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## CULTURAL HERITAGE CAPITAL AS A RESILIENCE FACTOR IN SUSTAINABLE DEVELOPMENT POLICY OF THE REGION

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**ABSTRACT:** This article assesses the role of cultural heritage capital in achieving social, economic and environmental resilience within regional sustainable development policy. It highlights the importance of cultural heritage in enhancing regional resilience, especially in the face of contemporary political and environmental challenges. The study results suggest that increasing awareness of cultural heritage can drive resilience in sustainable development. Two key approaches are presented: the impact of cultural heritage on economic resilience in the context of disasters and the role of cultural tourism. Desk research and analysis of best practices were applied to identify social, economic, and environmental benefits from cultural heritage capital, which can strengthen integrated regional resilience. The article underscores the necessity of adapting heritage conservation strategies to address climate change, enhancing long-term economic resilience. Its originality lies in positioning cultural heritage capital as the resilience factor, demonstrating how it can support the recovery and sustainable development of regional economies during crises.

**KEYWORDS:** cultural heritage, regional development policy, cultural tourism, economic resilience, sustainable development

## Introduction

Cultural heritage (CH) is fundamental to the identity of regional and national communities, preserving historical legacies while shaping contemporary societies and their resilience to social, economic, and environmental challenges (Phillips & Stein, 2013). Recent studies highlight the influence of CH on sustainable development, particularly within local communities (Roders & van Oers, 2011). In the context of natural disasters, CH supports economic and social recovery (UNESCO, 2003). Research identifies CH values like social identity, authenticity, and economic potential as key for addressing community needs and fostering regional development through tourism and cultural initiatives (Konior, 2021). CH serves as a dynamic tool for innovation, particularly amid urbanisation and globalisation, strengthening community cohesion during crises (Aitsi-Selmi et al., 2016; Fatorić & Egberts, 2020). Despite the recognition of CH as a resource for resilience, disaster risk policies remain fragmented (Santangelo et al., 2022). This article explores CH's role in economic resilience, focusing on disasters and cultural tourism, highlighting the need for climate-adaptive heritage policies. Case studies from Rzeszów, Helsinki, Lisbon, and Stockholm illustrate CH's role in local revitalisation, urging better integration of CH into sustainable development strategies.

## An overview of the literature

Cultural heritage is increasingly recognised as a critical factor in fostering resilience within sustainable development frameworks (Santangelo et al., 2022; Labadi et al., 2021; Petti et al., 2020; Lerario, 2022; Rudan, 2023). The growing interest in cultural heritage stems from its multifaceted role in promoting economic, social, and environmental sustainability (Lucchi et al., 2024; Franco & Mauri, 2024), as well as the contribution of cultural heritage to regional development and revitalisation (Kalfas et al., 2024; Agustian & Zen, 2024). Recent scholarship emphasises the need for an interdisciplinary approach to assess the value of cultural heritage, particularly in the face of contemporary global challenges such as climate change (De Masi et al., 2021; Fatorić & Seekamp, 2017; Seekamp & Jo, 2020). Ghahramani et al. (2020), Alavi et al. (2024) and UNESCO (2003) emphasized the integration of cultural heritage into comprehensive environmental and social policies to enhance community resilience. As climate change continues to affect cultural sites and practices, researchers have focused on how communities perceive the value of heritage (Musialik et al., 2021; Łukaniszyn-Domaszewska et al., 2024) and its potential benefits in building resilience against environmental threats (Wardekker et al., 2023; Nicu & Fatorić, 2023; Orr et al., 2021; Fatorić & Biesbroek, 2020; Sesana et al., 2019). A recent literature review by Sesana et al. (2019) focuses on the effects of climate change on the value associated with tangible aspects of cultural heritage. This review highlights potential hazards that could alter the material characteristics of heritage objects while also improving comprehension of the current state of research in this field. Although this synthesis integrates findings from multiple disciplines, it does not adequately address the wider challenges and opportunities that arise at the intersection of cultural heritage and climate change. Notably, it overlooks critical discussions regarding adaptation strategies, the barriers to implementation, and the role of cultural heritage in promoting climate action.

