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THE LAND BELONG TO US? THE ENVIRONMENTAL CAPITAL OF POLISH RESIDENTS BASED ON THE EXAMPLE OF MASOVIA

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ABSTRACT: Research explores the concept of environmental capital among the residents of the Masovia region, analysing their attitudes and behaviours towards the environment. Environmental capital, defined as collective and individual choices that enhance environmental sustainability, is examined across three dimensions: individual, collective, and socio-political. Utilising data from a 2023 study involving 2000 residents, the investigation assesses the coherence of environmental capital and identifies factors influencing pro-environmental attitudes. Key findings indicate high levels of environmental awareness and positive attitudes towards ecological actions, with significant variations based on age, material conditions, and energy needs. Older residents and those in favourable material circumstances tend to exhibit greater environmental capital. The study highlights the complexity of environmental capital and its importance in sustainable socio-economic development. Recommendations include the development of targeted educational strategies and interdisciplinary approaches to enhance environmental capital and address social justice issues, thereby promoting a balanced and sustainable future.

KEYWORDS: environmental capital, environmental justice, environmental economics, Masovia

Introduction

Does the Earth belong to us? Or do we belong to the environment? These questions, repeated like a mantra by many, are so ubiquitous that it's difficult to attribute authorship to anyone. For years, we have been emphasising the importance of our actions for the environment, boasting about our pro-environmental activities, but what is the reality?

In this study, we will focus on the relationship between the inhabitants of Masovia and the environment. To explore this issue, we will use the concept of environmental capital. In the literature, it is defined as a resource based on choices (most often of individuals) that can be used to improve the state of the environment (El Serafy, 1991; Thampapillai & Uhlin, 1997; Patten, 2005; Claver et al., 2007; Andjelic, 2020). Karol and Gale (2004) indicate that environmental capital encompasses a broad understanding of the environment, including the interdependence of all life forms on Earth and awareness of individuals' contributions both to positive and negative consequences for the environment (Rokicka, 2023).

Environmental capital draws attention to the social aspects of environmental management and protection, not focusing solely on natural resources, and in this sense, it differs from the widely recognised concept of natural capital (Poskrobko, 2012; Kim & Go, 2020; Wan & Du, 2022; Kozera-Kowalska, 2024).

Analyses of environmental capital are based on assessing the ecological and economic potential of natural elements and the social and ecosystem processes dependent on them. The concept of environmental capital, therefore, implies considering different elements of the environment as a whole and in relation to society, culture, and not just the economy. Indirectly, a different attitude towards the environment – expressed in environmental capital – can fit into the ideas of ecological modernisation and environmental justice (Pastor, 2001; Mix, 2011; Mróz, 2023). Institutions, policies, and social groups utilising and promoting mechanisms for protecting natural resources play an important role in striving for environmental justice (Heiman, 1996; Pellow & Brulle, 2005; Jones et al., 2009; Robinson & Śpiewak, 2023; Wyrwa et al., 2023).

Environmental capital is situated in a field formed by many values associated with the environment, towards which individuals and social groups take various positions. The environment itself is a subject whose complexity combines discussions on natural, ecosystem, social, and economic issues (McAllister, 1982; Allen et al., 2009; Lehtonen, 2004; Cracolici et al., 2010). The environment is also perceived as a source of natural resources, such as wood, water, or minerals, which are crucial for the economy. In some communities, especially those with rich natural heritage, the environment has deep cultural roots, and its significance is manifested in traditional practices or rituals related to nature. In this case, environmental protection is often an integral part of preserving one's own culture. Increasingly, it is also emphasised that the environment affects health – research is conducted on how ecosystems affect well-being and long-term health (Millennium ecosystem assessment, 2005; Corvalan et al., 2005; Reid et al., 2005; Zhao & Zhang, 2006; Martinez-Juarez et al., 2015; Pecl et al., 2017; Kalinowski et al., 2024; Szczygieł et al., 2024).

