BRIDGING GAPS IN ENVIRONMENTAL EDUCATION

A comparative case study analysis on youth environmental education

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1.EXECUTIVE SUMMARY

81% of the surveyed youth in Greece, Albania, and Montenegro, had encouraged others to attend environmental events, while only 21% looked up scientific information about the environment.

This comparative study presents the process followed during the research, conducted in the framework of the **Erasmus+ project "Capacity Building, Action, and Responsibility for the Environment—YouthCARE.".** The research seeks to provide a clear insight into understanding environmental issues and the environmental crisis from the perspective of 15–18-year-olds and focuses on populations living in geographically "disadvantaged" areas in the Western Balkan region. Through the case studies, we aim to educate and raise awareness among educators, youth workers, and stakeholders responsible for environmental policy about enhancing young people's environmental awareness. The ultimate and overarching goal of the research is to use the knowledge and results generated by research in the project partner countries (Albania, Montenegro, and Greece) to create and provide coherent and structured tools tailored to the needs of young people that will encourage awareness and action on environmental issues.

The main perspective addressed by the research is environmental education (EE), as the objective of the research is the environmental education of young adults in disadvantaged areas. Thus, the EE perspective is crucial as it focuses on young people, providing insight into their social realities and individual life courses within the given national and regional-specific contexts. However, the contribution of the research can also be framed within the environmental learning (EL) and non-formal educational (NFE) approaches. To do so, this research conducts case studies and makes quantitative and qualitative analyses of young adults' actual environmental awareness by analyzing socio-economic data aggregated at the regional level on different dimensions in participating countries. By doing this, it contributes to the overall aim of research to identify parameters for future decision-making support systems for young adults, as it provides contextualized and multidimensional evidence of youth. As environmental educational policies become effective at the regional and local level, the sub-study aims to provide insights into the different local contexts EE policies are embedded in and how these regional settings under study provide different contextual conditions for young adults. Thus, each regional context can provide (or preclude) specific opportunities for young adults' environmental, educational, and social participatory inclusion. Researchers in environmental education have called for more innovative practices in capacity building

at the local level to increase the involvement of students in actual actions aiming for sustainable transformations. In this regard, the main concern of the research study revolves around how to effectively promote daily sustainable commuting and the various factors that drive pro-environmental behavior. Understanding the factors that influence active and sustainable behavior and how they interact is crucial. Diverse factors, including geographical and urban built environmental characteristics, individual pro-environmental attitudes, awareness, intentions, and socio-cultural and economic backgrounds, can either hinder or promote sustainable actions, causing some vulnerabilities or disadvantages.

In our understanding, **socially vulnerable groups within disadvantaged areas refer to the exposure to social disadvantage coming from complex configurations of risks affecting various life domains.** It is a 'fluctuating' condition of weak social integration and high uncertainty that overlaps only partially with the identification of socially excluded groups characterized by systemic and infrastructural deprivation. Therefore, resonating with what is stated in this comparative study, **social vulnerability needs to be considered as a multidimensional concept and in relational terms, as it concerns the position within the systems of resource production and redistribution as well as in the crucial spheres of social integration.** It refers not only to individual and family aspects but also to contextual factors related to economic, demographic, and social trends that mutually interact and shape the educational infrastructure of individuals and groups in specific places and areas.

The final product of the extensive research is based on an inductive approach, which starts with a collection of empirical observations, looks for patterns in those observations, and then summarizes findings and suggestions. The first part of this report explains the approach applied and the reasoning behind it. Before the start of respective case studies, partners received a common methodology to be followed. Then, the best practices for different forms of educational practices directly focused on environmental education were distributed. In the final stage, the comparative study is compiled based on the primary data collected by questionnaires. Two main questionnaires were administered to collect primary data from the field, one with the youngsters (Appendix 1) and one with the professionals and practitioners of the field (Appendix 2).

The survey conducted with the youngsters aims to measure their current information, knowledge, attitude, and behavior. Given that the final aim of the intervention is to impact behavior and make people more environmentally friendly, this process goes through 4 different stages. The stages are conceptualized in the form of constructs and the measurement is done at 5 points. A Likert scale is a rating scale used to measure survey participants' opinions, attitudes, motivations, and more. In this study, it uses a range of answer options ranging from one extreme attitude (1 scale) to the highest (5 scale), including a moderate or neutral option in the middle. As for the survey conducted with the professionals related to the issue, this questionnaire was conducted with the aim of collecting some exploratory information based on their opinion, knowledge, and daily practices. In the same vein, the questions were constructed initially with some general demographic elements and later with a set of questions in Likert scale form. The first construct for them was related to the importance of environmental education; the second construct was about the main challenges based on their opinion; and the third was about key environmental performance and impact indicators.As a result of this, the comparative study is conducted in detail, and some conclusions and policy recommendations are given in the final part.

Theoretical Frame (s)

T**hree theories guide the analysis of the project, namely, environmental education (EE), experiential learning (EL), and non-formal education (NFE).** The objective of the research is to assess the environmental education of young adults in disadvantaged areas; thus, the EE perspective is crucial as it focuses on the young people, providing insight into their social realities and individual life courses within the given national and regional-specific contexts. However, the contribution of the research can also be framed within the EL and NFE approaches. Firstly, the process of gathering structural data with the secondary analysis approach on young adults is accompanied by the questions: what kind of data is available about them and what are the contextual factors affecting them? Secondly, the way data is produced and used to steer decision-making processes on EE policies concerning young adults is likely to influence their awareness of the need of the need to participate in environmental issues at a regional or local level.

In this light, this research conducts case studies and makes quantitative and qualitative analyses of young adults' actual environmental awareness by analyzing socio-economic data aggregated at the regional level on different dimensions in participating countries. By doing this, it contributes to the overall aim of this study, which is to identify parameters for future decision-making support systems for young adults, as it provides contextualized and multidimensional evidence of youth.

In this report, we **analyze the interplay among different dimensions and methods of environmental education that contribute to shaping the structures of opportunities and awareness of young adults in the regions and places where they live, with a focus on disadvantaged areas.** We focus on the disadvantaged areas, including small cities and rural regions, according to a multidimensional approach that considers the level of economic development and material living conditions, demographic trends, the interaction between different forms of education and the education systems within a region. By doing this, we want to stress the relevance of contextual living conditions in building different active participatory opportunities for young people in terms of complex mixes of factors and constraints.

There are many definitions of the term environmental education (EE), but the most important one was given by UNESCO: **"Environmental education is a learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action.".** To fulfil this definition, UNESCO, through its Education for Sustainable Development program, has been working to make education a more central and visible part of the international response to the climate crisis and to deliver on the Sustainable Development Goals. Learning and teaching for environmental sustainability can fully support other education agendas of inclusion, quality, innovation, internationalization, and student-centered learning. It has rich potential and is an excellent opportunity to make learning more relevant, to motivate learners and educators, and to develop competencies increasingly needed for life and work. While fully focused on the EU's ambitions and priorities to deliver on the European Green Deal, the proposal complements and builds on the work at the international level. It will mobilize all stakeholders for more concerted action to contribute to the UNESCO agenda, notably the ESD 2030 Roadmap, and it will support the EU's

[1]https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022DC0011
[2] COM(2019) 640 final
[3] COM(2020) 380 final
[4] COM(2020)625 final

commitment to the UN 2030 Agenda, the world's blueprint for global sustainable development.

The Commission [1] recently proposed an article that aims to:

- articulate a vision and shared understanding at the EU level on the deep and transformative changes needed in education and training for the green transition.
- develop a coherent approach to the competences, skills, and attitudes that people need to act, live, and work in a sustainable manner, and strengthen the importance of lifelong learning to ensure that everybody from a young age through to adulthood can acquire those competences and skills.
- facilitate the sharing of policymaker, researcher, and educator expertise and best practices at the system and institution level.
- support initiatives at EU level to foster learning for environmental sustainability; and
- encourage investment in the above areas.

Having regard to the proposal from the European Commission, other frameworks aligned, whereas:

- **(1)** The European Green Deal [2] and the EU Biodiversity Strategy for 2030 [3] highlight the key role of schools, higher education, and other training institutions to engage with learners, parents, educators, and the wider community on the changes needed for a successful green transition.
- **(2)** The Communication on the European Education Area [4] calls for education and training policies and investments to be geared towards inclusive green and digital transitions for future resilience and prosperity.
- **(3)** The key competences, as defined in the European Reference Framework on Key Competences for Lifelong Learning [5], aim to support people across Europe in gaining the skills and competences needed for personal fulfilment, health, employability, and social inclusion in a time of rapid and profound change.
- **(4)** The European Skills Agenda [6] announced support for the development of a core, green skills set for the labor market with a view to creating a generation of environment-conscious professionals and green economic operators, integrating environmental and climate considerations into school, higher education, vocational education, and training, as well as research.

[5] OJ C 189, 4.6.2018, p. 1–13, Annex
[6] COM(2020)274 final

A helpful tool in this process of environmental education is non-formal education (NFE), and its methodologies are varied, participatory, and learner-centered; they include a mix of individual and group learning and encourage people to learn from each other.

NFE is about learning life skills and preparing for active citizenship. NFE is holistic, which means engaging learners' emotions, minds, and bodies. Studies so far have shown that environmental education results are much better when they are experiential through the process of learning by doing. By engaging learners in hands-on experiences and reflection, they are better able to connect theories and knowledge learned in the classroom to real-world situations. The values, identities, stereotypes, and prejudices of the participants may be challenged while their learning experiences are influenced by the issues discussed and by the personal experiences they bring with them. NFE methodologies challenge the participants at many different levels; they are also expected to become aware of their role as social actors, which motivates them to take social action.

[5] OJ C 189, 4.6.2018, p. 1–13, Annex
[6] COM(2020)274 final

2. INTRODUCTION

Context and objectives of the study

Youth CARE project calls attention to the fact that the target groups implied in environmental educational policies are not natural and static categories, but rather are themselves changed and sometimes even constructed by these policies. Thus, we need to pay attention to how policies and methods themselves –directly or indirectly – impact on the target groups, for instance, by creating new life course normality expectations, framing "problems" as deriving from individual or collective attributes, creating new constellations of education-to-environmental transition, etc. Environmental educational policies across Europe have been repeatedly described as highly fragmented and often conflicting in their objectives in relation to their target groups and means of implementation. Although they seek to improve sustainable growth and social responsibility for young adults, they might produce unintended effects when they are not well suited to the highly diverse target groups, countries, and regions. Regarding the high fragmentation of environmental educational policies, different effects in different contexts can be observed, which raises the question mark as to how adequate are these policies for the targeted groups. Youth CARE seeks to identify necessary parameters for future decision-making support systems by understanding environmental educational policies for young adults in their interplay between the economy, society, environment, and education and training systems at regional and local levels, including discussing issues of fragmentation and discrepancies affecting young adults' life course, especially in disadvantaged areas. **In order to achieve this, the study intends to present a clear and thorough picture of how underprivileged youth who reside in communities with important natural resources or assets within the consortium understand environmental issues.**

Policies in general, and environmental educational policies specifically, are more often than not, framed by issues that are identified/constructed with reference to how specific groups perform or progress in comparison to others. It is with reference to these – usually national – indicators that groups are identified/constructed as "disadvantaged" or "excluded". While this represents a standard and useful practice, the level and quality of data available/used may also gloss over subtle but important differences among countries and regions. This applies heterogeneous groups such as young adults. This is relevant to understand under which circumstances policies are operating. As the environmental educational policies become effective at the regional/local level, the sub-study aims to provide insights into the different local contexts in which the EE policies are embedded in,

and how these regional settings under study provide different contextual conditions for young adults.

Thus, each regional context can provide (or preclude) specific opportunities for young adults' environmental, educational, and social participatory inclusion. **We seek to pay particular attention to the structural characteristics of the regions, such as the economy, education, and social opportunities, to describe the different social realities of young people and how those realities are constructed in statistical data collection.** This allows us to understand how context can mediate and influence EE policies in each region. Against this background, Youth CARE sets out to analyze the country- and region-specific settings of young people's environmental education in terms of their implications for EE policies.

