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CLASHES OF KNOWLEDGE: 'GREEN DEAL' CONCEPTS AND CHALLENGES FOR SUSTAINABLE RURAL SYSTEMS

ZDERZENIA WIEDZY: KONCEPCJE I WYZWANIA „ZIEŁONEGO ŁADU” DLA ZRÓWNOWAŻONYCH SYSTEMÓW WIEJSKICH

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Abstract

The content-related scope of the article includes primarily an attempt to take a broad look at the issues of research topics undertaken in research on sustainable development of rural areas. This topic is of great importance in the context of global environmental problems and various concepts of the 'green deal' included in the development policies of countries, primarily the EU member states. These issues were the subject of considerations during the 30th Annual Colloquium of the Commission on the Sustainability of Rural Systems of the International Geographical Union, which took place on June 5–9, 2023 at the University of Lodz, at the Faculty of Geographical Sciences. To comprehensively identify the topic, the methodology of content analysis of the abstracts submitted by the authors was used. This approach and the analysis of the sample of research papers presented at the conference made it possible to identify key issues related to sustainable development of rural areas. The approach used shed light on the relationship between society and nature, and revealed a variety of perspectives and solutions proposed by researchers from around the world. An attempt to integrate the thoughts of many scientists (conference participants) and highlight basic issues in the field of sustainable development of rural areas led to the construction of a model of environmental research in relation to the geographical specificity of understanding reality. This specific thought study

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(synthesis of views) highlights the importance of different perspectives and knowledge systems in understanding the foundations of sustainable rural development. The content-related analysis of the conference abstracts revealed four groups of processes influencing the sustainable development of rural areas, i.e. exploitation of natural resources and its social context, changes in land use, building social awareness of environmental threats and the evolution of connections between urban and rural areas.

Keywords: sustainable development, rural areas, research concepts, green deal.

Streszczenie

Zakres merytoryczny artykułu obejmuje przede wszystkim próbę szerokiego spojrzenia na kwestie podejmowanych badań nad zrównoważonym rozwojem obszarów wiejskich. Temat ten ma duże znaczenie w kontekście globalnych problemów środowiskowych oraz różnych koncepcji „zielonego ładu” zawartych w politykach rozwojowych państw. Zagadnienia te były przedmiotem rozważań podczas 30. konferencji Komisji ds. Zrównoważonego Rozwoju Systemów Wiejskich Międzynarodowej Unii Geograficznej (30th Annual Colloquium of the IGU Commission on the Sustainability of Rural Systems), która odbyła się w dniach 5–9 czerwca 2023 r. na Uniwersytecie Łódzkim, na Wydziale Nauk Geograficznych. W próbie całościowego rozpoznania tematu posłużono się metodologią analizy treści abstraktów nadesłanych przez autorów. Umożliwiło to określenie kluczowych zagadnień związanych ze zrównoważonym rozwojem obszarów wiejskich. Zastosowane podejście rzuciło światło na relacje między społeczeństwem i naturą oraz ujawniło różnorodne perspektywy i rozwiązania proponowane przez badaczy z całego świata. Próba zintegrowania myśli wielu naukowców (uczestników konferencji) i uwypuklenia podstawowych zagadnień z zakresu zrównoważonego rozwoju obszarów wiejskich doprowadziła do zbudowania modelu badań środowiskowych w odniesieniu do geograficznej specyfiki rozumienia rzeczywistości. W tym specyficznym badaniu myśli (synteza poglądów) podkreślono znaczenie różnych perspektyw i systemów wiedzy w rozumieniu podstaw zrównoważonego rozwoju obszarów wiejskich. Analiza merytoryczna abstraktów konferencji ujawniła cztery grupy procesów wpływających na zrównoważony rozwój obszarów wiejskich, tj. eksploatację zasobów naturalnych i jej społeczny kontekst, zmiany w użytkowaniu gruntów, budowanie świadomości społecznej na temat zagrożeń środowiskowych oraz ewolucję powiązań między miastem a obszarami wiejskimi.