The role of cultural heritage in disaster risk reduction has been highlighted by several studies, including those by Agapiou et al. (2020), Cacciotti et al. (2021), Romao and Bertolin (2022), Nocca and Angrisano (2022), Nocca et al. (2021) and Pahl-Wostl et al. (2023), which underscore the importance of integrating cultural practices in resilience planning.

The adaptation of cultural resources to changing environmental conditions faces several institutional, technical, financial, and social barriers (Fatorić & Seekamp, 2017). Overcoming these obstacles requires more extensive research into adaptation strategies and improved collaboration among stakeholders, including policymakers and local communities. Additionally, there is a need to revise disaster prevention and preparedness policies to incorporate the transformative potential of cultural heritage in responding to climate-related risks (Fatorić & Egberts, 2020).

Several studies have underscored the broad impact of cultural heritage on socio-economic resilience. The promotion and protection of cultural heritage can enable communities to preserve their identity while stimulating economic development through cultural tourism and local initiatives

(Labadi et al., 2021; Schultz et al., 2022). By emphasising cultural heritage as a resource for both social cohesion and economic regeneration, local initiatives can support long-term sustainable development.

Three significant dimensions of cultural heritage's impact are particularly important in this regard:

1. **Identity and community cohesion.** According to this dimension, cultural heritage, encompassing tangible and intangible elements such as architectural landmarks, traditions, and folklore, helps define the identity of a community. It fosters a sense of belonging and unity by transmitting values, history, and traditions from one generation to the next. This promotes community integration and strengthens social bonds (Paleczny, 2020; Beel & Wallace, 2020; Wallace & Beel, 2021). In disaster-prone areas, cultural heritage can play a vital role in maintaining continuity and identity amidst crisis recovery (Fatorić & Seekamp, 2017).
2. **Social capital.** From this point of view, cultural heritage can serve as the foundation for social capital – networks of relationships, norms, trust, and collaboration that contribute to community resilience and development. By strengthening social ties and encouraging cooperation between different groups, cultural heritage fosters social cohesion and supports the collective capacity to respond to challenges (Paleczny, 2020; Beel & Wallace, 2020; Wallace & Beel, 2021). This strengthens community resilience to crises, such as natural disasters and socio-political instability, as social capital acts as a resource for mutual aid and recovery.
3. **Economic and environmental impact.** In this regard, cultural heritage has a profound impact on local economies. Cultural tourism, traditional craftsmanship, and heritage-based festivals generate income and create jobs, contributing to regional economic development (Hełpa-Liszkowska, 2013). Moreover, the knowledge embedded in traditional practices – such as sustainable farming techniques and ecological craftsmanship – can inform contemporary approaches to environmental protection and the sustainable use of natural resources (Fatorić & Egberts, 2020).

The policy of utilising cultural heritage resources can serve as a foundation for regional development, particularly through the creative and innovative use of endogenous factors (Table 1) such as local knowledge and traditions (Hełpa-Liszkowska, 2013; Santangelo et al., 2022). Regional policies focused on the preservation of natural and cultural environments can boost social capital, stimulate economic growth, and strengthen community resilience. Such approaches increase society's capacity for creativity and innovation, which in turn enhances economic resilience and long-term sustainability. The result of such an approach may be the strengthening of the local economy and building economic resilience.

**Table 1.** The importance of heritage in the context of sustainable development and resilience

Endogenous factor	Explanation
Cultural survival	Cultural heritage enables communities to maintain their identity in the face of change and crises, serving as a foundation for the survival of local culture in a changing world (Fatorić & Seekamp, 2017).
Resource of knowledge and experience	Traditions, craftsmanship skills, and local knowledge passed down through cultural heritage are valuable resources that can be used to address social and environmental challenges (Fatorić & Egberts, 2020).
Cultural tourism	The protection and promotion of cultural heritage can contribute to the development of the local economy through the growth of cultural tourism, which in turn supports sustainable socio-economic development (Hełpa-Liszkowska, 2013; Naheed & Shooshtarian, 2022). Cultural heritage can be effectively integrated into regional development strategies (Labadi et al., 2021).
Building social bonds	Cultural heritage can serve as a platform for building social bonds and fostering cooperation between different social groups, which strengthens the community's resilience to conflicts and crises (Paleczny, 2020). In this way, heritage contributes to building social capital, supporting the stability and cohesion of communities in the face of contemporary challenges (Santangelo et al., 2022; Wallace & Beel, 2021).