The "transitional" nature of youth work implies a regular turnover of volunteers and staff in the organizations active in this field, especially those facilitating educational activities. Constant training of new generations of young people and youth leaders is required. One outcome anticipated from combining intellectual effort with manual work is to lay the basis for a more rational approach to the use of the environment in general and the mode of development of its resources. This would help to conserve and find the best use for resources or establish the best means to exploit them, while at the same time minimizing negative environmental impacts. The nature of the non-formal educational process subsumed within it, has very significant implications at both ends of the rural-urban continuum. Thus, preparing the youth for a more sustainable future improves the social and economic conditions in the countryside by making them more attractive places in which to live and work, which would help to reduce flows and the overcrowding of cities in the relatively impoverished rural areas. Rectifying infrastructural imbalances between town and country would in the long term relieve some of the pressure of migration from cities and the progression of environmental education in disadvantaged areas in the long term would result in reducing rates of abandonment of small properties while at the same time providing better access to greater and more sustainable opportunities for all. In this way, they would be better able to sustain their natural resources and environment while at the same time making a more significant contribution to the larger national economy. Through time, both rural and urban environments would become more productive urban places because their economies would have to support fewer dependent urban migrants and rural places because retaining more people in the countryside with better supporting services would back up a more rational and extended pattern of environmental issues.

The concept of disadvantaged areas and groups in social science

The concept of ‘disadvantage" shares characteristics with concepts such as deprived, lagging, left behind, marginalized, and lost, and also shares sets of indices and criteria applied by countries and institutions in order to distinguish between different places within the territory they are responsible for. Most definitions based on different criteria were developed to facilitate area-based targeting of funds through social and territorial policy (i.e., Lupton & Tunstall, 2003). MacKinnon et al. (2022) describe the multi-dimensional concept of left-behind places and define them as places that show a “combination of economic disadvantage, lower living standards, population loss/contraction/low growth, a lack of infrastructure and political neglect and disengagement.”. Though they emphasize the fact that depending on the national setting, this phenomenon occurs across all geographical units, they focus their analysis on rural and formerly industrial sites. This usually refers to “rural or formerly industrialized spaces” that show “problematic demographic development and significantly below-average economic activity.”. Something most definitions have in common is the focus on economic deprivation and a lag in economic activity compared to the respective country's national average. This emphasis on new definitions of what “disadvantage” means beyond a lack of economic performance connects the debates about deprivation, infrastructure, good living conditions, and quality of life. It is noteworthy that often “disadvantaged” and “rural” are used interchangeably, leading to a one-dimensional approach and the risk of overlooking disadvantaged (semi-)urban areas as well as overlooking the existence of well-serviced rural areas. Scholars have called for social cohesion policies to focus on residents' satisfaction in order to account for regional disparities and demands (Dax & Fischer, 2018; Valenzuela-Levi et al., 2022).

In the social sciences, disadvantaged groups are groups of persons that experience a higher risk of poverty, social exclusion, discrimination, and violence than the general population, including, but not limited to, ethnic minorities, migrants, people with disabilities, isolated elderly people, and children. Worldwide, those individuals and groups face barriers to accessing and participating in social life and issues. A growing number of socially disadvantaged people whose needs are not recognized or met by current educational and social care structures and services are more likely to become vulnerable (Briscoe et al., 2016). Vulnerability can relate to gender, age, race, ethnicity, religion, citizenship status, disability, and occupation—aspects that label and stigmatize individuals and groups (Cline, 2016).

Importance of environmental education in disadvantaged areas

Increasing people's awareness of the environment and the problems associated with it. is the goal of environmental education (EE) (Mogensen & Mayer, 2005; UNESCO, 2020) and an all-encompassing plan to increase people's environmental protection objectives by enhancing individuals' awareness, skills, expertise, values, information, attitudes, and motivation to improve the environment (UNESCO, 2020; Silva & Sá, 2018; OECD, 2018). Several academics define EE as **an education for, through, and about the environment** (Yeshalem, 2013; UNESCO, 2020; Silva & Sá, 2018; OECD, 2018). **The EE aims to advance indigenous wisdom and field-based, practical learning about environmental challenges on a regional, national, and global scale at every grade level. It is about, through, and for the environment** (Boileau et al., 2021; Yueh & Barker, 2011; Bhatia, 2020; Kimaro, 2018).

EE is commonly believed to be a methodology, a philosophy, a tool, and a profession: (1) to raise awareness of the interdependence of economic, social, political, and environmental resources in urban and rural areas; (2) to give everyone the same opportunity to gain the skills, morals, attitudes, dedication, and abilities needed to address environmental issues and enhance the quality of the environment; and (3) to foster the development of better environmental protection behaviors in people, communities, and society at large (UNESCO, 2020; OECD, 2019). **It is both multidisciplinary and interdisciplinary, serving as general education for decision-makers, policymakers, the public, and society at large without regard to age or gender, in addition to formal pedagogy** (schooling students) (Mogensen & Mayer, 2005; Khademi-Vidra, 2017; Ardoin, 2009). EE can be formal or informal (casual). The purpose of formal education is characterized as having a set duration and a well-defined and structured curriculum and is provided in places such as elementary, secondary, and university schools, colleges, and universities (Guevara et al., 2009);

Additionally, **it is essential for educating the younger and grassroots citizens, developing cognitive frameworks for understanding the issue related the natural world, thinking through and interpreting environmental problems, and establishing the necessary awareness, aptitude, knowledge, and mindset to start helping to solve local environmental issues** (Paraskeva-Hadjichambi et al., 2020; Ardoin & Bowers, 2020). Conversely, learning that occurs outside of official educational settings is referred to as informal and/or non-formal education of official educational

about environmental preservation, job training, community centers, and mass media, including radio, television, the internet, documentaries, etc. (Calvente et al., 2018).

Researchers in environmental education have called for more innovative practices in capacity building at the local level to increase the involvement of students in actual actions aiming for sustainable transformations (Kopnina, 2018). Among them, school gardening and ecological walks are considered promising approaches to participatory environmental education. These non-formal educational approaches help youth acquire basic knowledge about climatic conditions, types of plants, and the environmental and economic realities of their local community area. Furthermore, these approaches enable the children and youth of a local community to better reflect on ethical dimensions and receive practical skills related to environmental responsibility, such as soil maintenance and water conservation (Johnson, 2016). Topics related to health education, food sustainability, malnutrition, and obesity are other key learning areas that children can obtain from school gardening (Fischer et al., 2019; Weitkamp et al., 2013). Furthermore, it is argued that school gardens and ecological walks can be an effective instrument for childhood development as they enable children to benefit from the emotional healing powers of nature, especially in economically and socially vulnerable regions (Otto & Pensini, 2017; White et al., 2013).

As environmental problems are understood as the harmful impacts created by human activities on the ecological system, it is essential to examine the multiple dimensions of societies. **The economic, sociocultural, and political structures of today's societies are the root causes of environmental challenges.** Reflecting such realities, environmental education needs to incorporate the social dimension of environmental challenges. Such evolution in educational education is described by Mappin and Johnson (2005), who argued that the purpose of environmental education has gradually expanded its scope and now encapsulates the multifaceted nature of environmental challenges. This also includes environmental ethics, i.e., the moral relationship between humans and their environment, most significantly under increasing anthropocentric/human-centeredness activities (Brennan, 2016) and ethical philosophies such as deep ecology (Keller, 2008).

There is ongoing debate about how to effectively promote daily sustainable commuting and the various factors that drive pro-environmental behavior. Understanding the factors that influence active and sustainable behavior and how they interact is crucial.

Diverse factors, including geographical and urban built environmental characteristics, individual pro-environmental attitudes, awareness, intentions, and socio-cultural and economic backgrounds, can either hinder or promote sustainable actions (Giles-Corti et al., 2016; van Valkengoed et al., 2022). For instance, psychosocial factors related to the environment, awareness of issues like climate change, and intentions to address them through pro-environmental attitudes are precursors to adopting actual active and sustainable mobility behaviors (van Valkengoed et al., 2022). Moreover, higher levels of education, social status, and income empower individuals, granting access to information, enhancing critical thinking skills, and fostering trust in science. These socio-economic characteristics are associated with lifestyle and environmental behaviors, as well as greater access to resources and services. Compared to rural areas or smaller communities, large urban areas tend to concentrate the majority of human, economic, and infrastructure resources, including cycling and walking paths and other sustainable matters of mobility (Balland et al., 2020; Carlson et al., 2018; Dyck et al., 2011). It is unclear, though, how much these socioeconomic and geodemographic imbalances affect people's intentions and awareness of the environment.


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3. GLOSSARY OF TERMS

- **Environmental Education (EE):** A learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address these challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible actions.
- **Experiential learning (EL)** is a process of learning through experience and is more specifically defined as "learning through reflection on doing."
- **Non-formal education (NFE)**: education that is structured and organized but occurs outside the formal education system. It involves a range of learning activities provided by different agencies, including NGOs, community groups, and other organizations.
- **Social vulnerability** refers to the exposure to social disadvantage resulting from complex configurations of risks affecting various life domains, characterized by weak social integration and high uncertainty.
- **Sustainable Development Goals (SDGs):** A collection of 17 global goals set by the United Nations General Assembly in 2015 for the year 2030. These include goals related to poverty, inequality, climate change, environmental degradation, peace, and justice.
- **Socio-Economic Data:** Information that describes an individual's or group's economic and social conditions, such as income, education, employment, and housing conditions.
- **Participative Inclusion**: The involvement and active participation of individuals and communities in decision-making processes that affect their lives and surroundings.
- **Biodiversity**: the variety of life in all its forms, levels, and combinations, including ecosystem diversity, species diversity, and genetic diversity.
- **Ecological Footprint**: A measure of human demand on the Earth's ecosystems. It compares human consumption of natural resources with the Earth's ecological capacity to regenerate them.
- **Circular Economy:** An economic system aimed at eliminating waste and the continual use of resources. It contrasts with a linear economy, where resources are used once and then discarded.

4. A CONTEXTUAL AND PLACE-BASED PERSPECTIVE

In our understanding, socially vulnerable groups within disadvantaged areas refer to the exposure to social disadvantage coming from complex configurations of risks affecting various life domains. It is a 'fluctuating' condition of weak social integration and high uncertainty that overlaps only partially with the identification of socially excluded groups, characterized by systemic and infrastructural deprivation. Therefore, social vulnerability needs to be considered as a multidimensional concept and in relational terms, as it concerns the position within the systems of resource production and redistribution as well as in the crucial spheres of social integration. It refers not only to individual and familial aspects but also to contextual factors related to economic, demographic, and social trends that mutually interact and shape the educational infrastructure of individuals and groups in specific places and areas. Therefore, we argue in favor of the necessity of investigating people's contextual positioning in their specific contexts, as they are strongly connected to their degree of social integration emerging from circumstances characterizing specific areas. The impact of environmental behavior is mediated by institutional structures and specific local characteristics associated with the contexts in which young people live.

In this light, Atkinson (2002) and Stewart (2003) stress the importance of regional and place-based indicators, particularly when considering a wider view of exclusion that covers more dimensions. This implies **taking into consideration the interplay between contextual factors as a manifestation of socio-economic trends in the region and the impact of institutional factors related to welfare provision and structures of multilevel governance.** Therefore, we focus on the contextual environmental educational conditions in selected regions according to a multidimensional approach that considers the level of economic development and material living conditions, demographic trends, the interaction between education systems and working opportunities within a region.

What we want to stress is the relevance of contextual conditions in building different structures of environmental education for young people in terms of complex factors and constraints, according to the place where they live. Due to the wide range of data considered, our results cannot be translated into different degrees of vulnerability associated with the regions analyzed but contribute to building the contextual structure of factors and constraints with which young people engage and actively form their dispositions and choices. To sum up, in this research, we build on a multidimensional and context-sensitive approach, investigating the developments in environmental education

and the structures of opportunities that contribute to the following issues that are fundamental to research principles:

1. a better appreciation of context;
2. understanding the processes of change;
3. shedding light on complex issues;
4. recognizing the values and biases of the participant;
5. contributing to the transfer of knowledge.


What are the biggest challenges young people face when trying to live an environmentally friendly lifestyle?