Słowa kluczowe: zrównoważony rozwój, obszary wiejskie, koncepcje badań, „zielony ład”.

IDEAS AND RESEARCH MATERIALS

Over the last decades, we have been facing major challenges in maintaining a balance between different spheres of nature and social activities due to increasing human pressure on the environment. Population growth, rapid urbanisation, economic pressures (e.g. rising consumption and production patterns) and the

growing need to improve the quality of life are imposing increasing environmental costs on development (Pender, 2001; DeFries et al., 2010; Boserup, 2014). It has led to many environmental threats, the greatest of which are related to climate change. The great importance of issues that affect the current sustainability on a global and regional scale was the basis for choosing the topic of the 30th Annual Colloquium Commission on the Sustainability of Rural Systems (CSRS) of the International Geographical Union (5–9th June 2023, Poland, University of Lodz, Łódź).

Rural areas are particularly affected by these changes, especially as many green energy investments are located in rural areas (Poggi et al., 2018; Többen, 2023; Ulewicz et al., 2023). In this regard, it is worth exploring the opinions of researchers and experts coming from various countries and regions in different positions on the global development continuum and pursuing different development policies (the 'Global North' and 'Global South'). The clashes of knowledge in this field bring us closer to understanding various opinions and ideas related to issues such as energy transition, climate change, changes in land use and landscape, a transformation of rural functions, and changes in lifestyles.

Thematic issues of the conference were organised around three classical paradigms of human geography, i.e. environment, space and place, and landscape (Tuan, 1979; Buttner, Seamon, 2015; Zimmerer, 2017; Suliborski, Wójcik, 2023), i.e.:

- Environment and society. Environmental risk and social transformations in rural areas, including issues of migration due to environmental changes, conflicts over resources and space, social disparities, and the quality of life.
- The dynamics of communities and places. Rural communities and the challenges of the 'green deal', including concerns of social movements and organisations on sustainable development projects and smart growth, local initiatives, perception, and image of the rural environment.
- Transformation of the rural cultural landscape, including issues of the impact of environmental change on the rural settlement physiognomy, implications of new green energy investments on rural landscapes, and landscape adaptation to environmental change.

During the conference, a total of thirty research papers were presented, predominantly through oral presentations, which addressed the issues delineated in the call for papers. These contributions were made by researchers representing seventeen countries¹, spanning various geographic regions of the globe, which encompassed a spectrum of economic development stages as well as diverse civilisational and cultural contexts. In order to conduct a systematic analysis of the

¹ Australia, Austria, Belgium, Brazil, China, Croatia, Czech Republic, Ecuador, Germany, India, Italy, Japan, Poland, Portugal, Romania, Spain, USA.

content of the book of abstracts, we employed a methodology rooted in a content analysis framework (DiMaggio et al., 2013; Schreier, 2014; Krippendorff, 2018; Birgili et al., 2021). This methodology is geared towards deriving replicable and valid inferences from the textual material, thereby facilitating an examination of the environmental issues described in relation to the dynamics between society/community and nature. Initiating our analysis, we embraced the conceptual underpinnings of content analysis as outlined by Krippendorff (2018), recognising it as a robust research technique designed for extracting replicable and valid inferences from textual or otherwise meaningful material to the contexts of their utility. This approach enabled us to transcend the mere textual representations, delving into the significance of the discussed environmental problems as perceived by different researchers. Each abstract was analysed regarding the research issue described, i.e. the specificity of the environmental problem and the relationship between society/community and nature.