In summary, cultural heritage is not only a marker of historical and social identity but also a key resource for promoting socio-economic and environmental sustainability. Its integration into regional

policy frameworks can drive sustainable development, particularly in regions facing environmental challenges and disasters. As climate change continues to impact cultural heritage globally, there is an urgent need for adaptive strategies that ensure the resilience of heritage sites while fostering regional economic and social resilience.

## Research methods

The article encompasses two primary research components concerning the economic frameworks of CH:

- CH and economic resilience in the context of disasters and catastrophes.
- CH and economic resilience in the context of cultural tourism.

The first research question seeks to determine: How can CH strengthen the economic resilience of communities against the effects of disasters? This aims to assess the role of cultural heritage as a resource for economic resilience and its long-term impact on the stability of regions affected by disasters.

The second research question focuses on: How can CH strengthen the economic resilience of communities in the context of cultural tourism? This aims to explore the role of cultural heritage in promoting social and economic resilience within sustainable regional development frameworks related to cultural tourism.

The article identifies mechanisms for enhancing economic resilience through cultural heritage activities. The methodology primarily involves desk research, including a comprehensive literature review and a systematic examination of existing knowledge regarding cultural heritage and its relation to regional sustainable development policies. Sources comprise foreign scientific publications, industry journals relevant to various economies, and reputable online materials.

The analysis synthesises research findings to evaluate how cultural heritage meets the modern needs of urban societies in selected regions. The study specifically investigates how cities like Rzeszów, Helsinki, Lisbon, and Stockholm have successfully transformed their cultural heritage into dynamic centres and creative hubs. Additionally, it highlights sustainable development practices rooted in traditional local actions, such as herbalism and disaster prevention techniques.

The collected data forms the basis for a case study, illustrating specific cultural and heritage phenomena through secondary source analysis. This foundational material informs further discussions on the management of cultural heritage and its potential to foster regional and local resilience amid socio-economic challenges.

## Results of the research

This research examines the economic role of cultural heritage in fostering resilience. It focuses on two areas: the link between cultural heritage and resilience against disasters, including recovery support and long-term stability, and the impact of heritage-based tourism on local economies, helping them withstand economic fluctuations. Key findings reveal that cultural heritage not only supports economic recovery but also strengthens social cohesion and community identity, aiding crisis recovery. Practices like regenerative agriculture and herbal medicine exemplify heritage-driven resilience, enhancing productivity and promoting local self-sufficiency and stability. Table 2 highlights regenerative agriculture's role in economic resilience.

Herb gardening and herbal medicine bolster economic resilience by fostering self-sufficiency and reducing reliance on global supply chains, especially during crises. Growing consumer interest in natural health boosts local herb-related industries, benefiting small businesses and entrepreneurs. Tourism linked to herbal medicine, like festivals and workshops, further supports local economies. Table 3 shows that herb gardening contributes to resilience by diversifying income, supporting sustainability, preserving traditions, and enhancing public health.

**Table 2.** Regenerative agriculture and economic resilience

Factor	Explanation
Diversified Sources of Income	Regenerative agriculture promotes a diversity of crops and livestock, reducing the economic risks associated with market fluctuations. Organic and local products are increasingly gaining interest, creating new market opportunities.
Protection of natural resources.	Healthy soils and sustainable ecosystems are crucial for long-term agricultural production. Investing in soil regeneration and water resources yields economic benefits by enhancing productivity and sustainability of production.
Increased resilience to climate change	Regenerative agriculture supports adaptation to climate change, which is essential for the future economic stability of farming. Practices such as enhancing water retention and increasing biodiversity can help withstand extreme weather conditions.

