

Stavovi domaćinstava na Kosovu i Metohiji prema održivom razvoju

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Apstrakt: Ovaj članak istražuje stavove i preferencije domaćinstava u tri opštine (Štrpce, Gračanica i Kosovska Mitrovica) na Kosovu i Metohiji u vezi sa pitanjima održivosti. Za potrebe rada sprovedena je anketa u kojoj su podaci prikupljeni upitnikom od ukupno 81 predstavnika domaćinstava iz tri opštine. Kroz sveobuhvatnu analizu rezultata ankete, istraženi su ključni faktori koji utiču na održivost domaćinstava, identifikovani izazovi i prepreke sa kojima se domaćinstva suočavaju u primeni održivih praksi, a predložene su i smernice za unapređenje održivosti. Ključni zaključci ukazuju na potrebu za integrisanim pristupom u promovisanju održivosti, koji uključuje obrazovanje, infrastrukturna ulaganja, političke podsticaje i podršku domaćinstvima u cilju stvaranja održivog društva koje štiti životnu sredinu i promoviše bolji kvalitet života svih stanovnika.

Keywords: održivost, Kosovo i Metohija, anketa.

Attitudes of households in Kosovo and Metohija towards sustainable development

Abstract: This article investigates the attitudes and preferences of households in three municipalities (Štrpce, Gračanica and Kosovska Mitrovica) in Kosovo and Metohija in relation to sustainability issues. For the purposes of the paper, a survey was conducted, in which data were collected by questionnaire from a total of 81 representatives of households from three municipalities. Through a comprehensive analysis of the results of the survey, the key factors affecting the sustainability of households were investigated, the challenges and obstacles faced by households in the implementation of sustainable practices were identified, and guidelines for improving sustainability were also proposed. The key conclusions point to the need for an integrated approach in promoting sustainability, which includes education, infrastructure investments, political incentives and support for households in order to create a sustainable society that protects the environment and promotes a better quality of life for all residents.

Keywords: sustainability, Kosovo and Metohija, survey.

1. Introduction

Sustainable development has become imperative in modern society, and issues related to environmental protection, waste management, energy efficiency and sustainable practices are becoming increasingly important topics both at the global and local levels. In this context, research dealing with attitudes, practices and preferences of households plays a key role in understanding factors influencing sustainability at the local level and identifying potential interventions and policies to promote sustainability. Numerous issues have been addressed in the literature when it comes to sustainability in households. Research (Rashid et al., 2021) explores the level of sustainable consumption of Malaysian households from the perspective of income and consumption expenditure. Wang and Xie (2023) analyzed households' participation in energy transition and sustained use of clean energy in China. Numerous researches and different topics indicate the importance that households can have for environmental protection and sustainability.

The research area of this paper refers to Kosovo and Metohija. According to the Serbian constitution, Kosovo and Metohija is an autonomous province. From 1999 to 2008, the territory of Kosovo and Metohija was under international administration. However, in 2008, the provisional institutions in

Kosovo and Metohija declared independence. In the literature, there are some studies that were related to the area of Kosovo and Metohija and that dealt with various issues of sustainability and the environment. Dedić et al. (2022) gives a short review of the impact of mining from Trepča company on the environment and concluded that there is an evident impact on water, air and land as a result of improper waste treatment. In the article (Stojčetočić and Šarkoćević, 2017) a survey about the attitude of the population of the Štrpce municipality on the impact of the small hydro power plant on the quality of life is presented. Tahiri et al (2022) analyzed Kosovo and Metohija potential for the development of sustainable tourism. Veselaj (2019) conducted research to analyze the inclusion of sustainable development principles in relevant legislation as normative concepts. However, according to the author's knowledge, the attitude of households about the environment and sustainability in this territory has not been investigated, so this work, among other things, aims to fill that gap. In this context, this article aims to explore the attitudes, practices and preferences of households in Kosovo and Metohija regarding some sustainability issues. Through a comprehensive analysis of the survey results, the article will explore key factors affecting household sustainability, identify challenges and obstacles households face in implementing sustainable practices, and propose guidelines for improving sustainability.