Integrating the descriptive content analysis methodology into the examination of the conference abstracts enabled a thorough and nuanced exploration of key issues in rural sustainability. This methodological approach illuminated the complex relationships between society, community, and nature, highlighting the diverse perspectives and solutions proposed by researchers from around the world. An attempt to integrate the thoughts of many researchers (conference participants) and highlight the basic issues in the field of rural sustainability led to the construction of an environmental model under the geographical basis of its understanding. The most important argument in favour of such a construction of a holistic view of the contemporary issue of 'green deals' is the key tradition of human geography research, i.e. the presentation of humans/community as an active subject in the environment. This setting of the research issue was visible in most of the papers presented. It is important to determine the dominant problem, i.e. the one located in the natural or socio-cultural aspect of the environment. In more universal terms, we refer here to the global debate on the importance of elements in sustainable development research, especially the role of the social sphere (Davidson, 2010; Boyer et al., 2016; Missimer et al., 2017). In this respect, the geographical model of the environment is similar to the position where sustainable development is understood as permeating almost all aspects of life and is deeply dependent on the specificity of local contexts (Boyer et al., 2016). In this way, the cognitive process is open to clashes of knowledge, whose common issue is human/community in the world that creates various conditions, both constructive and destructive. This basic mental construction (model) makes it possible to recognise processes in a specific environmental and civilisational context (Fig. 1).

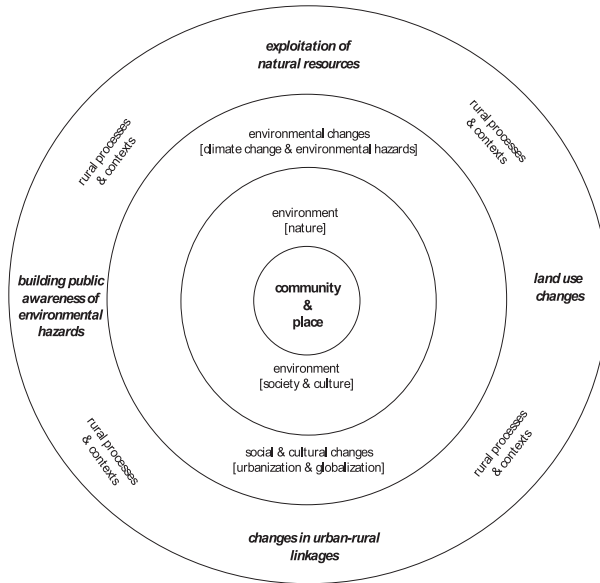


Fig. 1. A holistic view of the contemporary issue of ‘green deals’ – the environmental model
Source: own elaboration.

PROCESSES AND THE RURAL CONTEXTS

Following a comprehensive analysis of the content, four groups of processes were distinguished. Each group has been assigned a generic name to encapsulate its core essence accurately. Additionally, we have endeavored to provide a clearer understanding by describing the nature of the relationships with the environment that each group embodies. The processes identified are as follows: The Exploitation of Natural Resources, which delves into how natural assets are utilised and managed; Changes in Land Use, focusing on the transformation and repurposing of land for different functions; Building Public Awareness of Environmental Risks, which emphasises informing and educating the populace about the potential hazards that threaten the environment; and Changes in Urban-Rural Linkages, highlighting the evolving connections and interactions between urban and rural areas.

Exploitation of natural resources

The historical exploitation of natural resources has served as a linchpin in the economic development narrative, facilitating the progression towards industrial-

sation and societal advancement. This dynamic, however, presents a starkly different paradigm within rural contexts, where environmental integrity is intrinsically linked to a local quality of life and economic viability. The exigency for reevaluation of resource extraction methodologies in these settings emerges from the intersection of ecological sustainability and economic imperatives, a discourse propelled into prominence by the Green Deal. The Green Deal represents a paradigmatic shift, advocating for a holistic integration of sustainable practices within economic frameworks, thereby attempting to reconcile the erstwhile divergent objectives of economic growth and environmental conservation. This transition underscores the necessity of a paradigm shift that prioritises long-term ecological stability alongside economic advancement (*The European Green Deal – European Commission*, 2019).