**Table 3.** Herb gardening and herbal medicine and economic resilience

Factor	Explanation
Diverse income sources	Engaging in herb gardening allows communities to cultivate a variety of medicinal and culinary herbs, which can be sold at local markets or through herbal products. This diversification helps reduce economic risks associated with market fluctuations and enhances food security.
Promotion of local economies	The production and sale of herbs can stimulate local economies by creating jobs, encouraging entrepreneurship, and fostering community engagement. Small-scale herbal businesses can thrive, providing fresh, locally sourced products while reducing dependency on external suppliers.
Support for sustainable practices	Herb gardening often incorporates sustainable agricultural methods that preserve biodiversity and protect natural resources. By emphasizing organic growing techniques and traditional knowledge, communities can promote environmental stewardship while generating income.
Cultural significance	Herbal medicine is deeply rooted in many cultures and traditions. By preserving and promoting these practices, communities can strengthen their cultural identity and resilience, especially in the face of external pressures or disasters.
Health benefits	Herbal remedies contribute to public health, which can lead to reduced healthcare costs for communities. Access to natural remedies may enhance overall well-being, contributing to a healthier and more productive workforce.

Integrating cultural heritage into regenerative agriculture and herbalism enhances economic resilience by combining traditional knowledge with modern technologies. Regenerative agriculture promotes sustainability, supports local economies, and strengthens resilience to climate change, while herbalism fosters self-sufficiency and reduces dependence on global supply chains. Together, they preserve cultural legacies and bolster communities against environmental and economic challenges. To maximise this potential, comprehensive policies at regional and international levels are needed, including investments in cultural infrastructure and education that highlight heritage's role in economic resilience and sustainable development.

Cultural tourism is another key area where cultural heritage strengthens economic resilience, particularly in cities with strong historical and cultural identities. The "Cultural Heritage in Action" project (2020-2023) helped over 100 European cities share best practices in heritage management for post-pandemic recovery, sustainability, and climate adaptation. Examples include Rzeszów, Poland's underground city trail and Helsinki, Finland's Cable Factory cultural centre. These initiatives show how well-managed heritage sites can drive economic regeneration, engage communities, and preserve urban cultural identity, even amid economic challenges (see Table 4).

**Table 4.** Examples of best practices

City/Country	Best practise
Rzeszów, Poland	Rzeszów's historic underground city trail, an extensive network of restored cellars, has been transformed into an interactive cultural institution. Combining historical elements with modern techniques, the trail offers a fresh perspective on the city's history. The cellars have been modernized with interactive tools to create engaging exhibitions and promote cultural participation, developed with local residents in mind.
Stockholm, Sweden	In Stockholm, several cultural institutions and museums have opened the Material Store, a large storage facility for reusing props from exhibitions and performances. Located in the former Pripps brewery in Ulvsunda, Bromma, this innovative project promotes sustainability and recycling by repurposing materials that would otherwise be discarded or stored.
Lisbon, Portugal	In 2015, Lisbon launched the „Lojas com História” (Shops with History) program to preserve its unique commercial heritage and revitalize its urban structure. The initiative protects historic shops, combats real estate speculation, and helps prevent sharp increases in commercial rent prices.
Helsinki, Finland	After Nokia wound down its industrial operations in Helsinki in the late 1980s, its factory spaces were rented to artists and cultural organizations. Initially slated for demolition, the building was preserved after tenants lobbied the city. In 1991, the City of Helsinki established KAAPELLI, transforming the Cable Factory into a 63,000 m <sup>2</sup> cultural center. Today, it houses studios, galleries, museums, event spaces, and a modern dance house. By 2019, the center employed around 1,000 people and attracted over 500,000 visitors annually.

Source: authors' work based on European Union (2021).

Best practices from “Cultural Heritage in Action” (Table 4) show how diverse approaches to heritage management strengthen local identity and contribute to long-term economic and social development. International cooperation and experience sharing are key to accessing innovative solutions for heritage management. Such initiatives demonstrate that cultural heritage not only preserves traditions but also supports sustainable development. Integrating heritage into tourism stimulates economic growth through increased revenue, job creation, and local business development, as European examples highlight its role in building economic resilience amid global challenges like climate change and urban pressures.

## Discussion/Limitation and future research

The results of this study align with previous research that highlights the significance of cultural heritage (CH) in enhancing economic resilience, particularly in regions affected by disasters and through cultural tourism. Similar studies, such as those by Fatorić and Seekamp (2017) and Santangelo et al. (2022), have emphasised the multidimensional role of CH in not only preserving cultural identity but also as a driver for economic regeneration and recovery. The current research reinforces these conclusions, showing that CH can serve as a key asset in mitigating the socio-economic impacts of crises while also fostering long-term sustainability. Additionally, comparisons with the findings of Labadi et al. (2021) indicate that integrating CH into broader economic frameworks offers a unique avenue for promoting resilience, particularly when adapted to the specific needs of communities.