2. Methodology

The research was conducted in three municipalities on the territory of Kosovo and Metohija, in Štrpce, Gračanica and North Mitrovica. The questions in the survey are based on the questions used in the OECD (2023) survey on Environmental Policies and Individual Behavior Change (EPIC) that explores households' environmental attitudes and actions in the areas of energy, transport, waste and food systems across nine OECD countries. The survey was conducted in the period October-november 2023. A total of 81 respondents participated in the survey, whose detailed structure is presented in Table 1.

Table 1. Structure of respondents

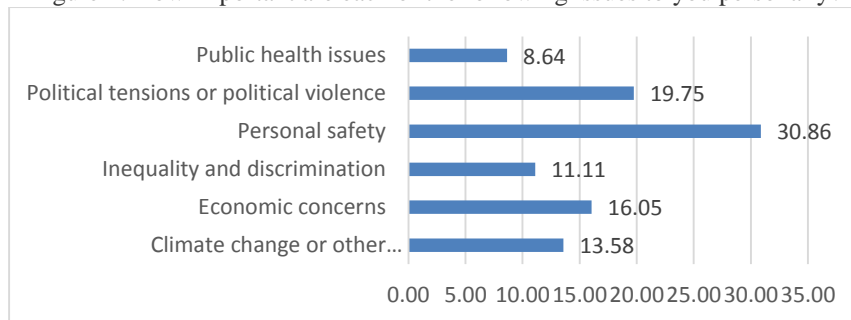
	N	%
Gender		
Male	53	65.43
Female	28	34.57
Total	81	100
Age structure		
20-25	12	14.81
26-35	18	22.22
36-45	27	33.33
46-65	24	29.63
Municipality		
Štrpce	29	35.80
Gračanica	21	25.93
North Mitrovica	31	38.27

3. Results and discussion

The analysis of the results on the attitudes of households on key issues indicates diverse priorities and concerns among the households that were the subject of the research (Figure 1). According to the obtained results, it is evident that personal safety (30.86%) is the most expressed concern among households in Štrpce, Gračanica and Kosovska Mitrovica, which suggests a significant concern for their own safety and the safety of their families. These results may be the result of political instability and tension that exist in the past but also in the current period. Another significant concern is political tensions and political violence (19.75%), which indicates the need for stabilization of the political situation and peaceful resolution of conflicts. In third place are economic issues (16.05%), which indicates the importance of financial stability and prosperity among households. This may be a consequence of the high rate of unemployment and economic inequality that is present in Kosovo and Metohija.

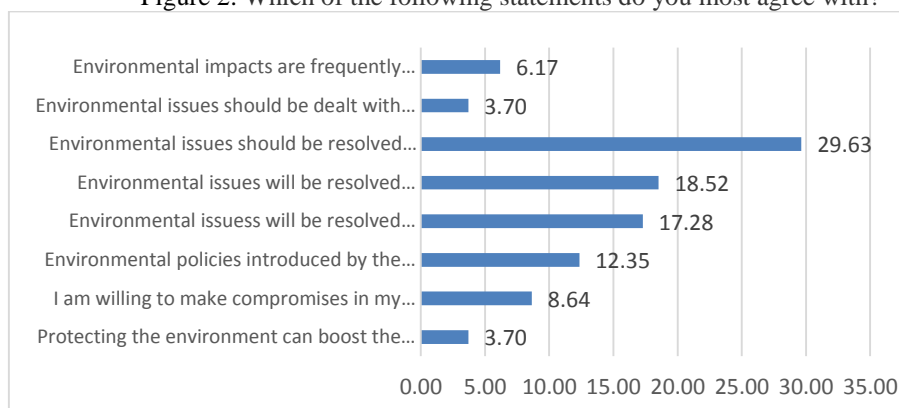
Considering all of the above, it is not surprising that the respondents for climate change and other environmental problems (13.58%), inequality and discrimination (11.11%) and public health (8.64%) showed a lower level of importance, but they are still relevant and require attention.