Critically, the discourse on natural resource exploitation within the ambit of the Green Deal elucidates the detrimental impact of external investment on rural ecosystems and communities. It accentuates a dual consequence: environmental degradation and socio-economic disenfranchisement of rural populations. External investments, often oriented towards maximising immediate returns, result in significant ecological disruptions, undermining the environmental substratum essential for rural livelihoods. Moreover, such interventions exacerbate socio-economic disparities, marginalising local communities and depriving them of sustainable economic opportunities (Dobbs et al., 2011). Concurrently, the narrative emphasises the paramount importance of social justice and community inclusivity in the decision-making process. It advocates for an equitable approach to development, one that ensures the voices of local stakeholders are integral in shaping the trajectory of resource management and exploitation strategies. This perspective is critical for fostering a model of development that is both inclusive and sustainable, addressing the inherent inequities within traditional resource exploitation frameworks (Bebbington, 2011).

The integration of sustainable practices in the exploitation of natural resources, particularly within rural locales, is imperative for alignment with the objectives delineated by the Green Deal. This approach necessitates an interdisciplinary strategy, harmonising the dual objectives of environmental conservation and socio-economic development. Such a strategy requires meticulous orchestration to mitigate potential land use conflicts and ensure the preservation of rural landscapes and the livelihoods they support. Engagement of rural communities in the stewardship of natural resources, underpinned by supportive local policies, is pivotal in this endeavour. It fosters a sense of ownership and environmental accountability among local stakeholders, facilitating the adoption of sustainable practices. Community-centric approaches, bolstered by educational initiatives and participatory governance models, are indispensable for empowering rural populations to sustainably manage their resources (Bodin, Crona, 2009; Oprea,

Ienciu, 2022). Through these mechanisms, the discourse on resource exploitation can evolve towards a model that harmonises economic development with ecological stewardship, ensuring the sustainability of rural ecosystems and communities (Wellmer, Becker-Platen, 2002; Omer, 2008; Wolsink, 2012).

Land use changes

Land use changes embody a multifaceted spectrum of issues, interpretations, and outcomes that are heavily influenced by the geographical locale of the activities. A significant body of research has delved into understanding the ramifications of these changes, highlighting the differential impacts dictated by regional and spatial policies implemented by states and supranational entities such as the European Union (EU). These policies often precipitate a variety of unintended social and economic consequences. For instance, in the Global South, rapid rural urbanisation is scrutinised for its adverse effects, underscoring the urgency to prioritise local environmental policies to mitigate these impacts (Ferraro et al., 2021).

Conversely, the countries in the Global North face distinct challenges, notably concerning the quality of life and economic vitality in areas subjected to conservation and landscape restrictions. The dynamics of tourism concentration in certain regions and the escalation of industrial agriculture pose significant questions, illuminating the intricate balance between economic development and environmental conservation (Bettencourt, West, 2010; Meyfroidt et al., 2022; Hu et al., 2023).

Studies have employed various methodologies to explore these dynamics, including simulation models integrating ecological and social factors to examine farmer decisions and cropping system performance based on cellular automata approaches (Ferraro et al., 2021). Moreover, the convergence of global urban land expansion trends provides a critical lens through which sustainable development efforts can be evaluated, offering new insights into managing urban growth in harmony with ecological sustainability (Hu et al., 2023). The exploration of trade-offs between landscape impact, land use, and resource quality for renewable energy sources further exemplifies the complex decision-making landscape that stakeholders navigate. This research emphasises the importance of balancing environmental impacts with the optimisation of land use for energy production (McKenna et al., 2022). In summary, the scope of research on land use changes is extensive and multidisciplinary, involving an array of approaches from simulation models to machine learning applications. These studies collectively underscore the complex interplay between ecological, social, and economic factors in shaping land use policies and practices across different global contexts. The contrast in land use challenges between the Global South and Global North exemplifies the global diversity in environmental, social, and economic conditions.

While the Global South grapples with the consequences of rapid urbanisation, the Global North seeks sustainable solutions to maintain quality of life amidst conservation efforts. Addressing these divergent challenges requires a nuanced understanding of local contexts and a commitment to sustainable development that harmonises environmental conservation with human well-being.