The text focuses on the relationship between environmental capital and social justice, taking into account individuals' subjective attitudes towards this relationship. It is focused on attempting to answer the question of the level of environmental capital among the inhabitants of Mazovia. This is important because previous studies have focused mainly on natural, economic, and social dimensions, omitting individual feelings and attitudes towards environmental issues at various levels of decision-making (Guariso & Werthner, 1989; Harding, 1998; Dietz, 2003; Kiker et al., 2005). The text also describes how adopted attitudes influence the inhibition of environmental capital. Unlike published studies that mainly focus on the economic assessment of environmental value, this analysis aims to understand the dynamic relationships between the environment and society. This includes the positioning of the environment and its associated values, as well as the choices and strategies of social actors regarding environmental protection.

Additionally, we would like to contribute to the discussion on environmental justice. The research results can help identify social groups that are most vulnerable to the negative effects of environmental degradation and develop strategies to ensure equal access to a healthy environment for all.

Methodology

Our goal is to recognise the attitude of Masovian residents towards the environment, so we will attempt to determine their environmental capital. We want to find out what factors may determine attitudes that fit into this type of capital and its various manifestations. Additionally, we aim to analyse attitudes that negatively impact the implementation of environmental capital. In our study, environmental capital will be depicted by the subjective attitude (approval or rejection) of respondents to statements related to the environment. These statements are as follows:

- a) In the individual dimension, my thermal comfort is more important than ecology. I use electronic devices that save energy, and if I had the opportunity, I would change the heating source to a more energy-efficient one.
- b) In the collective dimension, taking care of the environment is our duty, even at the cost of expensive energy, people should use every possible fuel (including waste) to ensure their thermal comfort
- c) In the socio-political dimension, access to energy should be guaranteed by the state, Poland should move away from coal-based energy, and the current energy policy being pursued by the state should be proper.

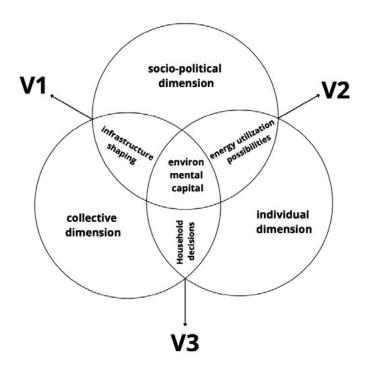


Figure 1. Scheme for inhibiting the development of environmental capital

Manifestations hindering the development of environmental capital occur between the dimensions specified. They affect many aspects, which can be divided into:

- a) (V1) Energy utilisation possibilities, where the degree of adaptation to the prevailing energy reception conditions takes place. If limitations in accessing green sources are significant, the direction of infrastructure adaptation will move away from building environmental capital.
- b) (V2) Infrastructure shaping, where depending on the effectiveness of pro-ecological policies by the authorities, conditions can be created for investing in renewable energy sources or developing eco-friendly infrastructure. However, a lack of community engagement may limit the effectiveness of these actions.
- c) (V3) Household decisions, where an active community undertaking pro-ecological initiatives can influence the shaping of local policy and promote more sustainable practices, often without having the infrastructure background. Adopting opposing attitudes will favour the emergence of tensions between decision-makers and recipients.

Differences in priorities between these areas can sometimes hinder the achievement of common goals. For example, the administration may prioritise long-term investments in eco-friendly infrastructure to varying degrees, while some residents may be more interested in other energy sources. Manifestations hindering the development of environmental capital in the dimensions mentioned can result in the creation of three variants of barriers (Figure 2).

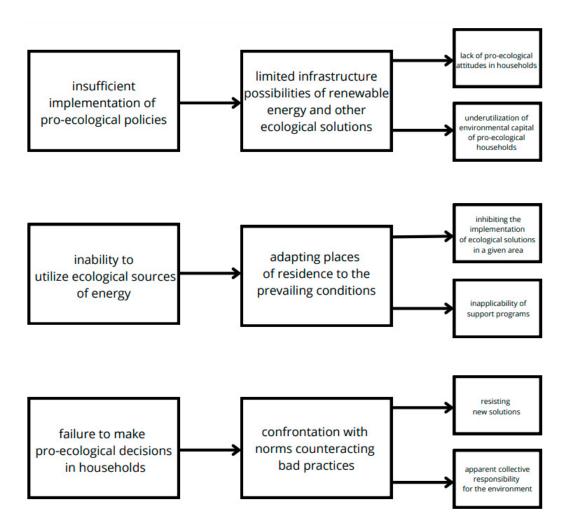


Figure 2. Variants of barriers to the development of environmental capital

The first scenario stems from the insufficient implementation of pro-ecological policies. As a result of such decisions, the infrastructure created utilises ecological opportunities to a lesser extent. This applies not only to energy itself but also to any other solutions aimed at reducing environmental degradation. Infrastructure solutions are relatively permanent, and in the case of many of them, dynamic changes are impossible. Because the implementation of policies is a lengthy process, there may be a delay in stimulating environmental capital in households. In the case of households that exhibit pro-ecological attitudes, their environmental capital may remain "unused".