However, unlike some prior studies that focus more on heritage preservation, this research emphasises the dual approach of leveraging CH for both disaster resilience and economic stability through tourism. For example, while Fatorić and Egberts (2020) discuss the adaptation of CH to climate change, this article further explores the potential of CH as an active contributor to economic growth, particularly in tourism. The case studies of cities like Rzeszów, Helsinki, Lisbon, and Stockholm illustrate how strategic integration of CH into urban development and creative hubs can lead to economic revitalisation, which complements the broader literature on CH's role in regional sustainability (De Masi et al., 2021).

The study's results are consistent with the broader literature, which underscores the multifaceted role of cultural heritage in resilience-building. Santangelo et al. (2022) highlight cultural heritage as a critical factor in community responses to disasters, with this article extending their argu-

ment by focusing on the economic benefits of heritage conservation in disaster recovery. Fatorić and Seekamp (2017) similarly underscore the importance of addressing barriers to integrating cultural heritage into resilience strategies, particularly in response to climate change, as emphasised by Sesana et al. (2019). This research contributes by advocating for adaptive heritage protection policies that align with climate change realities, as well as the integration of cultural heritage into regional development frameworks, echoing Labadi et al. (2021) findings.

Additionally, this study emphasises that cultural heritage plays a key role in promoting sustainable development through cultural tourism, as highlighted by Hełpa-Liszkowska (2013), Naheed and Shooshtarian (2022) and Paleczny (2020), who both discuss the economic impact of cultural heritage on local and regional development. Moreover, by integrating traditional practices and local knowledge, cultural heritage not only supports economic resilience but also contributes to environmental sustainability, aligning with the findings of Adegioriola et al. (2023).

It is worth noting that most researchers analysing the economic aspects of cultural heritage have so far focused on its role in cultural tourism. In such studies, CH is the primary goal, with processes and benefits or drawbacks stemming from its touristic use. While this approach is valid, there is a need to expand research where CH serves as a means to achieve specific goals. This perspective allows for a more holistic understanding of heritage as a tool supporting sustainable development, economic resilience, and environmental protection. For instance, reducing carbon footprints through 19th-century farming methods is now reflected in regenerative agriculture (Rajabi, 2023; Swensen et al., 2021; Stuti et al., 2024). Such themes are more often explored by researchers publishing in community project blogs (e.g., Sánchez & Carbonell, 2023; KnowHow, 2025; IOE, 2025). Demonstrating the economic justification for such activities requires extensive studies.

Another goal could involve improving public health using natural, manual, or dietary methods rooted in historical practices. These practices are already applied individually but remain outside mainstream research, exploring their origins, the scale of practitioners, and their success. In such cases, applied knowledge drawn from CH fulfils broader societal aspirations.

This study also examines the link between CH and the environment. Cultural landscapes, traditional practices, and heritage sites are deeply rooted in natural contexts. Adaptive reuse of historic buildings, sustainable tourism, and cultural landscape protection simultaneously support environmental conservation and economic resilience. According to Adegioriola et al. (2023), integrating CH with environmental sustainability efforts, such as promoting traditional agricultural practices or protecting culturally significant landscapes, yields dual benefits: ecosystem preservation and local economic strengthening.

However, several limitations should be acknowledged. Firstly, the research relies primarily on desk research and secondary data sources, limiting the scope of empirical validation. While case studies provide valuable insights, further field-based research is necessary to corroborate the findings with primary data from local stakeholders, policymakers, and affected communities. Secondly, the study focuses on specific regions and urban contexts, potentially limiting the generalizability of its conclusions to other areas with different cultural, economic, or environmental conditions.

While this research explores cultural heritage's role in disasters and tourism, it leaves the potential conflicts between preservation and development, particularly in mass tourism, underexamined. Future research should focus on balancing tourism's economic benefits with heritage preservation, especially in over-touristed regions. Interdisciplinary studies could enhance understanding of heritage's role in resilience strategies, and more research is needed on adaptive management practices amid climate change. Comparative regional studies could also identify best practices for enhancing cultural heritage's role in socio-economic resilience. This study highlights cultural heritage's potential for economic recovery but advocates for a nuanced approach to sustainable development.