Building public awareness of environmental risks

The expansion of public awareness about environmental risks underscores the necessity of educating individuals and communities about the factors driving changes in the global ecosystem, particularly focusing on climate change and other natural hazards. This educational effort encompasses a broad spectrum of issues, including the generation of social solidarity and community resilience in the face of environmental threats that manifest at varying scales, from local to global. These phenomena contribute to the strengthening of rural communities and the mobilisation of global environmental movements, highlighting the interconnectedness of environmental challenges, social cohesion, and collective action.

Research in this domain often explores how the threat of environmental changes fosters community phenomena, ranging from the development of social solidarity within rural settings to the rise of comprehensive environmental movements on a global scale. Such movements are inherently linked to the dynamics of political engagement and the interplay between local actions and global mechanisms. This nexus of community response, political action, and environmental awareness emphasises the crucial role of public understanding in exerting pressure on government bodies, multinational corporations, and financial institutions to adopt more sustainable practices and policies.

The exploration of human geography within this context provides valuable insights into the social, cultural, and economic dimensions that shape human behaviour and interactions with the environment. Furthermore, the concept of human well-being in the face of environmental changes and the capacity for adaptation highlight the importance of resilience and adaptability among communities. Modelling human adaptation to environmental changes provides a framework for understanding how individuals and communities can adjust their practices to align with the current state of the environment, thereby optimising their well-being despite ongoing ecological shifts (Nelson et al., 2010; Arneth et al., 2014; Becken et al., 2017). These insights collectively underscore the multifaceted relationship between environmental risks, public awareness, community resilience, and the broader socio-political dynamics that shape our global response to environmental challenges.

Changes in urban-rural linkages

Research within the realm of urbanisation and social dynamics in rural contexts delves into a myriad of new phenomena emerging from the interplay between urban expansion and rural lifestyles. In nations with advanced economies, a significant volume of scholarly work has been devoted to exploring the social and spatial transformations occurring within rural locales. These studies are not limited to areas immediately adjacent to large urban centres but also extend to regions situated at greater distances from such metropolises.

Academic inquiries have shed light on a range of critical aspects, including the intensifying competition over premium spaces (Keivani et al., 2001; Dörry, Handke, 2012; Theurillat et al., 2015). This competition is largely fuelled by the shifts within the real estate market, which prompt individuals and families to seek out living environments that promise a more harmonious balance with nature. The underlying motivation for this search often stems from a desire to escape the frenetic pace and environmental compromises of urban living, in favour of settings that offer tranquillity and a closer connection to the natural world.

The scope of research also encompasses innovative agricultural practices that align with ecological principles, such as eco-friendly and urban agriculture (Walters et al., 2018; Yuan et al., 2022). These practices represent a conscious move away from conventional farming methods, aiming to reduce environmental impact and foster sustainability. Additionally, the studies examine the burgeoning local food movements, which advocate for the reduction of supply chain lengths. By bringing producers and consumers of agricultural goods closer together, these movements strive to enhance the freshness and quality of food, support local economies, and minimise the carbon footprint associated with long-distance transport.

Another significant area of interest within this body of research is the evolution of community living patterns, with a particular focus on the rise of eco-communities. These communities are distinguished by their commitment to sustainability and their rejection of mainstream consumerist culture (Juskaite, 2019; Coskun, Gbadeyanka, 2022). By embracing alternative modes of living that prioritise environmental stewardship, social cohesion, and sustainable development, eco-communities challenge prevailing global consumption trends and propose viable pathways toward a more sustainable future.

Embedded within these research themes is the conceptual framework of the green deal concept, which emphasises the integration of environmental, economic, and social policies to achieve sustainable development. This framework acknowledges the pivotal role of rural areas and communities in the transition towards a greener economy and society. Furthermore, the investigations draw upon the disciplinary perspectives of human geography, which provides valuable in-

sights into the spatial dimensions of human activity, the dynamics of place-making, and the complex relationships between people and their environments.