The second scenario arises from the inability to utilise ecological sources of energy. Consequently, the sources of energy used for production and the transfer of energy between units may not allow consumers to use green energy, even if preferred. Limited possibilities may also have economic reasons. Investments in new heat sources have a relatively long payback period with a high entry threshold. For some households, this threshold may be considered "insurmountable". This can happen despite simultaneously adopting pro-ecological attitudes and awareness that the currently used heating methods and energy sources have negative environmental impacts and/or should eventually be rejected. This inhibits ecological solutions, and some support programmes may become inapplicable.

The third scenario results from the failure to make pro-ecological decisions in households. The broadly defined "decisions" relate to both the methods of heating used, reluctance to waste segregation and conscious and sustainable use of electricity. The consequences of such decisions accumulate, and attitudes can be inherited. The broadly understood "environmental care" and "being ecological" are generally widely accepted and can be considered views expressed by the majority of society. A group with different views, therefore, confronts norms. In this relationship, there is a clash between non-ecological attitudes (hindering social capital) and implemented norms. Perspectives are divided – on the one hand, on reluctance to adapt and, on the other, counteracting practices socially recognised as negative. Beyond resistance, the consequences of such confrontation include the adoption of apparent attitudes that are not consistent with actual beliefs.

These components can be determined by various factors. Among those potentially differentiating respondents' answers – and consequently environmental capital – are: (i) demographic factors (age, considering the responses of the youngest (18-29 years old) and oldest respondents (aged 60 and over), (ii) factor of meeting material needs, manifested in subjective indications of the material situation (poor or good), (iii) factor of unmet energy needs (manifested in need to limit energy and the impossibility of meeting energy needs). It is presumed that generational differences may be evident, translating into different attitudes towards the environment – as indicated by the "Think Forward Initiative" report (ING, 2021), older people exhibit greater ecological awareness. Additionally, individuals in poor material situations and those with unmet energy needs may presumably focus on day-to-day functioning, "making ends meet", and may not attach great importance to environmental issues or ecological issues as higher-order needs. Our analyses are exploratory in nature.

The results presented in the article are the effect of the project entitled "Conducting a study of the causes of energy poverty in the Masovia Voivodeship together with the preparation of a report (diagnosis)" (project number 1/MCPS/05/2023/B/BS) implemented in 2023.

In this study, we will use the results of research conducted among residents in all counties of the Masovia Voivodeship. The sample consisted of 2000 individuals. The study was conducted using CAWI and CATI techniques. The sample selection was purposeful, and the following differentiating variables were taken into account: type of locality (city/village) and area of residence (sub-region). Two-thirds of the respondents (67.1%) were urban residents, and the remainder were individuals in rural areas (32.9%). The largest participation was from residents of Warsaw, with correspondingly lower participation in individual sub-regions.

Results

Individual environmental capital manifests in respondents' attitudes towards statements related to thermal comfort and ecology, the use of energy-saving devices, and the potential willingness to replace heating sources. Close to two-thirds stated that they use energy-saving electronic devices.

Slightly fewer respondents declared that if they had the opportunity, they would change their heating source to a more energy-efficient one. The responses expressing approval (28.3%) and rejection (36.5%) of thermal comfort being more important than ecology were the most evenly distributed. Slightly more than one in four respondents agreed with this statement, prioritising their own comfort over ecology.

In the case of individual environmental capital in all its components, more individuals aged 60 and above than those aged 18-29 expressed a more positive attitude towards ecology, which manifested in not prioritising their thermal comfort over ecology and using energy-saving devices. The situation is more complex regarding the replacement of heating sources with energy-efficient ones – here, in both age groups, more individuals agreed with the statement presented. However, the percentage of seniors who reject such a possibility reaches almost a quarter and is nearly three times higher than in the reference group.