Figure 1. How important are each of the following issues to you personally?



Analysis of the results of the survey on the attitudes of households on environmental protection reveals diverse perspectives and attitudes on ways to solve environmental problems (Figure 2). A small percentage of respondents (3.70%) believe that environmental protection can have a positive effect on the economy, which indicates a lack of awareness of the potential economic benefits that can be provided by the preservation of natural resources and the reduction of environmental risks. Unfortunately, less than ten percent of respondents (8.64%) express their willingness to make compromises in their current lifestyle for the benefit of the environment, which also indicates the need for greater efforts in raising awareness and motivation for environmentally responsible behavior. A certain percentage of respondents (12.35%) believe that the government should not burden them with additional financial costs through the introduction of environmental policies, which can be a challenge for the adoption of effective environmental protection policies. It can be said that a larger percentage of respondents (17.28% and 18.52%) rely on technological progress and individual behavioral changes as key factors in solving environmental problems, while the largest percentage of respondents (29.63%) believe that environmental issues are solved mainly through public policies. Finally, only 3.7% of respondents believe that environmental problems should be solved exclusively by future generations, while a small percentage (6.17%) of respondents believe that environmental impacts are often exaggerated.

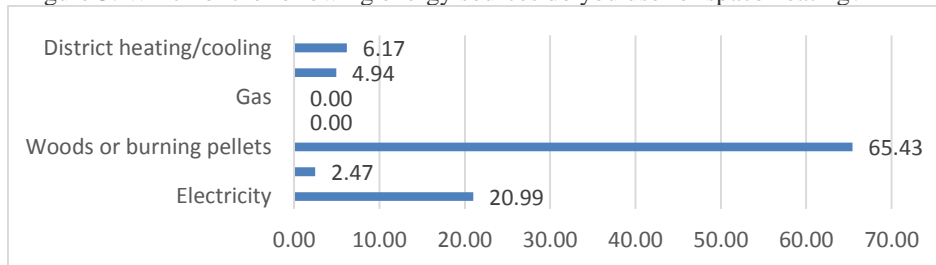
Figure 2. Which of the following statements do you most agree with?



Analysis of the results of the household heating provides insight into current practices and preferences that affect energy consumption and the impact on the environment. The most prevalent method of heating among respondents is the use of wood or pellets (65.43%), which indicates a traditional approach to heating that is still dominant in Kosovo and Metohija. This may be due to the availability of wood as a cheap and locally available fuel, but it may also have negative environmental consequences in the form of emissions of harmful gases and air pollution. Electric heating is also significantly represented among households (20.99%), which may be due to the practicality and cleanliness of this heating method, but it may also be more expensive compared to other options. However, if it is taken into account that over 95% of electricity in Kosovo and Metohija is obtained from thermal power plants, it can be said that this

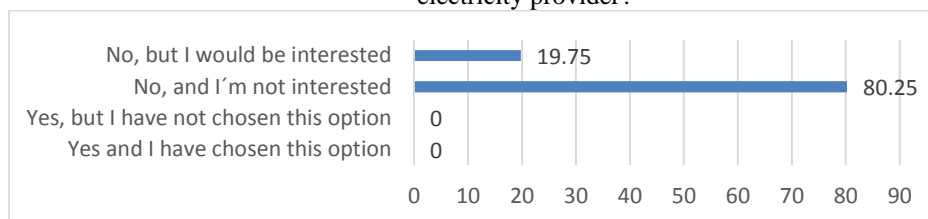
method of heating has a negative impact on the environment and sustainability. Other methods of heating, such as district heating/cooling (6.17%), and the use of oil, gas or other fossil fuels (4.94%), are less common, while gas (0%) and solar heating are not represented among respondents (0.00%), which indicates the lack of investments in renewable energy sources and the need to promote more sustainable technologies for heating. These results suggest the need to promote more energy-efficient and environmentally friendly heating options, as well as support and incentives for switching to renewable energy sources.