NAVIGATING KNOWLEDGE CLASHES IN THE QUEST FOR RURAL SUSTAINABILITY

In the research model, which takes into account the geographic values based mostly on the perception of variety in rural space and the regional/local specificity of conditions and resources, the concept of place and local community plays an important role. Studies relate above all to the questions of marginalisation of rural communities against the pressure from global powers. Sustainability has a deep social meaning now, which occurs in relation to other dimensions – environmental, economic, political. An analysis of conditions and mechanisms leading to social exclusion based on access to resources shows rural space in categories of inequality and injustice, thus highlighting the grassroots pressure to change this unequal relation. Place-based policy has to take into account the ability to adapt to the changing environmental conditions. This in turn relates to the studies emphasising the question of scale, and thus the issue of territorial development and land use based on the point of view stemming from a research model (quantitative vs. qualitative). In the context of environmental changes, it is necessary to indicate management models that may minimise the threats to democracy, including threats to local institutions. The relational interpretation of space takes into account the dynamics of place resulting from its social, cultural and institutional heterogeneity. On a local scale, studies show the presence of formal and informal networks, as well as agents of change, leaders, organisations and institutions. This dimension fits within relational space and also includes the sphere of social ideas, encompassing as well the everyday context of the environmental crisis. This also includes the issues of forming space resulting from a clash of narrations and behaviours (unstable environment). Social conflicts are woven into politics at different scales, so the questions of ensuring environmental security result from the changing relations of power, stakeholders, pressure groups, etc.

The 30th Annual Colloquium Commission on the Sustainability of Rural Systems, held from June 5–9, 2023, at the University of Lodz, Poland, centred on the pivotal role of rural areas in achieving sustainable development amidst the challenges posed by climate change, energy transition, and environmental degradation. Through the lens of human geography, this conference explored the intricate relationship between society/community and nature, leveraging classical paradigms such as environment, space, place, and landscape. A total of thirty research papers presented by scholars from seventeen countries delved into themes of environmental risk, social transformations, dynamics of communities and places, and the transformation of the rural cultural landscape.

CONCLUSIONS

1. **Interdisciplinary Approach:** The conference underscored the necessity of an interdisciplinary approach that merges insights from human geography, environmental science, and social sciences to address the multifaceted challenges of rural sustainability. By integrating diverse perspectives, researchers can better understand and propose solutions that balance ecological integrity with socio-economic development.
2. **Community Inclusivity and Participation:** The findings emphasise the critical importance of involving local communities in sustainable development initiatives. Participatory governance models and community-centric approaches are essential for fostering a sense of ownership and responsibility towards natural resource management and environmental conservation. Such inclusivity ensures that development strategies are aligned with the needs and aspirations of local populations, thereby enhancing the effectiveness of 'green deal' policies.
3. **Global Perspectives and Local Contexts:** The conference highlighted the contrast in environmental and socio-economic challenges faced by rural areas in the 'Global North' and 'Global South'. This disparity necessitates policies and solutions that are tailored to the specific needs and conditions of each region. Understanding the local context and leveraging global knowledge networks can facilitate the exchange of best practices and innovative solutions, thereby contributing to the global discourse on sustainable development.
4. **Future Research Directions:** There is a need for further research that delves into the relational interpretation of space and the dynamics of place resulting from social, cultural, and institutional heterogeneity. Exploring the mechanisms of social exclusion, environmental justice, and the role of formal and informal networks can provide deeper insights into the processes that shape rural sustainability. Additionally, examining the impact of global powers on local communities can shed light on the pathways to mitigating inequalities and ensuring a just transition towards sustainable rural systems.

In conclusion, the 30th Annual Colloquium Commission on the Sustainability of Rural Systems provided valuable insights into the complex interplay between rural sustainability, environmental challenges, and socio-economic dynamics. By fostering interdisciplinary research and encouraging community participation, the conference contributes to a broader understanding of the 'Green Deal' concepts and the pathways to achieving sustainable rural systems.

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