The differentiation of respondents' responses according to their material situation reveals – as expected – that individuals subjectively assessing their material situation as good more often indicated that ecology is more important than their thermal comfort and that they use energy-saving devices. Again, it is different when it comes to the replacement of heating sources. A higher proportion of individuals in a poor material situation stated that they would like to replace their heating source with a more energy-efficient one – perhaps seeing it as a potential for savings.

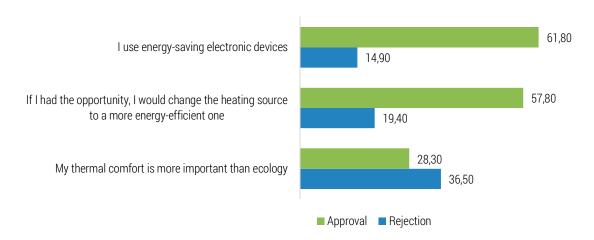


Figure 3. Environmental capital – individual dimension

Intriguing results come from the responses of individuals not meeting their energy needs. The proportion of those who agree with all statements significantly exceeds the percentage of those rejecting them. It should be noted that the relatively high proportion of individuals – two in five respondents – indicates that their thermal comfort is more important than ecology. The percentage of those approving this statement was highest among those not meeting their energy needs compared to other groups.

Table 1. Individual dimension of environmental capital

		Rejection	Approval
My thermal comfort is more important than ecology	Age: • 18-29 years • 60+ years	32.5 44.3	30.9 21.1
	Material situation: • bad • good	28.9 42.5	35.9 30.4
	Does not meet and limits energy needs	12.1	38.7
If I had the opportunity, I would change the heating source to a more energy-efficient one	Age: • 18-29 years • 60+ years	8.8 24.2	60.1 55.8
	Material situation: • bad • good	12.7 25.7	63.2 56.7
	Does not meet and limits energy needs	7.9	63.6
I use energy-saving electronic devices	Age: • 18-29 years • 60+ years	18.3 19.3	50.1 60.5
	Material situation: • bad • good	17.3 12.0	58.9 71.9
	Does not meet and limits energy needs	17.5	61.2

In the case of the second dimension discussed – that of collective action – once again, a fairly high level of ecological awareness among residents of Masovia is noticeable, which may indicate their high environmental capital. Just over half agreed with the statement that caring for the environment is

a duty, even if it involves high energy costs. A higher proportion of respondents – reaching two-thirds – indicated that they disagree with the idea that people should use every possible fuel to maintain temperature at a satisfactory level. However, it is worth noting the visible percentage of those who prioritise lower energy prices and thermal comfort over ecology – almost one in five respondents indicated this. It should be emphasised that the declarations may vary depending on the actual state. This is influenced by many factors, such as financial possibilities, limited purchasing possibilities or adopting attitudes adapted to the subject of the study.

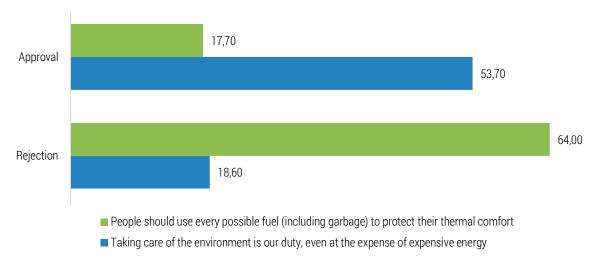


Figure 4. Environmental capital – the collective dimension

A higher percentage of individuals aged 60 and above indicated that caring for the environment is a duty – the difference between the young and seniors was close to nine percentage points. In the case of the second statement contributing to the collective dimension of environmental capital, once again, it was older individuals who expressed more pro-environmental attitudes – almost three-quarters indicated that not every fuel should be used to secure their own thermal comfort, while among the young, it was just over half. In the sub-population of the youngest respondents, close to a quarter-fourth declared that thermal comfort is more important than the type of fuel, whereas, among seniors, the proportion of individuals approving this statement was only about one in ten.

Similar to the individual dimension, here, too, more individuals in good material situations declared responses indicative of high environmental capital – this was evidenced by higher proportions than those in poor situations, who stated that caring for the environment and not using every possible fuel for heating were important.

