polytechnic"	Technical	Poltava
18	Vinnytsia National Technical University	Technical	Vinnytsia
19	Ivano-Frankivsk National Technical University of Oil and Gas	Technical	Ivano-Frankivsk
20	National Aerospace University "Kharkiv Aviation Institute"	Technical	Kharkiv
21	Yuriy Fedkovych Chernivtsi National University	Classical	Chernivtsi
22	Vasyl Stefanyk Precarpathian National University	Classical	Ivano-Frankivsk
23	Lesya Ukrainka Volyn National University	Classical	Lutsk
24	Vasyl Stus, Donetsk National University	Classical	Vinnytsia
25	Zaporizhzhia National University	Classical	Zaporizhzhia
26	Kherson State University	Classical	Kherson
27	Petro Mohyla Black Sea National University	Classical	Mykolaiv
28	West Ukrainian National University	Classical	Ternopil
29	Ukrainian Catholic University	Private / Specialized	Lviv
30	Kyiv National Economic University named after Vadym Hetman	Economic	Kyiv

The data analysis was conducted in three stages. First, the institutional documents were collected, verified, and organized into a structured database. Second, the documents were coded thematically according to the dominant form of third-mission activity identified in each source. The main analytical categories were social responsibility, humanitarian support, community engagement, innovation activity, support for internally displaced persons, professional training for reconstruction, and participation in post-war recovery projects. Third, the coded materials were compared across universities to identify recurring patterns, dominant forms of engagement, and the institutional mechanisms through which universities

contributed to social resilience, innovation, and reconstruction. To improve analytical consistency, a common coding protocol was applied to all documents.

Each document was examined according to predefined categories, and initiatives were classified by their primary function. Descriptive quantification was then used to summarize the frequency and distribution of identified initiatives across the main dimensions of the third mission. The quantitative summaries were used only to support qualitative interpretation and were not treated as inferential statistical results.

Several limitations should be acknowledged. The study relied on publicly available institutional documents, which means that informal, short-term, or undocumented university activities may not have been captured. The purposive sample also limits generalizability because the universities were selected on the basis of visible third-mission engagement rather than random sampling. In addition, the study classified the presence and type of initiatives but did not measure their effectiveness or long-term social impact.

4. RESULTS AND DISCUSSION

The analysis of 186 institutional documents from 30 Ukrainian universities shows that the third mission has expanded into three interconnected areas: social responsibility and humanitarian support, innovation and regional development, and participation in post-war reconstruction. Rather than functioning as separate activities, these areas formed a combined institutional response to wartime disruption, enabling universities to maintain teaching and research while also supporting communities, displaced students and staff, local authorities, innovation partners, and recovery-oriented initiatives. The findings indicate that the third mission has become a crisis-adaptive function shaped by the needs of social resilience and reconstruction.

The most visible dimension of this transformation was the expansion of social responsibility and humanitarian activity. The reviewed documents identified 48 initiatives in this area, including volunteering, humanitarian assistance, psychological support, educational provision for war-affected groups, and support for internally displaced persons. These activities show that universities acted not only as educational institutions but also as local centers of solidarity, coordination, and community assistance. The distribution of these initiatives is presented in **Table 2**.

Volunteer initiatives were the most frequent form of social responsibility, representing 29.2% of the initiatives in this category. Their prominence suggests that volunteering became one of the most accessible and flexible forms of university engagement during the war, allowing students, academic staff, university centers, and partnership networks to mobilize quickly despite institutional disruption.

Table 2. Main directions of social responsibility and humanitarian activities of universities during the war.

Sphere of activity	Number of registered initiatives	Share (%)
Volunteer initiatives of students and teachers	14	29.2
Humanitarian assistance to the population	11	22.9
Educational programs for war-affected groups	9	18.8
Psychological support and rehabilitation programs	7	14.6
Support for internally displaced persons	7	14.5

Humanitarian assistance accounted for 22.9% of the initiatives. This category included the collection and distribution of essential goods, support for affected communities, cooperation with humanitarian organizations, and assistance to people whose access to basic services had been disrupted. These activities illustrate the shift of universities toward more direct community-facing functions. Rather than limiting their contribution to education and research, universities became actors in local systems of emergency response and social support. Educational programs for war-affected groups accounted for 18.8% of the identified social initiatives. These programs included flexible learning opportunities, adaptive educational trajectories, retraining courses, and distance learning arrangements for students and other groups affected by displacement or wartime disruption. The educational mission and the third mission were not separate in practice. Under wartime conditions, education itself became a form of social support when universities created alternative pathways for students and community members whose learning opportunities had been interrupted.