To deepen the analysis of CH as a tool for achieving social, economic, and environmental goals, future research should explore the areas outlined in the Table 5.

This study makes a significant contribution to understanding the role of cultural heritage as a factor in building economic resilience and supporting sustainable development in the long run. At the same time, it highlights the need to expand the research perspective in which cultural heritage is not only a goal in itself but also a means to achieve various socio-economic and ecological objectives. The proposed directions for future research will provide a better understanding of the potential of cultural heritage in socio-economic recovery, environmental protection, and long-term sustainability.

**Table 5.** Proposed research areas

Research Area	Description	Examples of Research Questions	Proposed Study
Heritage as a Tool for Social Integration	Analyzing how CH can support the integration of local communities and strengthen their cohesion.	<ul style="list-style-type: none"> <li>How does CH influence the building of social capital?</li> </ul>	Study of community-based CH projects in small local communities.
Balancing Protection and Development	Studying strategies for balancing economic growth driven by tourism with the protection of CH and the environment.	<ul style="list-style-type: none"> <li>How does sustainable tourism impact the protection of CH and the environment?</li> </ul>	Analysis of case studies of tourist cities that implemented CH protection strategies.
Adaptive Management in the Context of Climate Change	Exploring ways to protect and adapt CH and the environment to the effects of climate change.	<ul style="list-style-type: none"> <li>What adaptive strategies for CH are most effective in response to climate change?</li> </ul>	Evaluation of the effectiveness of adaptive policies for protecting cultural landscapes in Europe.
Heritage as Support for Ecological Education	Studying the role of CH in promoting ecological awareness in local communities.	<ul style="list-style-type: none"> <li>What aspects of CH can support ecological education?</li> </ul>	Review of educational programs using CH to promote environmental protection.
Sustainable Use of Heritage Resources	Analyzing how CH can be used in ways that support economic and ecological goals.	<ul style="list-style-type: none"> <li>How can the protection of CH be effectively combined with local economic strategies?</li> </ul>	Case study of regions that combine traditional practices with modern technologies.
Economic and Environmental Valuation of CH	Assessing the combined economic and environmental benefits of CH-centered initiatives.	<ul style="list-style-type: none"> <li>How can the combined economic and ecological benefits of CH be valued?</li> </ul>	Modeling economic and ecological benefits of adaptive reuse of heritage sites.
Comparative Regional Studies	Studying differences in the use of CH between regions with varying economic and environmental potential.	<ul style="list-style-type: none"> <li>What differences in approaches to CH exist between regions with differing conditions?</li> </ul>	Comparison of CH management strategies in coastal and mountainous regions.
Interdisciplinary Approach to CH Management	Integrating cultural, environmental, and economic aspects in CH management.	<ul style="list-style-type: none"> <li>How can cultural, ecological, and economic approaches be integrated in CH policies?</li> </ul>	Development of an integrated CH management model involving local communities.

The addressed issue of the role of cultural heritage in resilience policy still requires in-depth quantitative and qualitative research to reveal the areas of occurrence and its impact on the economic resilience of regions.

## Conclusions

This article elucidates the critical role of cultural heritage in fortifying the economic resilience of regions and communities, particularly in the context of natural disasters and socio-economic crises. The findings emphasise the necessity of integrating cultural heritage within disaster recovery frameworks. By framing cultural heritage as an essential capital for integrated resilience, policymakers can leverage its potential to enhance tourism, education, and local innovation, thereby facilitating sustainable economic growth. The strategic incorporation of heritage conservation into comprehensive economic and policy frameworks not only preserves historical assets but also reinforces community identity and continuity in times of upheaval.

The research points to the cultural heritage as an important factor in specific humanitarian, social, economic and pro-environmental patterns of behaviour (e.g. high agricultural culture, the importance of craftsmanship in the local economy, respect for natural resources and environment, folk customs and traditions, faith, etc.). An element of cultural heritage is the care for cultural (historical) artefacts of the region's inhabitants' surroundings, including historic elements of infrastructure and material objects that can be part of the regional economic capital as cultural tourism destinations.