5. DATA COLLECTION AND METHODOLOGY

This methodology is the structural basis for the conduct of separate activities in the respective countries of the consortium, which are finalized in this comparative study. The final output of the comprehensive research is based on an inductive approach, which begins with a set of empirical observations, seeks patterns in those observations, and then makes a summary of conclusions and recommendations. The first part of this report explains in detail the approach applied and the reasoning behind why it was chosen. Before the start of respective case studies, partners were equipped with a common methodology to be followed. The aim of this methodology was to initially provide a better overview of each respective country, which was also connected to the reasoning behind the selection of each of the best practices presented in this study. After that, **the three case studies are conducted in Albania, Greece, and Montenegro, and respectively, the results of each divisional country are detailed within this summarized and analyzed comparative study of the finished country reports.**

The methods used are:

- **Phase I: Diagnostic Analysis:** Context analysis can be conducted at different levels, from a broad overview of the external environment to a more detailed examination of the specific context within which a project will be implemented. The process typically involves steps like topic, stakeholder, trend, location, program, and internal analysis. This diverse technique and tool identify patterns, trends, and connections to explain why certain events occurred and why there are specific situations. This phase will examine data to understand the root causes of events, behaviors, and current outcomes.
- **Phase II: Case Studies**: a holistic description and explanation, flexibility in the design and data collection methods, reliance on multiple sources of evidence, and emphasis on the context in which the phenomenon occurs.
- **Phase III: Surveys:** an activity aimed at gathering feedback from a target group on a given topic/theme. Each method will be applied at different stages of the research, as will be later explained in the following section of the present guidelines. You will find the description of each methodology in their respective task/section.
- **Phase IV**: **Collection and Analysis of the Country Reports:** Conduction of the Comparative Study Derivation to Some Results, Conclusions, and Policy Recommendations.
- **Phase V: Conclusions and Policy Recommendations**

6. SUMMARY OF RESULTS

- **Environmental performance and crisis**

Greece, the Mediterranean country with countless islands, is a particularly vulnerable point to the impacts and future projections of climate change. Although air pollution has decreased, Greece does not have a comprehensive plan to mitigate the health effects of pollution. Greece has adopted several policy initiatives and measures aimed at tackling waste management and plastic pollution, boosting the circular economy, green public procurement, and digital transformation. A milestone in these initiatives was the first National Climate Law (NCL), which was adopted in 2022 and aims to address the energy crisis and protect the environment by strengthening the country's adaptive capacity, climate resilience, and the gradual transition to climate neutrality by 2050.

- **Main environmental issues**

Among others, the most important environmental issues Greece is facing are: air pollution (carbon dioxide emissions, dependence on fossil fuels, industrial activity), water pollution and water scarcity mainly in coastal areas and/or areas heavily dependent on tourism (agricultural runoff of pesticides and fertilizers, industrial wastewater discharges, untreated wastewater), inadequate waste management (illegal dumping, inadequate recycling infrastructure), and biodiversity loss (urbanization, habitat fragmentation, spatial alien species, fires, pollution).

- **Young people, disadvantaged areas, and the climate crisis**

Greece's economic crisis, coupled with the global migration crisis, have forced many young people with Greek or migrant/refugee background to live in disadvantaged areas in Greece. As a result, the number of young people living in disadvantaged areas and under poor conditions (including camps) has increased over the past 10–15 years. Many young people in Greece live in disadvantaged areas with limited access to resources, such as healthcare and education, compared to urban areas. Despite these efforts, persistent socio-economic inequalities continue to affect the well-being and opportunities of young people living in disadvantaged areas in Greece. Regarding the environment, young people in disadvantaged areas are disproportionally experiencing the effects of the climate crisis due to factors such as lack of infrastructure, limited access to resources, and

environmental information and education. Moreover, a recent study has shown that schools in Greece, located in smaller areas of the country, fall behind in the implementation of environmental education compared to schools located in urban centers.

BEST PRACTICES IN NON-FORMAL EDUCATION

LET'S GET INTO ACTION

The set of activities aim to inform young people about the climate crisis and climate change, the reasons why they need to act themselves, and how they can act to contribute to the protection of energy and the environment.

https://www.wwf.gr/ti_kanoume/klimatiki_krisi_kai_energeia/energopoiisou/

PRACTICE ANALYSIS

Strengths: Easy implementation of the activity both in school and other educational settings, while the use of audiovisual material keeps the participants' active interest in critical thinking and raises awareness on the environment; social learning context; Collective discussion of action plans through open and participatory processes.	**Weaknesses:** Obstacles to curriculum integration; Limited reach (especially among schools or other settings of low socioeconomic status that do not have access to technological means).
Threats: Competition and disagreements between students; Competing priorities in schools (prioritization of other academic subjects over environmental education).	**Opportunities**: Opportunity for collaboration between students; Environmental awareness; Social learning; Encouraging environmental action and not just theoretical education on the environment; Policy advocacy (the activity can serve as a platform for advocating for environmental policies and initiatives); Technology integration.

ENVIRONMENTAL EDUCATION FOR FOREST FIRE PREVENTION

Presentation of videos focusing on 2 important axes (I) the real causes of fires, their connection with climate change, and the value of prevention, as well as (ii) the empowerment of students to feel motivated and take action. Videos are accompanied by corresponding educational brochures with suggestions for activities, topics for research and discussion, and ideas for immediate mobilization

https://www.wwf.gr/shmeio_gnosis/perivallontiki_ekpaideush/dasi/

PRACTICE ANALYSIS

Strengths: Teamwork, Communication; Presentation skills, Critical thinking; Creative imagination and thinking, Problem solving; Use of audiovisual material (keeping participants interested); Social learning context; Collective discussion of action plans; Open and participatory processes.	**Weaknesses:** Barriers to integration into the curriculum; Limited reach (especially among schools or other contexts that do not have access to technological means); Time constraints (integration of environmental activities into an overloaded curriculum).
Threats: Competition and disagreements between students; Competing priorities in schools (priority of other subjects over environmental education)environmental education).	**Opportunities**: Opportunity for collaboration among students; Environmental awareness on important issues; Social learning; Theoretical education and possibilities for action; Technology integration; Student leadership

LEARNING ABOUT FORESTS": "DISCOVERING MY ECOLOGICAL FOOTPRINT"

An educational game in which students discover their ecological footprint and the impact of their personal lifestyle on climate change. Materials: Outside space or big room where all participants can stand in one line and walk forward up to 70 small steps. Pen and a copy of the questionnaire for each participant.

https://www.eepf.gr/en/%20(EN)

PRACTICE ANALYSIS

Strengths: Active participation of students; Fun and participatory activity; Connection to the real life of participants; Implementation without restrictions	**Weaknesses:** Barriers to integration into the curriculum.
Threats: Competition and disagreements between students; The activity can test social desire; Competing priorities in schools (priority of other subjects over environmental education)	**Opportunities**: Opportunity for self-awareness and self-reflection; Increase environmental awareness; Encourage environmental action and not only theoretical education on the environment; Policy support (activity can serve as a starting point to support environmental policies and initiatives).

EDUCATIONAL PROGRAM "LEARNING ABOUT FORESTS"

Simply learn by playing Card game and Lego blocks. Materials: A. 24 Knowledge cards, B. Spinner wheel, C. Red, and green laminated cards with activities-behaviors. Each card describes some human behavior and its corresponding impact on the forest ecosystem or climate change. Each card leads players to "give up" carbon or get more carbon dioxide for their team. Students divided into two groups of 12 pupils take twelve clusters of blocks representing carbon dioxide. In addition, one more pile is placed in the center, to be used during the game. Players on each team turn the arrow on the spinning wheel one after another and score a color. Depending on the color, they choose the appropriate card (red or green) from the columns and read the instructions written on it. If they get a positive (green) card, they give carbon from their pile, but if they take a negative (red) card, the team takes a new cluster of blocks representing carbon dioxide, from the central pile. The winning team is the one that first accomplishes the disposal of the carbons.

https://eepf.gr/en/project/education/learning-about-forests

PRACTICE ANALYSIS

Strengths: Active participation of students; Fun and participatory activity; Connection to the real life of participants; Implementation without restrictions	**Weaknesses:** Barriers to integration into the curriculum.
Threats: Competition and disagreements between students; The activity can test social desire; Competing priorities in schools (priority of other subjects over environmental education)	**Opportunities**: Opportunity for self-awareness and self-reflection; Increase environmental awareness; Encourage environmental action and not only theoretical education on the environment; Policy support (activity can serve as a starting point to support environmental policies and initiatives).

BLUE GOLD: OUR DRINKING WATER AND CLIMATE CHANGE

At the core of Climate Change and Southern Voices learning module are the global connections of complex phenomena, questions of justice, feelings, and reactions caused by great challenges and turning them into action. A video project which will be carried out as a group project brings an active element into the module. The students have a chance to examine the themes of sustainable development from the perspectives of both North and South and to take their own stand on the themes. The learning module is suitable, for example, for geography, biology, art, and social studies classes or as a collaboration between these subjects." The learning module can be found under the name "Lesson Plans: Climate Change and Southern Voices" in the educational material the Hellenic Society for the Protection of Nature suggests as a useful tool for teachers and educators who wish to implement the Young Reporters for the Environment program in Greece

https://ymparistoreportterit.fi/en/learning-module/#materials

PRACTICE ANALYSIS

Strengths: Working in groups; Communication; Critical thinking; Creative imagination and thinking, Problem-solving; Decision-making; Holistic approach.	**Weaknesses:** Obstacles to curriculum integration; Time Constraints (incorporating environmental activities into a packed curriculum); Material constraints: More materials are required compared to other activities. Limited reach (especially among schools or other settings of low socioeconomic status that do not have access to technological means).
Threats: Competing priorities in schools (prioritization of other academic subjects over environmental education.	**Opportunities**: Technology integration; opportunity for collaboration between students; comprehensive learning; awareness of global environmental issues.

BEST PRACTICES IN OTHER FORMS OF EDUCATION

TAKING ACTION

Action competence is an important aspect of any educational program. Raising awareness and mobilizing action is an important aspect of citizenship. This lesson plan engages students on the issue of disposal of hazardous waste. The lesson plans have been developed by the Centre for Environment Education (CEE) India, as part of the Litter Less Campaign for the Foundation for Environmental Education and funded by the Wrigley Foundation. The learning module can be found under the name "Lesson Plans: Litter and Waste" in the educational material the Hellenic Society for the Protection of Nature suggests as a useful tool for teachers and educators who wish to implement the Young Reporters for the Environment program.

https://www.yre.global/litter-waste-lesson-plans

PRACTICE ANALYSIS

Strengths: Research oriented; Creative thinking; Decision-making; Working in groups; Communication; Critical thinking; Long-term impact.	**Weaknesses:** Obstacles to curriculum integration; Time Constraints (incorporating environmental activities into a packed curriculum); Material constraints: More materials are required compared to other activities; Limited reach (especially among schools or other settings of low socioeconomic status that do not have access to technological means).
Threats: Competition and disagreements between students; Competing priorities in schools (prioritization of other academic subjects over environmental education).	**Opportunities**: Student leadership; Technology integration; Opportunity for collaboration between students; Comprehensive learning, encouraging environmental action and not just theoretical education on the environment; Community Involvement: Engaging parents, alumni, and community members in the program can expand its reach and support base.

CLIMATE CHANGE AND SOUTHERN VOICES

This activity shows students how they could take action themselves and asks them to develop and implement their own solutions for sustainable water use. Two experiments on the water cycle and filtration will help them consolidate and deepen their knowledge. The learning packs on climate change, biodiversity loss & pollution can be found in the educational material the Hellenic Society for the Protection of Nature suggests as a useful tool for teachers and educators who wish to implement the Young Reporters for the Environment program in Greece.

https://www.eepf.gr/en/project/education/young-reporters-for-the-environment

PRACTICE ANALYSIS

Strengths: Accessible and interactive activity, Active student participation; Participatory activity; Hands-on learning.	**Weaknesses:** Barriers to integration into the curriculum; Time constraints (integrating environmental activities into a busy curriculum); Material limitations: More materials required compared to other activities.
Threats: Competing priorities in schools (priority of other subjects over environmental education).	**Opportunities**: Deepening knowledge: Experiments on water filtration and the water cycle; Deepening understanding of the water cycle, how water is purified, and problems related to water scarcity with "practical experience"; Cooperation between students; Experimental teaching.