Psychological support and rehabilitation programs represented 14.6% of the initiatives, while support for internally displaced persons represented 14.5%. Although these categories were smaller in numerical terms, they had high social significance. Psychological support addressed the consequences of trauma, uncertainty, displacement, and stress among students, staff, veterans, and local communities. Support for internally displaced persons included access to dormitories, educational continuity, adaptation measures, and social integration. Universities contributed to social resilience by supporting groups whose vulnerability increased during the war.

The results confirm that the third mission in wartime Ukraine cannot be understood only through the lens of innovation, entrepreneurship, or knowledge transfer. The social dimension became central because universities were required to respond to immediate human needs and community disruption. The third mission includes university social responsibility, civic engagement, and contribution to social transformation, rather than only economic cooperation or commercialization (Hou *et al.*, 2025). The Ukrainian case also shows that university social responsibility becomes more concrete during crises because it is expressed through direct support, humanitarian engagement, educational adaptation, and institutional cooperation with local communities (Orzhel *et al.*, 2023).

The second major dimension identified in the documents was innovation activity and regional development. The analysis found 32 initiatives related to university innovation ecosystems, startup incubators, acceleration programs, research partnerships with business, entrepreneurship education, participation in international innovation programs, and regional cooperation. Wartime conditions did not eliminate the innovation function of universities. Instead, innovation became more closely connected with recovery needs, regional development, economic modernization, and the search for practical solutions to social and infrastructural problems. The distribution of university innovation activities is presented in **Table 3**.

Startup incubators and acceleration programs were the most frequent innovation-related initiatives, representing 28.1% of the category. This indicates that universities continued to support entrepreneurship and technological development despite wartime constraints. Such initiatives were particularly visible in technical and research-oriented universities, where existing innovation infrastructure could be redirected toward practical recovery-related challenges. Startup and acceleration programs also helped connect students, researchers, business partners, and international actors around applied technological solutions.

Table 3. Main areas of university innovation activities in regional community development.

ACTIVITIES	NUMBER OF REGISTERED INITIATIVES	SHARE (%)
Startup incubators and acceleration programs	9	28.1
Research projects with business	7	21.9
Participation in international innovation programs	6	18.7
Educational programs in entrepreneurship and innovation	5	15.6
Regional innovation partnerships	5	15.7

Research projects with business accounted for 21.9% of the initiatives. This finding shows that university-business cooperation remained an important mechanism of third-mission implementation. In the wartime context, such cooperation was not limited to commercialization. It also supported applied research, technological adaptation, and the development of solutions relevant to regional and national recovery. This confirms that universities can operate as knowledge intermediaries between science, industry, and society when innovation is linked to urgent social and economic needs (Davey *et al.*, 2017; Kolesnykova, 2023).

Participation in international innovation programs represented 18.7% of the identified innovation initiatives. This result indicates that international cooperation remained a significant channel for sustaining research capacity, accessing expertise, and integrating Ukrainian universities into wider European and global innovation networks. Such cooperation is especially important in wartime because domestic institutional capacities are often constrained by damaged infrastructure, staff displacement, reduced funding, and uncertainty. International partnerships, therefore, functioned not only as academic cooperation but also as mechanisms of institutional resilience and knowledge circulation.

Educational programs in entrepreneurship and innovation accounted for 15.6% of the initiatives, while regional innovation partnerships accounted for 15.7%. These two categories show that universities contributed to innovation not only through research projects or startup infrastructure but also through human capital development and place-based cooperation. Entrepreneurship education helped students and young professionals develop competencies relevant to technological modernization, business creation, and recovery-oriented employment. Regional partnerships connected universities with local governments, communities, and enterprises, allowing institutional knowledge to be applied to local development needs. This pattern corresponds to the idea that universities can become embedded actors in regional innovation ecosystems when they coordinate knowledge, skills, and partnerships across different sectors (Adamakou *et al.*, 2021; Benneworth *et al.*, 2016; Kolesnykova, 2023).

Overall, the innovation-related findings suggest that the third mission did not disappear during wartime but was reoriented. Innovation activities became more closely connected with resilience, reconstruction, and community needs. This shift is important because it challenges a narrow interpretation of the third mission as primarily economic or entrepreneurial. In the Ukrainian case, innovation was not only a mechanism for commercialization or university-business cooperation but also a practical tool for sustaining regional capacity and preparing for recovery. University innovation activities increasingly

involve cooperation among academia, government, business, and civil society, especially when universities operate in complex and uncertain environments (Carayannis and Campbell, 2009; Bayuo *et al.*, 2020).