Close to half of those who do not meet their energy needs agree with the first statement – their proportion significantly exceeded the percentage of those who rejected this position. However, in the case of using various types of fuel to secure warmth, responses from individuals facing energy needs were not as diverse. Just over a quarter rejected this statement, while a third agreed with it. This may indicate that unmet energy needs allow for the acceptance of behaviour with adverse environmental effects.

In the socio-political dimension, we included statements related to state-guaranteed access to energy, whether Poland should move away from coal-based energy, and opinions on Polish energy policy. The largest proportion of respondents indicated that access to energy should be guaranteed by the state. The attitude towards the two subsequent positions can be described as ambivalent – there is a significant proportion of respondents both rejecting and approving these statements. In the case of coal-based energy, close to half believe that Poland should abandon it. An equal number of respondents stated that Poland's energy policy is not good.

Table 2. The collective dimension of environmental capital

		Rejection	Approval
Taking care of the environment is our duty, even at the expense of expensive energy	Age: • 18-29 years • 60+ years	18.0 18.3	50.1 58.5
	Material situation: • bad • good	21.9 18.6	51.7 60.2
	Does not meet and limits energy needs	22.4	47.1
People should use every possible fuel (including garbage) to protect their thermal comfort	Age: • 18-29 years • 60+ years	54.6 72.8	23.1 12.3
	Material situation: • bad • good	60.6 69.3	21.8 18.4
	Does not meet and limits energy needs	26.5	34.3

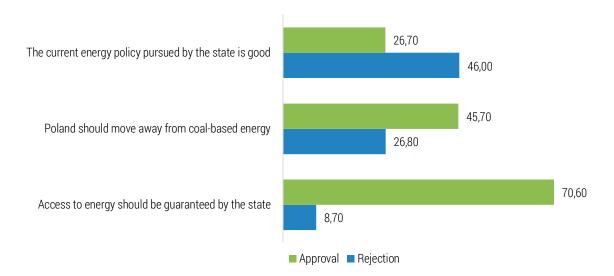


Figure 5. Environmental capital – the socio-political dimension

A higher proportion of seniors than the youngest respondents indicated that the state should guarantee access to energy. In the first group, the percentage of those approving was close to 80%; In the second, almost two-thirds. Secondly, young people, more often than the oldest ones, pointed out that Poland should move away from coal-based energy. They also more frequently negatively assessed the national energy policy. It can also be pointed out that the most visible discrepancy was in the assessments of seniors regarding energy policy, manifested in relatively balanced percentages of seniors evaluating it positively (32.6%) or negatively (45.0%).

The factor describing the material situation of the respondents almost does not differentiate the responses of the respondents regarding the access to energy guaranteed by the state. Relatively small differences are visible in the assessment of Poland's energy policy – half of those in a bad material situation assessed it negatively, and 43.6% of those in a good situation. In the group of people assessing their own material situation positively, a significant percentage of them – reaching a third – believed that the energy policy was well conducted. Differences were more noticeable in the opinion about Poland's departure from coal-based energy – close to half in a good situation agreed with this statement, while among those in a bad situation, it was no more than two in five. It is also noteworthy that a significant share of people indicated that coal energy should be maintained in Poland – the proportion of people agreeing with this is almost 30%.

Table 3. Socio-political dimension of environmental capital – the diversity of respondents' answers

		Rejection	Approval
Access to energy should be guaranteed by the state	Age: • 18-29 years • 60+ years	11.9 5.4	62.5 79.1
	Material situation: • bad • good	9.5 8.7	76.0 72.0
	Does not meet and limits energy needs	11.5	62.3
Poland should move away from coal-based energy	Age: • 18-29 years • 60+ years	24.9 29.5	48.2 46.0
	Material situation: • bad • good	29.0 26.0	40.6 54.1
	Does not meet and limits energy needs	18.8	43.7
The current energy policy pursued by the state is good	Age: • 18-29 years • 60+ years	52.7 45.0	17.2 32.6
	Material situation: • bad • good	50.1 43.6	23.8 34.5
	Does not meet and limits energy needs	45.0	33.9

It was unsurprising that a high proportion of individuals who are unable to meet their energy needs – reaching two-thirds – believe that access to energy should be guaranteed by the state. Among this group, there was also a high percentage of those who think that a shift away from coal-based energy is necessary. Nearly the same number of people experiencing difficulties in meeting their energy needs also expressed a negative view of energy policies.