THE CIRCULAR CLASSROOM

A European initiative for older students to learn about systems thinking, sustainability creative thinking and innovation skills with the circular classroom tool kit. The Circular Classroom is a free, multilingual educational resource for students and teachers alike, designed to integrate circular thinking into high school and upper secondary classrooms. It offers the opportunity to think differently about how we design products, how the economy works, how we meet our needs as humans, and how to support the development of more creative professional roles that help to design a future that is about social, economic, and environmental benefits." "Each of the three workbooks has been developed to help you quickly integrate the main concepts of circular thinking into the classroom, no matter what subject area you are teaching. From biology to math, language, and philosophy, the activities are universal and applicable to each learning objective in the curriculum.

https://circularclassroom.com/

PRACTICE ANALYSIS

Strengths: Research oriented; Hands-On Learning; Working in groups; Communication; Critical thinking; Creative imagination and thinking, Problem-solving; Decision-making; Holistic approach; Educational value; Long-term impact.	**Weaknesses:** Obstacles to curriculum integration; Time Constraints (incorporating environmental activities into a packed curriculum); Material constraints: More materials are required compared to other activities. Limited reach (especially among schools or other settings of low socioeconomic status that do not have access to technological means).
Threats: Competing priorities in schools (prioritization of other academic subjects over environmental education.	**Opportunities**: Deepening understanding of circular thinking and the economy; opportunities for collaboration between students; comprehensive learning; policy advocacy; raising awareness.

COMMUNICATING WASTE LAW

The lesson plan encourages research in laws related to various aspects of waste from local to global and their wider dissemination. Awareness about laws is an important tool for better compliance and enforcement. The lesson plans have been developed by the Centre for Environment Education (CEE) India as part of the Litter Less Campaign for the Foundation for Environmental Education and funded by Wrigley Foundation.

https://www.yre.global/litter-waste-lesson-plans 

PRACTICE ANALYSIS

Strengths: Research orientated; Working in groups; Communication; Critical thinking; Creative imagination and thinking, Problem-solving; Decision-making; Understanding of law and legal processes related to the environment; Educational value.	**Weaknesses:** Obstacles to curriculum integration; Time Constraints (incorporating environmental activities into a packed curriculum); Limited reach (especially among schools or other settings of low socioeconomic status that do not have access to technological means.
Threats: Competing priorities in schools (prioritization of other academic subjects over environmental education.	**Opportunities**: Technology integration; Opportunity for collaboration between students; Comprehensive learning; Awareness on law and legal processes; Policy advocacy, Student leadership.

EAT4CHANGERS: EATING TO CHANGE THE WORLD

a.It is addressed to young people who want to become active citizens on climate change and biodiversity issues through the adoption of a sustainable diet.

https://www.wwf.gr/shmeio_gnosis/perivallontiki_ekpaideush/diatrofi/ 

PRACTICE ANALYSIS

Strengths: Research orientated; Working in groups; Communication; Critical thinking; Creative imagination and thinking, Problem-solving; Decision-making; Educational value; Holistic approach; Long-term impact.	**Weaknesses:** Obstacles to curriculum integration; Time Constraints (incorporating environmental activities into a packed curriculum); Limited reach (especially among schools or other settings of low socioeconomic status that do not have access to technological means).
Threats: Competing priorities in schools (prioritization of other academic subjects over environmental education.	**Opportunities**: Technology integration; Opportunity for collaboration between students; Comprehensive learning; Awareness on law and legal processes; Policy advocacy, Student leadership.

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MONTENEGRO

Setting youth policy priorities and implementing them for years has depended on the joint efforts of non-governmental organizations, especially youth organizations and organizations for young people, local government units, ministries, various institutions, and international actors. In addition, young people themselves, both formally organized and those acting as non-formal groups, play an important role in contributing to the realization of recognized youth priorities.

By examining the position of youth in Montenegro through the analysis of the National Youth Action Plan, the Youth Strategy 2017-2021, and the Youth Strategy 2023-2027, as well as local action plans, we have observed that youth in Montenegro share a common sentiment, which is particularly important when it comes to environmental issues: the feeling of invisibility within the system. Research through youth surveys has shown that young people feel invisible and uninformed and that they are not adequately invited to participate in social decision-making, a sentiment that was confirmed during research for both the first and second strategies.

Research has shown that "institutional representatives consider young people passive and uninterested, while young people claim otherwise—they are not informed about opportunities to get involved, and the programs offered to them are not tailored to their needs. However, youth services have not been tailored to the needs of young people at the local level, nor to other actors and strategies concerning youth (e.g., the Strategy for Social Inclusion of Roma and Egyptians envisages the creation of youth services accessible to young people from the Roma and Egyptian populations). Additionally, young people are generally not informed about the existence of youth services, especially young people with disabilities, for whom not all services are accessible.

Despite that, nearly half of young people have participated in some youth activities. **Young people are frequently present at community events (37.1%), and they mostly engaged in volunteer work (43.2%) and educational activities (59.5%).** According to the majority of responses, young men do not participate in any kind of non-formal education because they feel that they already possess sufficient knowledge and skills and that further education will not greatly advance their professional development.

Young people who claim to be members of a youth club or organization only make up 8.8% of the population. Almost one-fourth of young individuals (23.9%) say they used to be members but are no longer part of such organizations.

The most significant problems are illegal forest cutting, inadequate waste disposal, air pollution (Pljevlja is the most polluted city in Europe), and the construction of small hydroelectric power plants on rivers. A significant step towards environmental education for youth in Montenegro is the integration of sustainable development content into the curriculum for high school education and general education subjects in vocational high schools through the development of the interdisciplinary field of Education for Sustainable Development, which was adopted by the National Council for Education in 2015. According to an official report, the international eco-school program has been implemented in Montenegro since 2016, and so far, 95 educational institutions have been included in it, of which 41 have met all the criteria and gained international recognition as eco-schools.

In addition to NGOs, which predominantly conduct non-formal environmental education (whose environmental practices we will explore later), other entities involved in non-formal environmental education include agencies such as the Environmental Protection Agency, as well as state-owned companies like Waste Management or National Parks. The Environmental Protection Agency carries out part of its activities with schools, organizing workshops on environmental protection, coordinating cleanup actions, or greening educational institutions (schoolyards and preschools) and various green, non-forested, or fire-affected areas. Also, Skadar Lake National Park offers many workshops for children from its local area in its repertoire, most often when marking ecologically significant dates.

BEST PRACTICES IN NON-FORMAL EDUCATION

NATURE FOR THE PHYSICAL AND MENTAL HEALTH OF YOUNG PEOPLE

The development of citizens' awareness as well as their inclusion in the social, economic, ecological, and cultural development of society, the quality of life of citizens and the local community.Outdoor activities and education. The concept of learning through experience. The main learning concept practiced is "experiential learning," a concept that focuses on acquiring knowledge and skills through experience, active engagement, and reflection. The areas from which the activities of 'doing and learning' are conducted include community contribution, exploration of Montenegro's nature and ecosystems, acquaintance with cultural heritage, civic education, and life skills programs.

http://www.nasaakcija.me/ –

PRACTICE ANALYSIS

Strengths: Implements various volunteer actions such as waste clean-ups, ecological performances, camps, and educational workshops, fostering a sense of responsibility and environmental stewardship among youth; targeted age groups; outdoor activities; experiential learning; diverse learning areas; empowerment of marginalized youth.

Weaknesses:
Resource Dependency: Relies on external funding and resources to sustain the program, making it vulnerable to changes in funding priorities or availability. Limited Age Range: Targets a specific age group (10 to 20 years old), potentially excluding younger or older individuals who could also benefit from the program. Socioeconomic Barriers: Despite targeting socially disadvantaged families, barriers such as lack of access to transportation or resources may hinder participation among the most marginalized youth.

Threats: Competition and disagreements between students; Competing priorities in schools (prioritization of other academic subjects over environmental education).	**Opportunities**: Opportunity for collaboration between students; Environmental awareness; Social learning; Encouraging environmental action and not just theoretical education on the environment; Policy advocacy (the activity can serve as a platform for advocating for environmental policies and initiatives); Technology integration.

SCHOOL GARDEN AS AN INTEGRAL CLASSROOM

During the school year, it is planned to conduct 12 to 16 thematic workshops with children, depending on the workload of the children's school responsibilities. The objectives are for children to become familiar with a wide range of topics and concepts in the fields of ecology, environmental protection, and energy efficiency through the practice of urban gardening and adequately prepared didactic teaching methodologies. This program is organized as an upgrade to ecological knowledge, as well as a supplement in teaching methods, given that modern didactic and pedagogical methods are applied in working with children. Program includes interactive workshops, table games, quizzes in public schools as a supplementary program correlating with school curriculum. Also designing and establishing school gardens as a sustainable infrastructure for outdoor classrooms. Practice also includes (urban) gardening in schools, forestation around the city and small study visits or ecosystem observations. The program is implemented in elementary and secondary schools and is methodologically and thematically adapted to different age groups within the target audience.

https://www.facebook.com/bastaekologika

PRACTICE ANALYSIS

Strengths: Innovative approach, comprehensive education, practical implementation, adaptability, consistent engagement, increased knowledge, and interest (in environmental themes and practices), inclusive education.	**Weaknesses:** Limited Scope; dependency on volunteer teachers.; dependence on donors.
Threats: Funding constraint. competing priorities. policy changes.	**Opportunities**: Expansion potential, partnerships, Integration into curriculum.

YOUNG REPORTERS FOR THE ENVIRONMENT (YRE)

YRE engages participants aged 11-25 in environment-focused citizen journalism, encouraging them to investigate local environmental issues and solutions, and report on them through articles, photos, or videos. YRE uses a tried and tested four-step methodology: 1) investigate; 2) research solution; 3) report and 4) disseminate. Young Reporters for the Environment (YRE) is an award-winning program coordinated by FEE and run in Montenegro by ECOM (from 2008). The YRE program is run in more than 40 countries around the world, and they are the ones implementing the program on a national level. Depending on the country, National Operators organize workshops and events for YRE students as well as National YRE Competitions.

http://mladi-ekoreporteri.org.me/

PRACTICE ANALYSIS

Strengths: YRE is one of 5 programs of the biggest international umbrella NGO related to environmental education YRE as a FEE program is recognized as a partner of Greening Education Partnership, global initiative run by UNESCO. Global Engagement Opportunities.	**Weaknesses:** Voluntary mentor involvement: The involvement of mentors in the program is voluntary and irregular, potentially impacting the consistency and quality of support provided to participants; limited budget.
Threats: Lack of Recognition by the Ministry of Education: The program's absence of official recognition from the Ministry of Education in Montenegro may limit its visibility, funding, and long-term sustainability. Competition with Other Initiatives: YRE may face competition from other environmental education programs or initiatives, potentially diluting its impact and resources. Potential threat of AI.	**Opportunities**: Recognition by the Ministry of Education. and integration of artificial intelligence: Exploring the use of artificial intelligence could enhance the program's effectiveness in data analysis, outreach, and engagement, potentially improving outcomes and scalability. Non-formal education benefits.

SCOUTING PROGRAM FOR ENVIRONMENTAL AWARENESS

Scouting activities involve a wide range of practices, including learning basic survival skills, exploring the natural environment, community volunteering, developing leadership and teamwork, as well as promoting environmental responsibility. The basic rules vary depending on the specific activity but typically involve collaboration, respect for nature, and safety measures. The objectives of sc.outing activities include promoting teamwork, developing survival skills, fostering environmental awareness among youth, and promoting a healthy lifestyle through outdoor activities. Scouting activities have a wide range of positive impacts on participants, including building self-confidence, developing social skills, promoting a healthy lifestyle, fostering environmental awareness, instilling responsibility and solidarity, and encouraging creativity and innovation. Additionally, scouting activities provide young people with the opportunity to explore nature, develop an emotional connection with the environment, and build lasting friendships

https://www.scouts.org.me/

PRACTICE ANALYSIS

Strengths: Strong community engagement; diverse program offerings. Partnership Opportunities: Scouts Montenegro collaborates with various stakeholders, such as local governments, NGOs, & international organizations, expanding its reach & resources for implementing initiatives. Positive impact on youth.	**Weaknesses:** Limited financial resources. volunteer dependency; recognition and support: despite its impactful initiatives, Scouts Montenegro may lack official recognition and support from governmental bodies, which could hinder its ability to access resources and expand its influence.
Threats: Changing societal priorities: shifting societal priorities and competing interests may reduce the emphasis on youth development and environmental conservation, potentially impacting the relevance and support for Scouts Montenegro's initiatives. Regulatory constraints: regulatory changes or bureaucratic hurdles may impede the organization's operations.	**Opportunities**: Expansion of partnerships; leveraging technology: embracing technological tools & platforms can enable the organization to reach a wider audience, facilitate online learning, & streamline administrative processes; advocacy & awareness campaigns (for environmental conservation, youth empowerment, & social inclusion), mobilizing support for relevant causes.