The third major dimension was university participation in post-war reconstruction and support for internally displaced persons. The analysis identified 41 initiatives related to reconstruction-oriented education, support for displaced students and staff, infrastructure recovery projects, professional training for reconstruction specialists, and social programs for veterans and affected communities. These findings show that universities were not only responding to immediate wartime needs but also preparing for long-term recovery. Their activities connected educational provision, social support, specialist training, and institutional cooperation with state and international reconstruction priorities.

The distribution of reconstruction-related initiatives is presented in **Table 4**. Educational programs for internally displaced persons were the most frequent reconstruction-related activity, representing 26.8% of all initiatives in this category. This finding indicates that universities played an important role in protecting access to higher education under conditions of forced mobility and disrupted educational pathways. These programs included flexible admission procedures, distance learning opportunities, academic transfer mechanisms, and support for students whose studies were interrupted by war. In this sense, education became part of reconstruction because it helped preserve human capital and reduce the long-term social costs of displacement.

Table 4. Main areas of university participation in post-war reconstruction and support for internally displaced persons.

ACTIVITIES	NUMBER OF REGISTERED INITIATIVES	SHARE (%)
Educational programs for internally displaced persons	11	26.8
Support programs for displaced students and teachers	9	22.0
Participation in infrastructure recovery projects	7	17.1
Professional training for reconstruction specialists	8	19.5
Social support programs for veterans and affected communities	6	14.6

Support programs for displaced students and teachers accounted for 22.0% of reconstruction-related initiatives. These programs included housing support, financial assistance, adaptation measures, and institutional mechanisms for continuing study or employment after displacement. The prominence of this category shows that universities were directly involved in stabilizing academic communities affected by forced migration. It also demonstrates that the third mission increasingly overlapped with the internal social responsibilities of universities, because support for displaced staff and students helped preserve institutional continuity and academic capacity.

Professional training for reconstruction specialists represented 19.5% of the identified initiatives. This category is particularly important for the long-term recovery agenda because reconstruction requires specialists in infrastructure planning, engineering, project management, social services, public administration, and regional development. By expanding or adapting educational programs in these areas, universities contributed to the formation of the human capital needed for national recovery. This finding aligns with policy-oriented

discussions that emphasize the centrality of skills, human capital, and institutional coordination in Ukraine's reconstruction.

Participation in infrastructure recovery projects accounted for 17.1% of initiatives. These activities included involvement in planning, expert support, applied research, and cooperation with local or national actors responsible for restoring damaged infrastructure. Although this category was smaller than educational support for displaced persons, it shows that universities contributed to reconstruction not only indirectly through training but also directly through research and expertise. Social support programs for veterans and affected communities represented 14.6% of the initiatives. These programs addressed reintegration, rehabilitation, professional development, and community support, indicating that reconstruction was understood not only as physical rebuilding but also as social recovery. After examining the three major dimensions separately, the results were consolidated to show the overall distribution of university activities across the main areas of the transformed third mission. **Figure 1** presents the integrated distribution of initiatives identified in the study.

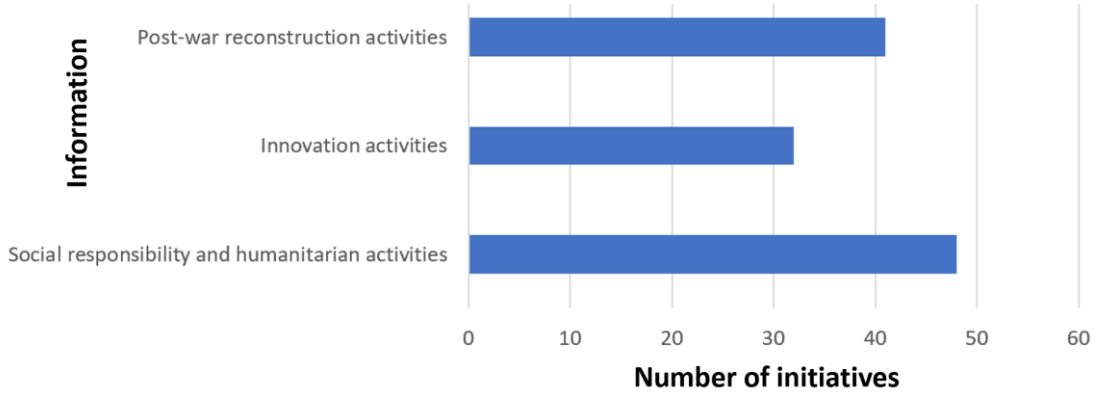


Figure 1. Integrated distribution of university activities across the main dimensions of the third mission.