Figure 3. Which of the following energy sources do you use for space heating?



In the survey, the respondents were asked the question whether their households were offered electricity produced from renewable energy sources by the supplier. Unfortunately, the vast majority of respondents (80.25%) are not interested in the offer of electricity produced from renewable energy sources by their electricity suppliers, even though they did not even receive such an offer from the supplier. This may be due to a lack of information or education about the benefits and possibilities of using renewable energy sources, as well as the possibilities provided by their supplier. A smaller percentage of respondents (19.75%) expressed interest in this option, which indicates the potential but also the need to increase awareness and promote sustainable energy sources among households. This may include providing information on the environmental and economic benefits of using renewable energy sources, as well as considering opportunities to reduce prices and facilitate the switch to this option for interested consumers, as well as introducing incentive measures for households. These results emphasize the need for stronger engagement of electricity suppliers and authorities in the promotion of renewable energy sources and raising awareness of their importance for a sustainable energy future. Also, they indicate the need to consider policies and measures that would facilitate the transition to renewable energy sources and support interested consumers.

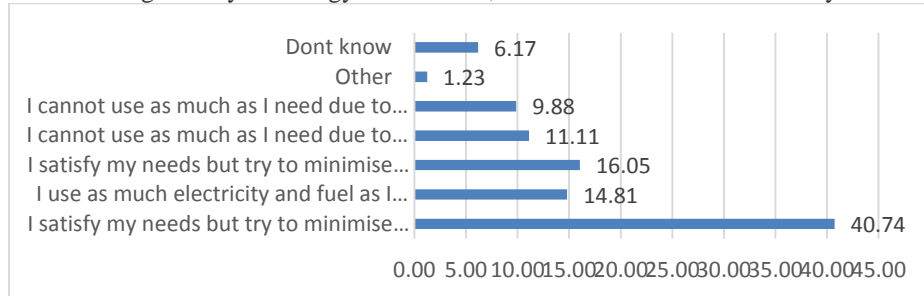
Figure 4. Are you being offered for electricity generated by renewable energy sources by your electricity provider?



Analyzing the results of the survey on household energy use provides insight into various behavioral patterns and reasons that influence energy consumption. The largest number of respondents (40.74%) declare that they meet their needs, but try to minimize energy consumption for financial reasons. This indicates the importance of economic sustainability and the need for rational use of energy to reduce costs. A smaller number of respondents (14.81%) declare that they use energy as much as they want, which suggests a lack of awareness for the efficient use of resources and the possible negative consequences of excessive energy consumption. Another significant part of respondents (16.05%) declares that they meet their needs, but try to minimize energy consumption for environmental reasons. Although this percentage is small, it is encouraging because it indicates a growing awareness of the impact of energy consumption on the environment and the need for sustainable behavior. Some respondents (11.11%) state that they cannot use as much energy as they would like due to high costs, while others (9.88%) state that they have problems with inconsistent or unavailable supply. These results indicate the challenges that households face in relation to energy access and costs. A small percentage of respondents (1.23%) cite "other" as the reason for their energy consumption, while a few of them (6.17%)

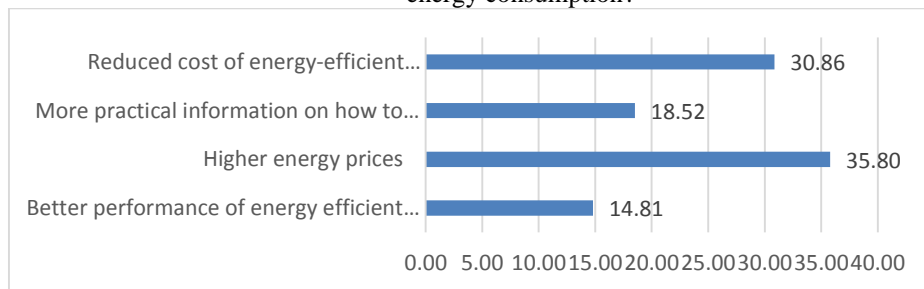
state that they do not know which statement best describes their household. These responses highlight the need for additional analysis and research to better understand the factors that influence household energy consumption.