YOUTH LAUNCH

The objective of the Youth Activism Network of Montenegro is to network youth activists, volunteers, and peer educators to strengthen the position of young people and work on solving social problems that burden young individuals. The network organizes educational activities, workshops, campaigns, and public events to empower young people to actively engage in societal processes and contribute to solving social problems. Activities include raising awareness on important issues, promoting democratic values, and developing leadership and activism skills.

https://www.moacg.me/ 

PRACTICE ANALYSIS

Strengths: Active networking of young activists, volunteers, and peer educators. Organization of educational programs and workshops contributing to the capacity building of youth. Promotion of democratic values and involvement of youth in societal processes. Collaboration with relevant institutions and partners at the local, national, and international levels.	**Weaknesses:** Possible limitations in financial resources for implementing programs and activities. Need for continuous engagement and motivation of youth to sustain activity and interest in participation. Challenges in finding suitable venues and resources for organizing events and workshops.
Threats: Limited resources and competition for financial funding from other organizations and projects. Possible political and institutional challenges that may hinder the organization's work. Potential lack of support or interest from certain segments of society or institutions.	**Opportunities**: Growing interest of young people in participating in activism and social change. Possibility of receiving support and financial resources through projects and grants from domestic and international organizations. Potential for expanding influence and strengthening partnerships with other organizations and institutions.

BEST PRACTICES IN OTHER FORMS OF EDUCATION

SUSTAINABILITY SUNDAY WORKSHOP

During the Sustainability Sunday Workshop, participants showed a keen interest and eagerness to learn about sustainable living practices. They actively participated in discussions revolving around topics such as healthy eating and its impact on the environment. Many expressed a genuine desire to incorporate more sustainable habits into their daily routines, demonstrating a growing awareness of their ecological footprint. One aspect of the workshop that stood out was the composting activity. Participants were particularly enthusiastic about this segment, eagerly absorbing information about waste reduction and environmental stewardship. As they engaged in hands-on composting activities, such as creating their own compost bins using recycled materials, their enthusiasm only grew. Many expressed excitements about the prospect of implementing composting practices in their own homes, viewing it as a tangible way to contribute positively to the environment. In overall, the workshop served as a catalyst for meaningful discussions and practical learning experiences, inspiring participants to explore new ways of living that are both healthier for themselves and more environmentally sustainable.

PRACTICE ANALYSIS

Strengths:
High level of interest and enthusiasm from participants, even at such a young age.
Diversity of participants in terms of gender and socio-economic status provides a wealth of different perspectives. Active participation in discussions and hands-on activities, indicating engagement and a desire to learn.
Positive reactions to practical activities, such as composting, demonstrate the effectiveness of learning through hands-on experience.

Weaknesses:
Limited resources such as time and budget may hinder the implementation of additional activities and the expansion of workshop content.
Lack of long-term monitoring may make it difficult to assess the workshop's long-term impact on participants' behavior.

Threats: Lack of support from the school system. Funding constraints or budget cuts within educational institutions or community organizations could hinder the sustainability workshop's ability to secure necessary resources for its implementation. Lack of long-term commitment or sustained interest from participants, as well as turnover in leadership or organizational support, may undermine the continuity and impact.	**Opportunities**: Growing awareness of the importance of sustainable living presents an opportunity to expand sustainability programs among youth. Participants' interest in additional topics suggests potential for expanding and enhancing workshop content. Partnerships with local organizations or schools can provide additional resources and support for workshop implementation. Influence and strengthening partnerships with other organizations and institutions.

PEER ENVIRONMENTAL EDUCATION

Participants in the workshop exhibited a high level of enthusiasm and interest right from the introductory activities, eagerly delving into discussions on composting and waste management. This initial engagement set a positive tone for the rest of the workshop. Throughout the session, students remained actively involved, eagerly absorbing information on composting techniques and waste reduction strategies. They asked insightful questions and contributed to discussions, demonstrating their commitment to learning. The hands-on activities, especially creating their own composting bins, sparked excitement and curiosity, motivating them to participate actively in the composting process at home. Some students expressed surprise and concern about the extent of waste generated and its environmental impact. Learning about the role of composting in waste reduction and environmental preservation prompted reflection on their consumption habits and the importance Students suggested incorporating more outdoor activities into future workshops to further engage with nature and the environment. Some participants recommended organizing follow-up sessions to monitor and support their composting efforts at home. Students expressed interest in learning about other sustainable practices beyond composting, such as recycling and energy conservation. Participants suggested inviting guest speakers or experts to provide additional insights and information on environmental topics.

PRACTICE ANALYSIS

Strengths:
The wide age range of participants from second-grade elementary school to second-grade high school allows for diverse perspectives and experiences. Participants are inherently interested in environmental issues, fostering a conducive learning environment and active engagement. A high level of enthusiasm and interest was demonstrated by participants from the beginning of the workshop, indicating strong motivation and receptiveness to learning.

Weaknesses:
The broad age range of participants may pose challenges in tailoring content and activities to suit their varying levels of comprehension and maturity. Limited time and resources may constrain the depth and breadth of topics covered during the workshop, potentially leaving some areas underexplored. Lack of expertise among workshop facilitators in certain environmental topics beyond composting may limit the scope of discussions and learning opportunities.

Threats:
Environmental factors such as weather conditions or seasonal variations may impact the feasibility of outdoor activities, limiting opportunities for experiential learning. Inadequate follow-up and support mechanisms for participants' composting efforts may result in disillusionment or disengagement over time, diminishing the workshop's long-term impact on behavior change.

Opportunities:
Incorporating more outdoor activities into future workshops can provide hands-on experiences and foster a deeper connection with nature and the environment. Organizing follow-up sessions to monitor and support participants' composting efforts at home can reinforce learning and encourage sustained engagement with sustainable practices. Expanding the workshop's focus to include other sustainable practices, such as recycling and energy conservation, can broaden participants' understanding of environmental stewardship.

SOLUTION TO LOCAL PROBLEMS

Throughout the computer science task, participants showcased exceptional dedication and resilience, demonstrating their commitment to addressing societal anomalies within their local community. Initially challenged by the task's complexity, they swiftly engaged in the process, showcasing their critical thinking and problem-solving abilities as they progressed. The project aimed to equip students with skills in using MS Word while identifying socially significant problems and recognizing the potential role of philanthropy in societal progress. Additionally, it sought to enhance entrepreneurial skills and improve precision in interpreting and implementing instructions. Participants carefully analyzed various issues, identified root causes, and considered the potential consequences of interventions, resulting in high-quality project proposals. Despite challenges, they remained determined, reflecting their understanding of the essence of Dreyfus' definition of computer science. At the project's conclusion, participants not only met the task requirements but also gained valuable insights and skills. They acknowledged the importance of addressing local social issues and expressed readiness to apply their newfound knowledge to continue effecting positive changes in their communities. As the project task concluded, participants offered valuable feedback and tips for the development of future research endeavors. Many expressed gratitude for the opportunity to engage with real-world problems, recognizing the importance of honing skills in project management and problem-solving. They emphasized the empowerment that comes with taking ownership of local issues and striving towards meaningful solutions. In their reflections, participants highlighted the need for additional resources and support to delve deeper into the complexities of societal challenges. They acknowledged that addressing these issues requires more than just passion; it demands a deep understanding of underlying factors. Suggestions included adopting a more interdisciplinary approach in future projects, drawing on insights from various fields to craft comprehensive solutions. Despite challenges faced, the project left a lasting impact, sparking a sense of responsibility and agency among participants. It demonstrated that even as high school students, they possess the power to drive positive change in their communities. Moving forward, they are eager to continue their journey as active citizens and social entrepreneurs, armed with the skills and insights gained from this transformative experience.

PRACTICE ANALYSIS

Strengths:
Strengths:Diverse group of high school students with various backgrounds and interests, providing a rich pool of perspectives and expertise. Exceptional dedication and resilience demonstrated by participants, showcasing their commitment to addressing societal anomalies and developing problem-solving skills. project aimed at equipping students with practical skills in using MS Word, identifying social issues, and recognizing the potential for philanthropy in societal progress. Participants' careful analysis of issues, identification of root causes, and consideration of potential interventions resulted in high-quality project proposals, reflecting their understanding of computer science principles and real-world application.

Weaknesses:
The limited time frame for the project may constrain the depth of research and analysis, impacting the comprehensiveness of proposed solutions. Lack of expertise or experience in interdisciplinary approaches may limit participants' ability to craft comprehensive solutions that address multifaceted societal challenges.

Threats:
Limited access to technology or software beyond MS Word may hinder participants' ability to explore alternative solutions or develop a broader range of technical skills. Limited availability of laboratory equipment or facilities may restrict participants' opportunities for hands-on experimentation and scientific exploration, constraining the scope of their research projects. Inadequate access to mentorship or guidance from experienced professionals in relevant fields may hinder participants' ability to receive constructive feedback and mentorship, impacting the overall development of their research skills and projects, or cause disengagement over time, diminishing the workshop's long-term impact on behavior change.

Opportunities:
Valuable feedback and insights from participants can inform the development of future research endeavors, enhancing the effectiveness and relevance of future projects. Recognition of the importance of additional resources and interdisciplinary approaches presents opportunities for collaboration with experts from various fields and organizations. The lasting impact of the project on participants' sense of responsibility and agency provides a foundation for continued engagement and leadership in addressing local social issues.
Participants' readiness to apply newfound knowledge and skills to driving positive change in their communities offers opportunities for sustained impact and community development.

CENTER FOR PROTECTION AND RESEARCH OF BIRDS

During the introductory activities, participants exhibited a palpable sense of curiosity and eagerness to learn more about citizen science and its pivotal role in scientific research and conservation. Their interest was particularly piqued by the real-world examples presented, showcasing how citizen science initiatives have directly impacted bird conservation efforts. The story of the black-eyed babbler's rediscovery resonated deeply with attendees, serving as a powerful testament to the tangible outcomes achievable through community involvement in biodiversity monitoring. This narrative sparked discussions and reflections on the potential of citizen science to effect positive change in local ecosystems. Moreover, participants expressed genuine enthusiasm about contributing to the Spring Alive program, recognizing it as an opportunity to actively engage in meaningful conservation actions. Their inquiries centered on practical aspects such as bird identification techniques and the process of submitting observation data, reflecting a genuine desire to participate effectively in citizen science endeavors.

PRACTICE ANALYSIS

Strengths:
Diverse participation; youth engagement; passionate backgrounds: Participants came from various backgrounds, ranging from individuals with a keen interest in ornithology to newcomers to environmental activism, providing a diverse pool of knowledge, perspectives, and experiences to enrich discussions and collaborative efforts. Real-world Impact: The presentation of case studies, such as the rediscovery of the black-eyed babbler, resonated deeply with participants, illustrating the tangible outcomes achievable through community involvement in biodiversity monitoring and conservation efforts.

Weaknesses:
Resource Accessibility: Some participants highlighted the need for more comprehensive resources and instructional materials to support engagement, particularly in bird identification and data collection, suggesting potential gaps in providing adequate support and guidance. Limited Outreach: While the workshop attracted a diverse group, there may be opportunities to further expand outreach efforts to reach underserved communities or individuals less engaged in environmental initiatives, potentially through targeted marketing and outreach strategies. Sustainability Challenges: There may be challenges in sustaining youth engagement beyond the workshop without ongoing support, mentorship, and follow-up activities to maintain interest and involvement in citizen science projects.

Threats: Resource Constraints: Limited resources, including funding, personnel, and technological infrastructure. Environmental Challenges: External factors such as habitat loss, climate change, pollution, and biodiversity decline pose ongoing threats to bird populations and ecosystems.	**Opportunities**: Enhanced Education and Training: The workshop presents an opportunity to develop and deliver tailored educational resources, workshops, and training sessions to deepen participants' understanding of citizen science methodologies, bird identification techniques, and the importance of biodiversity conservation. Community Collaboration. Technological Integration: Leveraging technology, such as mobile applications, online platforms, and digital tools, can facilitate data collection, analysis, and communication, streamlining citizen science activities and enhancing participant engagement, feedback, and collaboration.

EXPLORING THE MAGIC OF MUNIKA

In the one-day workshop "Exploring the Magic of Munika," participants had the opportunity to delve deeper into understanding Munika, a relic tree species dating back to pre-ice age periods. The workshop aimed to acquaint participants with the significance of Munika in preserving natural habitats and biodiversity, as well as inspire them to engage in its protection. In the introductory activity, participants had the chance to learn basic information about Munika, its history, and its significance. Pictures and photographs of Munika and its forests were shown to create an impression of this unique tree. Following the introductory session, a lecture on dendrochronology, the scientific method of studying tree rings, was conducted. Participants learned how the analysis of tree rings can reveal much about climate change and environmental conditions. An interactive discussion on the importance of Munika conservation followed, during which participants had the opportunity to share their views and reflect on ways they could contribute to preserving Munika's forests. One of the most creative parts of the workshop was the artistic activity, where participants could express themselves through various art forms inspired by Munika. Drawings, paintings, photographs, and sculptures depicting the beauty of Munika and its habitat were created.