The importance of cultural heritage capital for the sustainable development of regions is cross dimensional: as an element of human capital (system of values, solidarity of residents), social capital (regional customs and folk traditions), economic capital (historical elements of infrastructure and material objects as goals of cultural tourism), ecological capital (respect for local resources and natural environment). The development of the region's development capital undoubtedly strengthens its human, social, economic and environmental resilience in the long term.

In this context, it is important to internalise the multidimensional importance of cultural heritage by the inhabitants of the region. A manifestation of such internalisation may be:

- the scope of cultural identity and solidarity and cohesion of residents in the face of common threats,
- herb gardening and herbal medicine for improving public health,
- increasing social participation in the preparation of programmes/plans for the revitalisation of buildings and infrastructure with the preservation and/or restoration of elements of regional cultural heritage,
- the degree of public support for the financing of development projects that take into account the sustainability of the regional cultural heritage capital,
- awareness of the protection of cultural and environmental heritage, including regenerative agriculture, enhancing water retention and increasing biodiversity.

The actions indicated above, directly and indirectly, improve integrated resilience at the regional level.

Our findings align with the literature on cultural heritage's role in economic and social resilience. Santangelo et al. (2022) emphasise heritage's importance in disaster response, and this study extends their work by highlighting economic benefits in recovery and development. Similarly, Fatorić and Seekamp (2017) call for adaptive strategies to overcome barriers to integrating heritage into climate policies. This article further supports revising heritage policies to address climate risks, as noted by Sesana et al. (2019).

This study contributes to the existing body of literature by highlighting the multidimensional value of the cultural heritage that extends beyond its historical and social significance. This study emphasises the multidimensional value of cultural heritage, advocating for adaptive governance to integrate heritage into resilience strategies, especially given climate and pandemic challenges. It calls for research into policies that enhance heritage's role in resilience, supporting both crisis recovery and sustainable development.

## The contribution of the authors

Conceptualisation, W.M., K.M. and K.Ł.D.; literature review, K.Ł.D. and E.K.; methodology, W.M., K.Ł.D., K.M. and E.K.; formal analysis, W.M., K.Ł.D. and E.K.; writing, K.Ł.D., E.K., W.M. and K.M.; conclusions and discussion, W.M., K.M., K.Ł.D. and E.W.

The authors have read and agreed to the published version of the manuscript.

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## KAPITAŁ DZIEDZICTWA KULTUROWEGO JAKO CZYNNIK ODPORNOŚCI W POLITYCE ZRÓWNOWAŻONEGO ROZWOJU REGIONU

**STRESZCZENIE:** W artykule oceniono rolę kapitału dziedzictwa kulturowego w osiągnięciu zintegrowanej odporności w ramach polityk zrównoważonego rozwoju regionalnego. Podkreślono znaczenie dziedzictwa kulturowego w zwiększaniu odporności regionalnej, zwłaszcza w obliczu współczesnych wyzwań politycznych, gospodarczych i środowiskowych. Badanie sugeruje, że wzrost świadomości (internalizacja społeczna) dziedzictwa kulturowego może rozwinąć odporność w rozwoju zrównoważonym regionu. Przedstawiono dwa kluczowe podejścia: wpływ dziedzictwa kulturowego na odporność regionu w kontekście katastrof oraz znaczenie turystyki kulturowej w tym zakresie. W badaniu zastosowano analizę literatury i dobrych praktyk, aby zidentyfikować humanitarne, społeczne, ekonomiczne i środowiskowe korzyści wynikające z polityki dziedzictwa kulturowego, które mogą wzmacniać zintegrowaną odporność regionalną. Podkreślono konieczność dostosowania strategii ochrony dziedzictwa do wyzwań związanych ze zmianami klimatu i zagrożeniem pandemicznym, co długoterminowo wzmacnia odporność zintegrowaną. Oryginalność pracy polega na przedstawieniu kapitału dziedzictwa kulturowego jako czynnika wzrostu odporności zintegrowanej, ukazując, jak może on wspierać odbudowę i zrównoważony rozwój lokalnych gospodarek w czasie kryzysów.

**SŁOWA KLUCZOWE:** dziedzictwo kulturowe, turystyka kulturowa, odporność zintegrowana, rozwój zrównoważony, polityka rozwoju regionu