Figure 5. Thinking about your energy use at home, what statements best describe your household



The analysis of the results of the survey on the factors that would influence the encouragement of households to reduce energy consumption provides insight into the key factors that influence consumer decisions regarding energy efficiency. The most significant factor for respondents is the higher price of energy (35.80%), which indicates the importance that household costs can have in reducing energy consumption. Higher energy costs can encourage households to be more aware and rational in their energy use in order to reduce their energy bills. The next important factor for respondents is the decrease in the prices of energy-efficient appliances and renovations (30.86%), which indicates the need for financial incentives and incentives to enable households to invest in energy efficiency without significantly increasing costs. Practical information on how to reduce energy consumption at home is also important for respondents (18.52%), which indicates the need for education and support related to the implementation of energy-efficient practices in households. The performance of energy-efficient appliances has less influence on the respondents' decisions (14.81%), but they still represent a relevant factor in encouraging the reduction of energy consumption. This may indicate the need to improve the technology and supply of energy-efficient appliances in order to make them more attractive to consumers. Taken together, these results highlight the importance of energy prices, financial incentives and education in encouraging households to reduce energy consumption. The combination of these factors can be crucial in creating an enabling environment for the promotion of energy efficiency and the reduction of negative impacts on the environment.

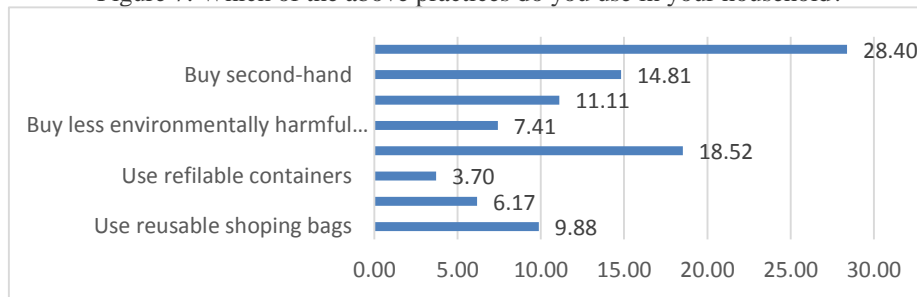
Figure 6. How important would the following factors be in encouraging you to reduce your energy consumption?



When asked which of the listed sustainable practices they use, a significant number of respondents declare that they do not use any of the listed practices (28.40%), which may indicate a lack of awareness or motivation to undertake sustainable actions in everyday life. The most prevalent practice among the respondents is the repair of damaged items (18.52%), which indicates the importance of extending the life of the product and reducing waste through repairs instead of replacement. Also, this may indicate the poor financial situation of the respondent. Another significant practice is the purchase of second-hand products (14.81%), which indicates the growing popularity of buying second-hand as a way of reducing resource consumption and supporting the circular economy as well as household financial savings. A smaller percentage of respondents declare that they use other practices such as buying products with recycled content (11.11%), using paper with recycled content (7.41%), buying products that are less harmful to the environment (7.41%), buying high-quality products (6.17%), and the use of refillable containers (3.70%). The practice of using reusable cloth bags is less prevalent among respondents (9.88%), which may indicate the need for greater incentives and education about the harm of single-use