At the end of the workshop, participants gathered for a collective reflection, where they shared their impressions and plans. This activity encouraged participants to consider how they can continue to support Munika and its forest protection efforts and how they can use their talents and skills to contribute to this important goal.

PRACTICE ANALYSIS

Strengths: Large number of participants allows for diverse perspectives and contributions, enriching the workshop experience and fostering a sense of community. Predominantly young participants aged between 25 and 30 bring energy, enthusiasm, and a fresh outlook to the workshop, enhancing engagement and participation levels. Emotional and profound reactions from participants during the workshop, including moments of silence, tears, and goosebumps, indicate a deep emotional connection to Munika's story and a strong commitment to its preservation. Artistic activity provides a creative outlet for participants to express their emotions and interpretations of Munika's significance, fostering personal connection and ownership of the conservation cause.	**Weaknesses:** Limited duration of the workshop may restrict the depth of exploration and understanding of Munika's ecological importance and conservation challenges. Dependence on participants' prior knowledge and interest in environmental issues may result in varying levels of engagement and understanding among participants. Constraints in resources or expertise may limit the scope and variety of artistic activities available to participants, potentially impacting the richness of their creative expressions. Lack of follow-up mechanisms or long-term engagement strategies may hinder the sustainability of participants' commitment to Munika's conservation beyond the workshop.

Threats:
Shifting societal priorities or competing interests may diminish ongoing support and funding for Munika's conservation efforts, jeopardizing the sustainability of initiatives stemming from the workshop. Munika's survival could be seriously jeopardized by increasing environmental threats like habitat degradation, climate change, and deforestation, necessitating swift and coordinated conservation efforts. Securing protected status for Munika's forests or putting conservation measures into action may be hampered by bureaucratic or regulatory obstacles, which would delay or obstruct efforts to protect the region's future. Apathy or skepticism on the part of the general public toward conservation initiatives may impede community involvement and advocacy efforts, slowing the progress towards Munika's protection and extending threats to its existence.

Opportunities:
Leveraging the emotional connection and commitment demonstrated by participants can inspire ongoing advocacy and action for Munika's protection, amplifying impact and outreach efforts. Collaboration with local environmental organizations or government agencies can provide access to additional resources, expertise, and support for ongoing conservation efforts. Expanding the workshop's reach through digital platforms or virtual experiences can broaden participation and raise awareness about Munika's importance beyond the workshop's immediate attendees. Partnering with artists, scientists, and educators can enrich the workshop experience and offer diverse perspectives on Munika's significance and conservation challenges.

ALBANIA

Climate change is often said to be the defining issue of our time. Indeed, climate change threatens the stability of socio-ecological systems around the globe and requires unprecedented societal transformation now. The Intergovernmental Panel on Climate Change 2022 report states that environmental issue's impacts are concurrent and interact with other significant societal changes that have become more salient, including a growing and urbanizing global population; significant inequality and demands for social justice; rapid technological change; continuing poverty, land, and water degradation; biodiversity loss; food insecurity; and a global pandemic (Pörtner et al., 2022).

Environmental education affects agricultural, forestry, fisheries, and aquaculture sectors, reducing crop yields, increasing tree mortality, and disrupting marine ecosystems. The warming has altered biological timing and distribution, impacting food quality and availability. Climate extremes have further threatened food security, with events like droughts and marine heatwaves leading to reduced food availability and increased prices. Vulnerable groups, such as low-income households and small-scale producers, face higher risks of malnutrition and livelihood loss. Projected impacts suggest that climate change will render some food production areas unsuitable, exacerbate food and nutrition insecurity, and challenge outdoor workers and livestock due to heat stress (Bezner Kerr et al., 2022).

The UN Sustainable Development Goals (SDGs) provide insights on the impact of climate change. Climate change can hinder achieving the goals or even reverse current progress in various SDGs, primarily poverty reduction (SDG1), zero hunger (SDG2), gender equality (SDG5), and reducing inequality (SDG10) (Filho, Lovren, Will, Salvia, & Frankenberger, 2021). The Mediterranean region, where Albania lies, is characterized by unique biodiversity and sociocultural richness and is currently facing significant challenges due to climate change. This area has seen a rise in surface temperature of 1.5°C above pre-industrial levels, which has led to more frequent and intense heatwaves, droughts, floods, and sea-level rise, as well as cascading impacts on marine and terrestrial ecosystems and human activities like agriculture, forestry, fisheries, and tourism (Ali et al., 2022). Albania stands out as one of the Balkans region countries most susceptible to shifts in climate trends. The last decade and a half have witnessed significant changes in weather patterns, with a tendency towards higher temperatures

(Albania has experienced an increase in annual temperature of 1°C since the 1960s), rainfall intensity has increased, leading to flood events, and intense storms, floods, heatwaves, and wildfires are becoming more frequent, unpredictable, and severe due to projected climate change trends. Key sectors impacted by shifts in climate are agriculture, water, energy, health, and coastal zones (The World Bank Group, 2021). Higher temperatures, heat waves, and heat extremes are a major concern for Albania, which impact the health of vulnerable populations. Changes in climate and increasing extreme weather events may significantly impact Albania's economy and key sectors. Critical infrastructure and agricultural production, including crops and livestock, are at risk from these hazards (FAO, 2018).

In 2020, **Albania enacted a law on climate change** (Ndryshimet Klimatike, 2020) with the following objectives: **a) reduce greenhouse gas emissions; b) expedite adaptation processes to mitigate the detrimental effects of climate change; c) uphold the Republic of Albania's obligations to the global climate change convention; d) establish a comprehensive legal and inter-institutional framework for national climate action in alignment with EU climate change regulations; e) align with nations acknowledging the climate emergency, in line with the European Parliament's decision dated November 28, 2019.**

Albania has drawn up a climate change strategy outlining specific measures to mitigate potential risks and damages associated with climate change. These measures encompass energy, transport, water, agriculture, forestry, health, biodiversity, and tourism (Ministria e Turizmit dhe Mjedisit, 2019). Albania (2022) conducted the monitoring of the action plan of the national strategy on climate change for 2019–2020 and found that, despite some areas receiving positive ratings, several key areas showed significant room for improvement. One such area was access to climate information, and another lacked a monitoring and evaluation system to track timely progress.

The Fourth National Communication of Albania on Climate Change (Kamberi, Islami, Bruci, & Salisbury, 2022) acknowledges climate change as a cross-cutting issue for all sectors in Albania and beyond. The report is focused on the Vjosa Basin River but also provides a general view of the impact of climate change on agriculture, water, health, and biodiversity. The impact of climate change on agriculture in Albania is multifaceted, with both positive and negative consequences.

Due to the diffusion of seawater and coastal erosion, sea level rise exacerbates these threats. It results in flooding, land loss, and groundwater salinization, all of which contribute to a considerable loss in biodiversity. There is an observable shift in water fauna and flora, leaning towards species that prefer warmer and saltier conditions (Kamberi, Islami, Bruci, & Salisbury, 2022).

In terms of education, awareness-raising, and information sharing, there remains significant work to be done in Albania (Kamberi, Islami, Bruci, & Salisbury, 2022). The integration of climate change and sustainable development education is still emerging. At the pre-university level, subjects like society, biology, and geography incorporate climate change content, complemented by extracurricular activities that raise environmental awareness. However, the higher education sector in the country lacks specialized programs in climate change or sustainable development. NGOs, international organizations, and occasionally private companies have been most active in the awareness-raising campaign for the public regarding climate change. Environmental awareness at all levels remains low and cooperation between all relevant stakeholders requires further strengthening. Albania is part of the Green Agenda among the six Western Balkans countries, signed at the Sofia Summit (RCC, 2021). This action plan not only outlines regional steps for climate protection but also underscores the vital role of youth. Recognizing that they are the most affected by current decisions on climate and environmental issues, youth are not merely beneficiaries but pivotal stakeholders in the agenda's execution. Their distinctive insights, marked by innovation and critical thinking, ensure the initiative's success.

Albanian younger generations actively participate in environmental preservation, with high engagement across age groups. Children are inclined towards eco-friendly transportation and energy conservation but lag in waste sorting and plastic abstinence. Adolescents prefer walking and organic food consumption and are potential environmental advocates but seek more institutional support. Young adults lean towards walking, waste sorting, and organic diets, yet they face challenges in community engagement and need more robust support systems. Across all age groups, there's a strong call for unity in combating climate change and a perceived need for greater involvement from all sectors of society.

Albania's children, adolescents, and young people exhibit varying degrees of knowledge and concern about environmental issues. Adolescents and young

adults demonstrate progressively more profound insight into the issue. According to a UNICEF report (2023), Albania's children, adolescents, and young people exhibit varying degrees of knowledge and concern about environmental issues. Adolescents and young adults demonstrate progressively more profound insight into the issue. According to a UNICEF report (2023), 41% of adolescents and 42% of young people have limited, moderate, and extensive knowledge of environmental issues; 50% of adolescents are alarmed about climate change, with predominant concerns: direct impacts on daily life and potential societal ramifications, biodiversity loss, health threats, and broad climatic changes.

Young adults emphasize the interconnectedness of personal actions with broader societal impacts; they have strong recognition of the benefits of walking and cycling (57.5% and 60.3%), recycling (68.3%), and tree planting (75%). There is a need for awareness around sustainable fashion and the importance of donating clothes. Children and young adults display a passionate commitment to climate action. **Children advocate for collective responsibility, adolescents combine personal convictions with calls for systemic change, and young adults stress shared responsibility while constrained by societal inaction. Across all age groups, personal beliefs serve as a notable driving force (42.2% to 81.1%); the love for wildlife resonates strongly with 66.7% of adolescents and 83% of young people as a motivator.**

Albanian younger generations actively participate in environmental preservation, with high engagement across age groups. Adolescents favor walking and organic food consumption and are potential environmental advocates but seek more institutional support. Young adults lean towards walking, waste sorting, and organic diets, yet they face challenges in community engagement and need more robust support systems. Across all age groups, there's a strong call for unity in combating climate change and a perceived need for greater involvement from all sectors of society.

BEST PRACTICES IN NON-FORMAL EDUCATION

ALBANIAN YOUTH FOR ENVIRONMENTAL EDUCATION (AYFEED)

Students used GIS to learn about topics such as endangered species in the country and the effects of improper waste management on the environment. Their final project was the creation of Tirana's very first "green map" which was then delivered to the Mayor of Tirana. Activities include raising awareness on important issues, promoting democratic values, and developing leadership and activism skills. Students used GIS to learn about topics such as endangered species in the country and the effects of improper waste management on the environment. Their final project was the creation of Tirana's very first "green map" which was then delivered to the Mayor of Tirana. The workshop helped to raise awareness about environmental issues, enabled students as young as 13 to use GIS software and provided them with the toolset, knowledge, and motivation to initiate environmental change in their own communities and schools.

PRACTICE ANALYSIS

Strengths:
Active networking of young activists, volunteers, & peer educators. The organization of educational programs & workshops contributes to the capacity building of youth. Promotion of democratic values and involvement of youth in societal processes. Collaboration with relevant institutions & partners at the local, national, & international levels.

Weaknesses:
The requirement for specific skills. Possible limitations in financial resources for implementing programs and activities. Need for continuous engagement and motivation of youth to sustain activity and interest in participation. Challenges in finding suitable venues and resources for organizing events and workshops.

Threats:
Limited resources and competition for financial funding from other organizations and projects. Possible political and institutional challenges that may hinder the organization's work. Potential lack of supportor interest from certain segments of society or institutions.

Opportunities:
There is a growing interest among young people in participating in activism & social change. Possibility of receiving support & financial resources through projects & grants from domestic and international organizations. Potential for expanding influence & strengthening partnerships with other organizations and institutions.