Discussion

The concept of environmental capital is complex and can be heterogeneous. When aiming to implement pro-environmental attitudes, it is essential to ask which group requires intervention. The study of Masovia residents clearly shows generational differences in their approach to environmental issues. While older individuals tend to exhibit a greater inclination towards pro-environmental attitudes, the younger generation seems more open to change and new technologies, which can influence their approach to ecology. The presence of positive attitudes among specific groups is thus not only a reflection of responsibility and forward-thinking but also of altruism. However, it is not entirely clear whether the greater political engagement of younger age groups is a result of more frequent activist attitudes that are not solely related to climate issues. Environmental issues involve both prevention and remediation. A diversity of action is, therefore, natural while maintaining a single, consistent direction derived from environmental capital. Consequently, partially adopting pro-environmental attitudes, even unconsciously, is natural.

An important issue is the role of respondents' material situation in shaping their pro-environmental attitudes. Based on our data, we find that individuals in better material circumstances are more likely to demonstrate greater ecological awareness and willingness to take action to protect the environment. Can those currently considered poor thus further exacerbate their crisis situation and reduce social justice? Individuals with lower material status may be more focused on day-to-day problems, which can limit their engagement in environmental issues. This might also be related to adopting survival strategies, which do not have socially positive outcomes. Negative environmental attitudes impact dimensions other than the individual to a greater extent. People living in poverty

experience negative phenomena individually. In the case of individuals disregarding ecological attitudes, we can speak of benefits at the individual level (e.g., heating by burning waste) and harms at the collective level.

This raises an important ethical question: could the growing emphasis on environmental responsibility inadvertently exacerbate social inequalities? People living in poorer communities, disproportionately burdened by environmental degradation, may be further marginalised if they are excluded from sustainability initiatives or penalised for unsustainable behaviour they cannot avoid (Rentschler & Leonova, 2023; SmogLab, 2023). This constitutes a call for inclusive policies that bridge socio-economic gaps, such as subsidies for renewable energy technologies, accessible education on environmental practices and infrastructure development that reduces reliance on harmful survival strategies (Levenda et al., 2021).

In the context of Poland, this problem is particularly relevant in regions with high levels of air pollution, such as Upper Silesia and Małopolska, where lower-income people often rely on cheap but harmful heat sources. In addition, the need to bear the costs associated with modernisation, such as replacing stoves or insulating homes, is an insurmountable barrier for many families, requiring the implementation of comprehensive support programmes (Pomianek, 2020). At the same time, the failure to include these groups in pro-environmental measures may lead to a loss of public support for the environmental transition, which would undermine its effectiveness and the pace of implementation nationally (Davis & Ramírez-Andreotta, 2021).

Summary

In this study, we focused on the concept of environmental capital, which refers to a resource based on choices (usually by individuals) that can be used to improve the state of the environment.

On the one hand, indications representing environmental capital seem to be internalised by the population surveyed; on the other hand, they may be treated as socially desirable declarations. When looking for certain differences, it can be noted that environmental capital is relatively strongest in the collective dimension, where respondents' indications refer to knowledge about behaviour by society as a whole.

We assumed that there are potential generational differences manifested in varying levels of environmental capital. Survey responses indicate that older individuals exhibit higher levels of this capital and, thus, greater ecological awareness compared to the youngest individuals. This might be because older people have more experience related to observing environmental changes and their impact on quality of life. As people age, they may also develop more stable values and beliefs, including those concerning environmental protection. The influence of media, particularly traditional media that fulfil an educational role by addressing ecological issues, may also be a factor. Additionally, older individuals tend to be more socially engaged, often participating in social organisations, including those promoting ecological awareness.