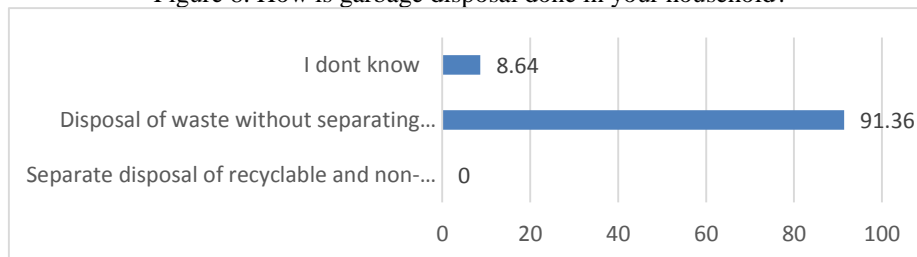
plastic bags and the advantages of using alternatives. Overall, these results suggest the need for stronger promotion of sustainable practices and support for their adoption in everyday life in order to contribute to the preservation of the environment and the creation of a society that relies on sustainable resources.

Figure 7. Which of the above practices do you use in your household?



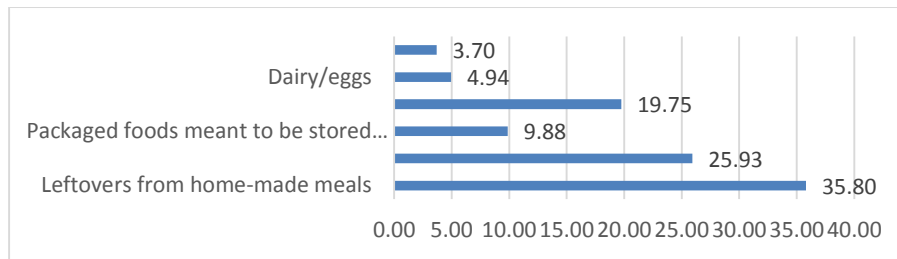
The analysis of the results of the survey on the method of waste disposal (Figure 8) in households reveals an insufficient practice of separating recyclable and non-recyclable waste. The vast majority of respondents (91.36%) declare that they dispose of waste without separating recyclable and non-recyclable waste. This practice indicates a lack of awareness of the importance of separating waste for recycling and reducing the negative impact on the environment. Also, this is also a consequence of the lack of conditions for waste separation in the environments that are the subject of research in this paper. That is why it is necessary for local competent institutions to improve this sector. A small percentage of respondents (8.64%) declare that they do not know how waste is disposed of in their household. This may indicate a lack of information or insufficiently clear guidelines on proper waste management. These results emphasize the need for stronger education and awareness raising about the importance of waste separation for recycling and reducing environmental pollution. They also emphasize the need to improve recycling infrastructure and support households in adopting more sustainable waste management practices.

Figure 8. How is garbage disposal done in your household?



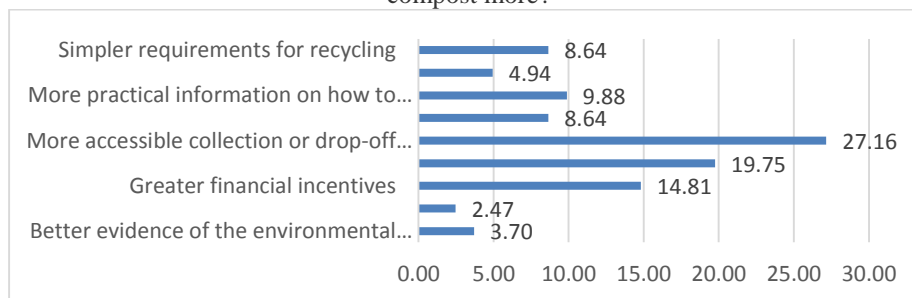
Analyzing survey results on the type of food that households typically throw away provides insight into patterns of food waste and potential areas for improving food management. The majority of respondents state that they most often throw away leftovers from meals they prepared themselves (35.80%), which indicates a tendency to throw away excess food that remains after a meal. This may be due to insufficient attention when planning meals or excessive food preparation. The second most common type of food that households usually throw away is bread (25.93%). This can be the result of quick spoilage of bread and insufficient care in storage or excessive buying of bread. A smaller percentage of respondents state that they throw away fruits/vegetables (19.75%), which indicates the need for better management of these types of food in order to reduce waste. Packaged food stored outside the refrigerator is also often thrown away by households (9.88%). This may be due to expiration dates or incomplete consumption of packaged food before it spoils. A small percentage of respondents state that they throw away dairy products/eggs (4.94%) or meat/seafood (3.70%). These results highlight the need to raise awareness to reduce food waste and promote practices such as better meal planning, proper food storage and use of leftovers. They also emphasize the need for education on the importance of preserving food and preventing the wastage of resources.