IMPROVING ENVIRONMENTAL EDUCATION

The activities of this project were for the students in the 6th, 7th, 8th, and 9th grades. The activity included an informative presentation by specialists to inform people about environmental pollution and its effects on human health. The activity was developed in two parts: the first was concentrated on organic pollution and the second on industrial pollution, showing their effects on health as well. In the framework of the project, the environment of the school has improved significantly. The students have also contributed to awareness activities like distributing leaflets and informing the community of the acid-lead battery contamination. A presentation on the forest and pasture role in the creation of a healthy environment and the role of the rivers on the natural environment made up an informative presentation for the students of 'Xhemal Cekini' school, Uznova.

PRACTICE ANALYSIS

Strengths: Linking activity to participants' real lives. Easy implementation of the activity both in school and other educational settings. Active participation of students. Critical thinking and raising awareness about the environment; social learning context; collective discussion of action plans through open and participatory processes.	**Weaknesses:** Limited reach (especially among schools or other contexts that do not have access to technological means); Time constraints (integration of environmental activities into an overloaded curriculum).
Threats: Competition and disagreements between students; Competing priorities in schools (prioritization of other academic subjects over environmental education).	**Opportunities**: Opportunity for collaboration between students; environmental awareness; social learning; encouraging environmental action; and not just theoretical education on the environment.

YOUTH- ENVIRONMENTAL CHALLENGES

The aim of the project "Youth- Environmental Challenges" was to educate a target group of high-school students on Environmental Legislation, Youth Awareness on Environmental Challenges, Sustainable Development and Climate Change through the application of environmental and legal instruments in accordance with international standards and norms. The main objective of the project was raising awareness through high-school students about the importance of environmental protection and promotion of the environment preservation practices. The project promoted exploitation of the potential of young people and their community through direct involvement and contribution to the benefit of the community and the environment where they live. 1. Informing pupils in three high schools Sami Frasheri, Partizani, Petro Nini Luarasi in Tirana districts on Environmental Protection, Sustainable Development, Climate Change and Environmental Legislation. 2. The challenges which represent climate change and what can currently be achieved in environmental protection against this phenomenon. 3. Recognition of environmental legislation and integration of the new generation into decision-making on environmental issues. 4. Student awareness on solid waste recycling, as the most effective measure for environmental protection.

PRACTICE ANALYSIS

Strengths: Creative thinking; Decision-making; Working in groups; Communication; Critical thinking; Long-term impact.	**Weaknesses:** Relies on external funding and resources to sustain the program, making it vulnerable to changes in funding priorities or availability.
Threats: The program's absence of official recognition from the Ministry of Education in Albania may limit its visibility, funding, & long-term sustainability; may face competition from other environmental education programs or initiatives, potentially diluting its impact and resources. Potential Threat of Artificial Intelligence.	**Opportunities**: Student leadership; Opportunity for collaboration between students; Comprehensive learning, encouraging environmental action and not just theoretical education on the environment; Community Involvement: Engaging parents, alumni, and community members in the program can expand its reach and support base..

YOUTH ENVIRONMENTAL EMPOWERMENT THROUGH THE LENS OF THE SHKUMBIN RIVER

The aim of the project was to educate a target group of high school students on environmental legislation, youth awareness of environmental challenges, sustainable development, and climate change through the application of environmental and legal instruments in accordance with international standards and norms. The main objective of the project was to raise awareness among high school students about the importance of environmental protection and the promotion of environmental preservation practices. The project promoted the exploitation of the potential of young people and their communities through direct involvement and contribution to the benefit of the community and the environment where they live. 1. Informing pupils in three high schools (Sami Frasheri, Partizani, and Petro Nini Luarasi) in Tirana districts on environmental protection, sustainable development, climate change, and environmental legislation. 2. The challenges that represent climate change and what can currently be achieved in environmental protection against this phenomenon. 3. Recognition of environmental legislation and integration of the new generation into decision-making on environmental issues. 4. Student awareness of solid waste recycling as the most effective measure for environmental protection.

PRACTICE ANALYSIS

Strengths: Strong Community Engagement Creative imagination and thinking, Problem-solving; Decision-making; Holistic approach; Educational value; Long-term impact	**Weaknesses:** Obstacles to curriculum integration; Time Constraints (incorporating environmental activities into a packed curriculum); More materials are required compared to other activities. Relies on external funding & resources to sustain the program.
Threats: Prioritization of other academic subjects over environmental education. Competition with Other Initiatives.	**Opportunities**: Potential to expand program activities to include more diverse outdoor experiences, educational workshops, & community initiatives, catering to a wider range of interests and needs. Possibility to advocate for policies that support youth development & social inclusion.

BEST PRACTICES IN OTHER FORMS OF EDUCATION

THE ENVIRONMENTAL EDUCATION BOOK - ENVIRONMENTAL EDUCATION PROGRAM FOR SCHOOLS IN TIRANA

Environmental education is considered a very important issue for sustainable development and society. In this frame, the environmental book developed environmental patterns and models for schoolchildren. Upon request of the Municipality of Tirana and the teachers' need for such a book in the schools, REC Albania published the book that was later distributed at the beginning of school year 2004-2005 for the pupils of the capital, Tirana. The Target groups were the following: Teachers and pupils (ages 11–16); educators and teachers on environmental protection; Environmental NGOs; and the community.

Improvement of the environmental situation in general: Knowledge of sustainable development on environmental issues by raising environmental awareness among teenagers and students in Tirana city; Publication of the environmental book "Environment in my city" (The title in Albanian is "Mjedisi në qytetin tim"); Distribution to the schools of Tirana; Improving environmental behavior through trainings of teachers on "How to use it".

At last, an environmental educational book was prepared to be used at schools as an extracurricular information source. That practice linked the school program and environmental issues through supporting direct environmental education activities That pilot program supported the establishment of a pilot network of schools around the municipality area for experience and knowledge exchange in the environmental field and information on similar programs at country and regional level in Central and Eastern Europe. Three training courses were organized and held in Tirana. More than 100 teachers from Tirana's school were trained with the new concepts of environmental education and were instructed on the most effective ways and means to hold them, especially the practical training courses.

PRACTICE ANALYSIS

Strengths: Mjedisi ne qytetin tim" was the first color book for kids, attractive and interesting for learning about nature and urban problems. At last, an environmental educational book was prepared to be used at schools as an extracurricular information source. That practice linked the school program and environmental issues through supporting direct environmental education activities That pilot program supported the establishment of a pilot network of schools around the municipality area for experience and knowledge exchange in the environmental field and information on similar programs at the country and regional level in Central and Eastern Europe.	**Weaknesses:** The environment book was developed only for Tirana city and Tirana's (urban) problems. The absence of serving as a facility to other schools. The locality may hinder the multiplication of other municipalities.
Threats: Limited resources and competition for financial funding from other organizations and projects. There may be political and institutional challenges that may hinder the organization's work as the leading party changes. There is a potential lack of support or interest from certain segments of society or institutions.	**Opportunities**: There is a growing interest among young people in participating in activism and social change. Possibility of receiving support and financial resources through projects and grants from domestic and international organizations. Potential for expanding influence and strengthening partnerships with other organizations and institutions.

CODING FOR SUSTAINABLE DEVELOPMENT GOALS

Traditional education provides students with few opportunities to understand and solve real world problems such as global climate change, gender equality, hunger, poverty or good health and well-being. The Sustainable Development Goals (SDGs) are the core of the 2030 Agenda for Sustainable Development, adopted by all member states of the United Nations as a road map to achieve peace and prosperity on the planet, encouraging global development. Teachers can use the SDGs in the classroom as a tool for students to develop their critical thinking, but also to help them find their identity and purpose. Combining basic elements of coding and computational thinking with the SDGs will boost your students' confidence, and you will help them develop their creativity, entrepreneurial spirit, problem-solving or communication skills. In the activities below, students will apply the principles Scratch, ASCII coding and unplugged coding to topics of global and social relevance today. Teachers will be raising awareness about the sustainable development goals while helping them develop empathy, active citizenship, and prosocial skills in a fun and engaging way.

PRACTICE ANALYSIS

Strengths: Replication to different settings: Code Week Challenges are activities that you can do on your own, in the classroom, with colleagues, or with friends. The formation of guidelines on how to complete the challenges, but you can adapt them so that they suit the needs, interests, and age of your participants.	**Weaknesses:** Time Constraints (incorporating environmental activities into a packed curriculum); Material constraints: More materials are required compared to other activities; Limited reach (especially among schools or other settings of low socioeconomic status that do not have access to technological means). Socioeconomic Barriers: Barriers such as lack of access to technology or resources may hinder participation among the most marginalized youth.
Threats: The lack of linking activity to participants' real life; Policy support (activity can serve as a starting point to support environmental policies and initiatives).	**Opportunities**: Opportunity for self-awareness and self-reflection; Increase environmental awareness; Encourage environmental action and not only theoretical education on the environment; Policy support.


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7. FINDINGS OF THE STUDY

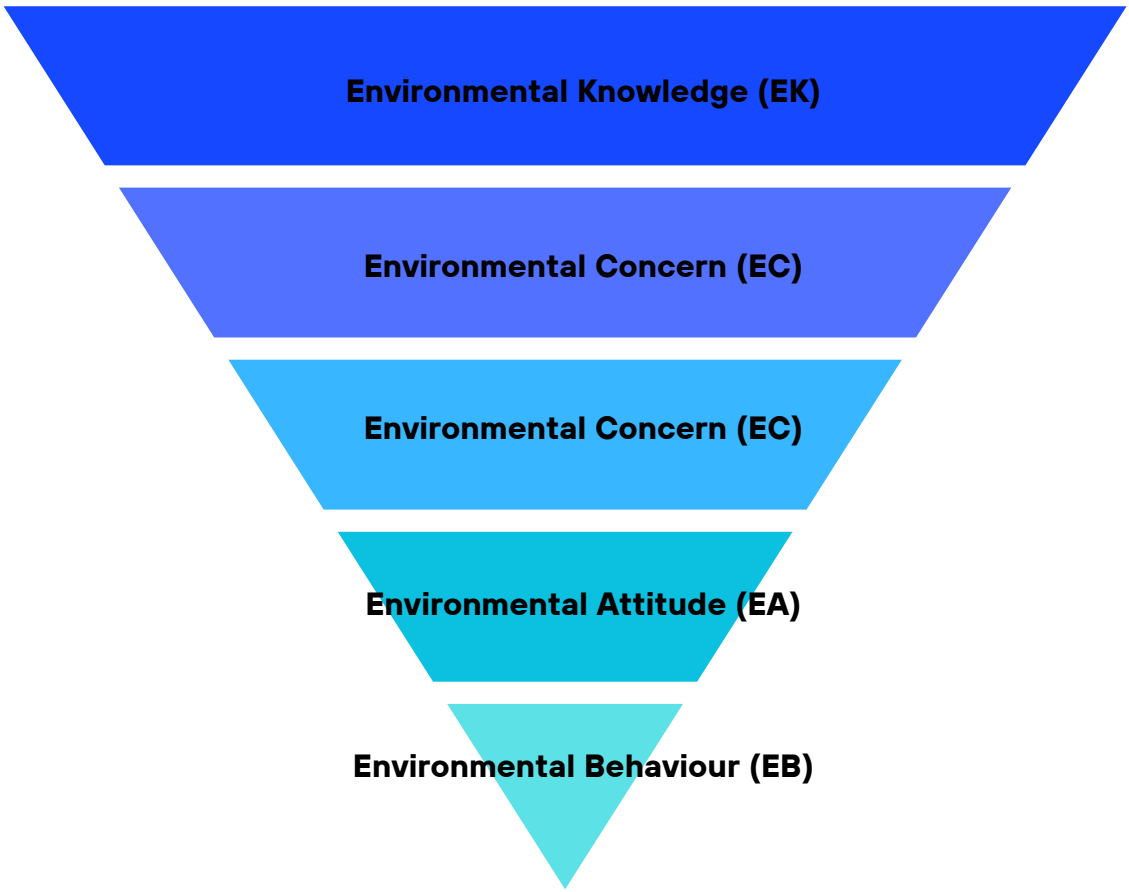
To have an impactful output from the research study and to have some final conclusions and recommendations, we conducted three case studies in different countries and different regions within the countries so that we could have a clear understanding of the contextual situation. The data collected from each country is analyzed and collected for this final comparative analysis. There were two main questionnaires conducted to collect primary data from the field: one for the youngsters (Appendix 1) and one for the professionals and practitioners in the field (Appendix 2).

The survey conducted with the younger people aims to measure their current information, knowledge, attitude, and behavior. Since the final aim of such intervention is to change behavior and make people more environmentally friendly, this process goes through 4 different stages. Those stages are conceptualized in the form of constructs and the measurement is done on 5 points A Likert scale is a rating scale used to measure survey participants' opinions, attitudes, motivations, and more. In this study, it uses a range of answer options ranging from one extreme attitude (1 scale) to the highest (5 scale), including a moderate or neutral option in the middle.