We also identified material conditions and unmet energy needs as factors differentiating environmental capital. It turns out these do not significantly determine respondents' answers. Those in a good material situation only slightly more often agreed with statements indicating possession of environmental capital. This was also evident among individuals with unmet energy needs, who more frequently agreed with pro-ecological statements than rejected them. Respondents' answers suggest that those in worse material situations, unable to meet all their needs, may be more focused on basic necessities. Ecological issues may be perceived as less urgent or important compared to daily challenges. However, in terms of knowledge and awareness, wealth seems only to a certain extent to be a determining factor in respondents' answers. Greater differences might be expected in the realm of practice, where there can be a gap between what people openly express and their unconscious judgments, which can influence their behaviour in specific situations (see Rutkowska-Piontek, 2014; Fazio & Karrow, 2013). Lower-income individuals may be more constrained in their choices, as limited financial flexibility could prevent them from adopting more ecological practices in favour of cheaper alternatives.

The concept of environmental capital is crucial for environmental protection, ecology, and human well-being (see Costanza et al., 1997). This is a topic that is expected to gain increasing significance.

The presented research addresses only certain aspects of this issue. It is cross-sectional in nature, meaning that it does not account for changes in attitudes and behaviours over time. Longitudinal studies could offer a more comprehensive understanding of the evolution of this form of capital. The research relies on the respondents' declarations, and a more in-depth analysis of the findings should involve examining the practical actions undertaken by residents in the field of environmental protection. Understanding the discrepancies between declared intentions and actual behaviours could provide valuable insights. In studies on environmental capital, there is also a need to consider local conditions, such as the availability of natural resources and regional ecological policies (Malinowski & Smoluk-Sikorska, 2020).

Recommendations

To facilitate the proper growth of environmental capital and to mitigate the factors identified as hindering it, we consider it appropriate to expand research on environmental capital and social justice to include more diverse social groups and various cultural contexts. This step would allow for a more comprehensive understanding of the relationship between these two factors. We also recommend adopting interdisciplinary research approaches that encompass social sciences, natural sciences, and economics. We deem it necessary to conduct further studies on individuals' subjective attitudes and beliefs regarding their assessment of the impact of environmental capital on social justice. Such analysis might help to better understand individual and social differences in the perception of this issue.

The expansion of research on environmental capital should culminate in the development of programmes and policies. These should have two focal points: concentrating on people's non-ecological preferences and the relationship between the environment and energy. The aim of such policies is to transform the perception of waste from a financial perspective to an environmental one. Such attitudes are characterised by greater collectivity driven by shared and/or similar interests between all stakeholders.

The contribution of the authors

Conceptualization, O.S., D.Z. and S.K.; literature review, O.S. and D.Z.; methodology, O.S. and S.K.; formal analysis, O.S. and D.Z.; writing, O.S., D.Z. and S.K.; conclusions and discussion, O.S., D.Z. and S.K.

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ZIEMIA NALEŻY DO NAS? KAPITAŁ ŚRODOWISKOWY MIESZKAŃCÓW POLSKI NA PRZYKŁADZIE MAZOWSZA

STRESZCZENIE: Artykuł przedstawia koncepcję kapitału środowiskowego wśród mieszkańców województwa mazowieckiego, analizując ich postawy i zachowania wobec środowiska. Kapitał środowiskowy, definiowany jako zbiorowe i indywidualne wybory, które zwiększają zrównoważony rozwój środowiska, jest badany w trzech wymiarach: indywidualnym, zbiorowym i społeczno-politycznym. Wykorzystując dane z badania z 2023 r. z udziałem 2000 mieszkańców, badanie ocenia spójność kapitału środowiskowego i identyfikuje czynniki wpływające na postawy proekologiczne. Kluczowe ustalenia wskazują na wysoki poziom świadomości ekologicznej i pozytywne nastawienie do działań ekologicznych, ze znacznymi różnicami w zależności od wieku, warunków materialnych i potrzeb energetycznych. Starsi mieszkańcy i osoby w korzystnych warunkach materialnych mają tendencję do wykazywania większego kapitału środowiskowego. Badanie podkreśla złożoność kapitału środowiskowego i jego znaczenie w zrównoważonym rozwoju społeczno-gospodarczym. Rekomendacje obejmują opracowanie ukierunkowanych strategii edukacyjnych i podejść interdyscyplinarnych w celu zwiększenia kapitału środowiskowego i rozwiązania problemów sprawiedliwości społecznej, promując w ten sposób zrównoważoną i zrównoważoną przyszłość.

SŁOWA KLUCZOWE: kapitał środowiskowy, sprawiedliwość środowiskowa, ekonomia środowiskowa, Mazowsze