Figure 9. What type of food does your household usually throw away?



Analysis of the survey results on the factors that would most encourage households to recycle or compost more provides insight into the key motives and needs that influence consumer decisions regarding waste management. The largest number of respondents emphasized the importance of increased availability of services for the collection or disposal of recyclable or compost waste (27.16%). This indicates the need to improve infrastructure and increase the availability of waste collection services to facilitate households to actively participate in recycling and composting. A significant number of respondents also emphasize the importance of the option that recycled or composted waste can be collected from their home (19.75%). This practical option facilitates the recycling and composting process for households that have limited ability to transport waste to disposal sites. Financial incentives are also an important factor for respondents (14.81%), which indicates the need to introduce economic incentives that would motivate households to engage in recycling and composting activities. Practical information on how to do it was also highlighted as a significant factor (9.88%), indicating the need for education and support regarding the implementation of household recycling and composting practices. A smaller percentage of respondents cited other factors such as cleaner recycling/composting containers (2.47%), more frequent collection of recycled/composting items (8.64%), recycling/composting space (4.94%) and simpler recycling requirements (8.64%) as factors that would encourage them to recycle or compost more. Taken together, these results point to the importance of a combined approach that includes improving infrastructure, introducing financial incentives, providing practical information and supporting households to improve waste management and promote sustainable recycling and composting practices.

Figure 9. What are the most important factors that would encourage your household to recycle or compost more?



4. Conclusion

Based on the analysis of the results of the survey on the attitudes and preferences of households in relation to issues of sustainability, waste management, energy efficiency and environmental protection in Kosovo and Metohija, key conclusions can be drawn that indicate the necessity of comprehensive interventions and policies to improve sustainability and preserve the environment.

First, the survey results show diverse household attitudes and practices regarding sustainability issues, from energy efficiency to waste management and recycling. While some respondents show a high level of awareness and engagement in sustainable practices, such as repairing damaged items or buying used products, others are less inclined to these activities, which points to the need for education and raising awareness about sustainable lifestyles. Second, the results also highlight the challenges and barriers households face in implementing sustainable practices, including lack of financial incentives, lack of information or accessible recycling and composting services, and lack of space or resources to implement certain sustainable practices. Third, key factors that would encourage households to participate more in sustainable practices include greater availability of waste collection and disposal services, greater financial incentives, practical information on how to implement sustainable practices, and the option to collect recycled and composted household waste. Overall, these conclusions point to the need for an

integrated approach in promoting sustainability in Kosovo and Metohija, which includes education, infrastructure investments, incentives and support for households in order to create a sustainable society that protects the environment and promotes a better quality of life for all residents.

Although this paper can serve as a good starting point for further research, its limitations can also be discussed. A significant limitation is the inclusion of only three municipalities (majority populated by Serbs) in the research, so it can be said that the results of the research do not necessarily represent the views of the entire population of Kosovo and Metohija. Therefore, in future works, it is necessary to include all other municipalities in order to get a complete picture. Also, in future research it is necessary to include as many questions as possible in order to get a more detailed insight into the problem of sustainability in households.

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