The figure summarizes the distribution of identified initiatives across social responsibility and humanitarian activities, innovation activities, and post-war reconstruction activities. The values are based on the authors' analysis of 186 institutional documents. **Figure 1** shows that social responsibility and humanitarian activities formed the largest group of identified initiatives, with 48 cases. Post-war reconstruction activities formed the second largest group, with 41 cases, while innovation activities accounted for 32 cases. This distribution suggests that wartime conditions shifted the center of gravity of the third mission toward social resilience and recovery-oriented functions. Innovation remained important, but it was embedded in a wider institutional response that also included humanitarian support, educational continuity, displacement assistance, and reconstruction planning.

The integrated findings indicate that the wartime transformation of the third mission was not simply an expansion in the number of university activities. It was also a qualitative reconfiguration of institutional purpose. Ukrainian universities became platforms through which teaching, research, social responsibility, innovation, and reconstruction were combined in response to the national crisis. This supports the view that the third mission is not a fixed institutional category but a dynamic process shaped by competing demands, social expectations, and changing external conditions (Flitsch and Menzel, 2026).

The findings also show that the Ukrainian case extends existing third-mission theory in at least three ways. First, it demonstrates that the social dimension of the third mission can become dominant under conditions of war. This does not mean that innovation and entrepreneurship lose relevance; rather, they are reframed within broader social and recovery needs. Second, it shows that universities can act as crisis-adaptive institutions that connect internal academic capacities with external community needs. Third, it suggests that post-war reconstruction should be treated as a distinct third-mission dimension, because it requires the integration of education, applied research, human capital development, public engagement, and regional cooperation.

These findings are consistent with scholarship that emphasizes the growing social role of universities and the importance of university social responsibility in times of uncertainty (Hou *et al.*, 2025). They also correspond to studies showing that Ukrainian universities have developed new forms of resilience, international cooperation, and community engagement during the war (Błaszczyk *et al.*, 2025; Orzhel *et al.*, 2023). At the same time, the present study adds an empirical contribution by showing how these activities are distributed across a broader sample of institutions and how they can be interpreted as parts of one transformed third-mission framework.

The results have practical implications for higher education policy and university governance. If universities are expected to contribute to recovery, their third-mission activities should be supported through institutional strategies, public funding mechanisms, regional partnerships, and international cooperation. Social responsibility, innovation, and reconstruction should not be treated as separate agendas. They should be integrated into university development strategies, quality assurance frameworks, and national recovery planning. This is particularly important because the effectiveness of reconstruction depends not only on infrastructure investment but also on human capital, community trust, institutional coordination, and knowledge-based decision-making.

The findings also suggest that universities need mechanisms for documenting and evaluating third-mission activities more systematically. The present study relied on publicly available documents, and this revealed substantial evidence of university engagement. However, the analysis also suggests that many socially important activities may remain informal, underreported, or inconsistently documented. Developing clearer reporting practices would make it easier to assess the contribution of universities to resilience, innovation, and reconstruction. Such reporting could also strengthen accountability, improve coordination with local communities, and support international partnerships.

In theoretical terms, the study supports a crisis-adaptive understanding of the third mission. Under stable conditions, the third mission is often discussed through concepts such as knowledge transfer, entrepreneurship, regional innovation, and university-business cooperation (Davey *et al.*, 2017; Gaffaro Garcia and Naranjo Tuesta, 2025; Rubens *et al.*, 2017; Cunningham *et al.*, 2019). Under wartime conditions, however, the third mission becomes more socially embedded and recovery-oriented. The Ukrainian case shows that universities can mobilize their academic, organizational, and social capacities to respond to emergency needs while also preparing for long-term reconstruction. This suggests that future research should analyze the third mission not only as an economic or innovation function but also as a mechanism of resilience in societies facing war, displacement, and large-scale institutional disruption.

5. CONCLUSION

This study examined how the third mission of Ukrainian universities has been transformed under wartime conditions. Based on the analysis of 186 institutional documents from 30 universities, the findings show that the third mission has expanded beyond knowledge transfer, entrepreneurship, and university-business cooperation. In the Ukrainian wartime context, it has become a crisis-adaptive institutional function that integrates social responsibility, humanitarian support, innovation, regional engagement, and post-war reconstruction. The study identifies three interconnected dimensions of this transformation: social responsibility and humanitarian support, innovation and regional development, and reconstruction-oriented engagement. These findings suggest that Ukrainian universities have become important actors in sustaining social resilience, mobilizing knowledge, supporting displaced communities, and preparing human capital for recovery. The study contributes to third-mission scholarship by showing that, under conditions of war and large-scale disruption, the third mission should be understood not only as an economic or innovation function but also as a mechanism of resilience and reconstruction. Future research should examine the effectiveness and long-term impact of these activities through interviews, surveys, and comparative studies across crisis-affected higher education systems.

6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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