All those constructs are derived from the literature and based on most of the literature, it is supposed that from one construct to the next, the level of inclusion of people tends to decline. In this regard, the 4 stages are: **Construct 1: Environmental Knowledge; Construct 2: Environmental Concern; Construct 3: Environmental Attitude; and Construct 4: Environmental Behavior.**

The main representation of those constructs is the inverted pyramid, which also has the form of a funnel, and it represents that from environmental knowledge to environmental behavior, the level is going to be on a decreasing scale, showing that the level of environmental knowledge is not supposed to be totally translated into environmental concern, which is later not totally converted into an attitude. Finally, despite having some level of those elements, environmental behavior is the most difficult one to achieve and is going to have the lowest results. In general, people have some elements of the first constructs but they do not behave environmentally friendly, that's why we have environmental problems. After defining those constructs, based on literature each of them has different factors which are suggested as respective measures. for the first construct were found 8 main factors, for the second construct were found 12 factors, for the third construct are listed 6 factors and for the fourth construct are found 9 factors. For any further information you can refer to Appendix 1.

While as for the survey conducted with the professionals somehow related to the issue: this questionnaire conducted with the aim to collect some exploratory information based on their opinion, knowledge, and daily practices. In the same line those questions were constructed initially with some general demographic questions and later with the set of questions with Likert scale form. The first construct for them was related to the importance of the environmental education, the second construct was about the main challenges based on their opinion, and the third on is about the key environmental performance and impact indicators. For any further information refer to Appendix 2.



FINDINGS FROM GREECE

In Greece, the intervention carried out in schools from disadvantaged areas was based on the WWF Hellas "Let's Get into Action" activity, which aims to inform young people about the climate crisis and climate change, the reasons why they need to take action themselves, and how they can act to contribute to environmental protection and eliminate energy waste. The case study aims to focus on the following main barriers: difficulty/time constraints in integrating environmental education in schools (social level), lack of climate consciousness (social-environmental level), lack of training, and reduced interest of teachers and students (individual-social level). In this way, it aims to overcome the specific obstacles, motivate the participating individuals to take environmental action, and influence the other levels where we find obstacles in environmental education in Greece (political, economic, legal, and individual attitudes). For example, individual action could influence the negative attitudes of parents or teachers and lead to collective action by exerting pressure for state support and increasing resources for environmental education. Therefore, we strived to create an activity that could be easily implemented both at school and in other educational environments and that would actively involve both students and teachers in it, keeping the participants' interest alive using audiovisual material. At the same time, a crucial point for the choice of this activity is the global knowledge it provides regarding the environmental crisis at an international and local level, combined with the encouragement of environmental action, thus reducing the knowledge gap between environmental attitudes and actual environmental behavior (Pedro & Pedro, 2010). Therefore, the activity can be a trigger for supporting environmental policies and initiatives by enhancing interest in participating in decision-making processes.

The case study was conducted at a high school in Larissa. Larissa, a city in the region of Thessaly, is known for its agricultural production and is an important commercial center of Greece. At the same time, it offers the opportunity to implement the case study in a high school in Katerini, a region of Central Macedonia that is facing socio-economic challenges. The sample of this case study was composed of **126 high school students from the regions of Thessaly and Central Macedonia who completed the questionnaire**.

The students' feedback at the beginning of the activity was positive. The presentation of the videos and their short duration kept the participants' interest active and managed to convey a lot of information in a very short time, as reported by the participants themselves.

At the same time, the fact that the activity provided practical advice (beyond theoretical training) on how to take action on climate change was also positively evaluated. Finally, the opportunity for students to work together in groups during the activity was also positively evaluated, which created a team spirit and an appetite for the activity. As for the teachers, they conveyed that the activity helped them to learn about the climate crisis directly and understandably and was also a trigger for them to seek more information to inform and implement other environment-related activities in their classrooms. As one teacher mentioned, the questionnaire and the activity were ''a motivation for the school community to take action".

The analysis of the results has shown that the level of students' environmental knowledge regarding the environmental topics examined is moderate (level 3) to high (level 5), with an average of 3.41. In particular, **higher environmental knowledge seems to be present in the topics concerning the impact of human behavior on the climate crisis (EK2) at a level of 43% and almost at the same level, 44% of the participants relate their existence and behaviour t nature (EK3). EK8 (Nature may experience a major ecological disaster if human actions continue in their current form) has the highest rating of all the variables with an average of 4.02/5, where 75% of participants are on this at a level considerable and high, receiving the highest average in terms of knowledge level among the students.** Continuing, moderate environmental knowledge seems to exist around recycling and the use of environmentally friendly products, respectively: knowledge about recycling than the average person (EK4) at a majority of 49% is modest; they understand the environmental phrases and symbols on product packages (EK6) at a modest level, having an average of 3.13/5; knowledge on products and packages that are environmentally safe (EK7) has an average value of 3.07/5, where the highest value of 38% falls under the modest level; and environmental issues in general (EK1) again have a 47% under the modest level of knowledge. **The lowest levels of environmental knowledge among male and female students are observed in the knowledge about the choice of products and packaging that reduce landfill waste, where 9.5% of respondents report having insufficient knowledge, 24.6% have low knowledge and 39.7% have moderate knowledge.**

Environmental concern in Greece seem to show moderate to high levels of concern; 43% of them think that the environment is one of the most important issues facing the world today (EC1), and only 14% of them think that the

The importance of the environment is often exaggerated (EC2). Decision-makers are doing far too little to protect the environment (EC3) for 40% of the participants at a considerable level, while 37% of them are doing nothing at all. Issues relating to the environment are very important (EC4) for 39% at a modest level and for 46% at a considerable level. For the majority of them, 73% at a considerable to high level think that the increasing destruction of the environment is a serious problem and if we continue down the same path, we are heading toward an environmental catastrophe (EC5). In general, Greek youth don't think that environmental protection is a Western idea and is not relevant for us in this country (EC6) and the majority agree on the statement that there is a real need for anyone to worry about protecting the environment because it can't take care of itself naturally (EC7).At the same time, many of them think that there are other more serious problems facing our society than the environment (EC8), ranging from low concern (26%) to modest concern (47%). Almost 69% of the participants think that we are not doing enough in this country to protect the environment (EC9) and 65% of them at a high level think that it is important that we try to protect our environment for future generations (EC10). Participants agree that we should devote some part of our national resources to environmental protection (EC11) and disagree with the statement that the benefits of environmental protection do not justify the costs involved (EC12).

Youth environmental attitudes are marked as friendly and mainly concern individual daily actions rather than an effort to influence other people or participation in social actions. 75.4% of participants agree that being environmentally friendly helps to preserve nature (EA5) and 59.6% agree that if given the choice, they would choose green products (EA6), while lower levels of environment-friendly views are detected when it comes to efforts to motivate other people to act on the protection of the environment (EA4) or participate in environmental groups (EA2), although the differences are not significant.

Social Environmentalism

EB 1: Encourage other people to attend an event related to the environment.
EB 2: Talked to other people about the environment.
EB 3: Learn from other people, like longtime residents or elders, to solve an environmental problem.

Conservation Lifestyle

EB 4: Took measures like re-purposing products to reduce my waste and separate containers for paper, plastic, glass, etc.

EB 5: Avoid traveling out of town for non-local products.
EB 6: Looked up scientific information about the environment.

Environmental Citizenship
EB 7: Participated in a policy process like a public comment period that affected the environment,
EB 8: Donated money with the intention of benefiting the environment and willing to pay higher prices for products that are environmentally friendly.
EB 9: Write a letter or email about an environmental issue.

As far as environmental behavior is concerned, this variable has the lowest levels compared to the other variables. Specifically, the overall average of environmental behavior is slightly above the middle, with environmental citizenship being below the base and showing the lowest mean, followed by social environmentalism and conservation lifestyle. These results are quite discouraging, and it seems that knowledge about environmental issues is not necessarily translated into positive environmental actions. The factor that shows the best results in this construct is the declaration that youth have learned from other people, like longtime residents or elders, to solve an environmental problem (EB3). Unfortunately, only 9% of the participants have encouraged other people to attend an event related to the environment (EB1) and only 7.9% have talked to other people about the environment (EB2). Measures like repurposing products to reduce my waste and separate containers for paper, plastic, glass, etc. (EB4) are at a moderate level for 29% of the participants, and only 11% have avoided traveling out of town for non-local products (EB5). They rarely search for scientific information about the environment (EB6) and even more rarely, at a level of only 4%, have participated in a policy process like a public comment period that affected the environment (EB7). They donate (EB8) and write mail (EB9) at the same level, despite being only 7.9%

In parallel to the questionnaire to students was conducted also the questionnaire for the educators. Regarding the barriers that prevent environmental initiatives from having an impact, the vast majority of teachers (80%) agree that the absence of policies related to the implementation of solutions to environmental issues [GEE4 (average = 4.80)] is a very important barrier. Equally important barriers are the lack of a common framework and common understanding in education and policymaking [GEE7, (Average = 4.47)] and the lack of meaningful interaction between stakeholders and networks of professionals [GEE9, (Average = 4, 33)]. With an average of 4.27, the barriers of lack of representation

from various stakeholders (GEE2), lack of systematic thinking and prevalence of Silo thinking (GEE5) and resistance to change, especially at the level of political views (GEE6), are considered equally important in terms of their impact on the success of environmental initiatives. Continuing with an equally high mean, the barrier of lack of socio-economic indicators, cultural differences, and reduced level of adoption of new technologies [GEE10, (Average = 4.07)], while relatively less important barriers are considered to be poor communication between different professionals [GEE8, (Average = 3.93)], lack of cross-sectoral partners [GEE3, (Average = 3, 87)], and minimal data from different sources/data sets [GEE1, (Average = 3.80)].

Finally, the results also highlighted the most important factors of a successful environmental initiative. The most important factor that determines an effective environmental initiative, according to the teachers, is the impact it has on human and/or environmental health [EPI4 (average = 4, 87). This factor occupies the highest mean of all the questionnaire measures, highlighting its importance. Equally important factors for a successful environmental initiative are sustainable resource management [EPI2, (Average = 4.60)] and stakeholder participation and cooperation in them [EPI3, (Average = 4.60)], followed by technological innovations [EPI9, (Average = 4.53)] and the role of policy and regulatory frameworks [EPI8, (Average = 4.47)]. Finally, according to teachers, an important factor for the success and effectiveness of an environmental initiative is the integration of different sources, such as water or energy, and other interconnected sectors into environmental initiatives [EPI1, (average = 4.33)], the integration of biophysical and socio-economic aspects [EPI5, (average = 4.13)], the inclusion of marginalized communities and groups [EPI7, (average = 4.13)], and the promotion of cultural heritage and local communities [EPI6, (average = 4.07)].

FINDINGS FROM MONTENEGRO

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The survey we conducted among young people revealed their familiarity with environmental issues and the human impact on the environment. However, it also indicated a lack of proactive engagement in finding solutions to these problems. **A total of 150 young individuals participated in the survey, with 75% aged between 14 and 18 years and 25% aged below 15 years. The gender distribution among respondents was 45% male and 55% female. The surveys were filled out by youth from disadvantaged areas.**

In terms of environmental knowledge, a substantial **50% of respondents felt they possessed at least a moderate level of knowledge,** with half of them believing their knowledge to be modest and significant percentages claiming considerable (22%) or high (11%) knowledge. **This suggests a positive perception of their understanding of environmental issues.** While many demonstrated a good grasp of the broader concepts regarding human impact on the environment and ecological consequences, practical knowledge, such **as recycling and waste sorting,** appeared to be less prevalent, with **30% claiming low knowledge and 42% modest knowledge in these areas.** Regarding the interpretation of environmental symbols on product packaging, there were mixed levels of understanding, with 19% having poor knowledge, 25% having low knowledge, and only 5% believing they had high knowledge. Similarly, when confronted with the possibility of significant ecological disasters due to current human actions, a considerable 35% acknowledged the severity of the threat, with an additional 35% claiming high knowledge on this matter.

Turning to environmental concern, the survey revealed widespread apprehension among respondents regarding environmental issues. Most notably, **environmental protection was viewed as a critical global priority by a significant 36% majority**, indicating a strong collective consciousness about the importance of preserving the environment. Conversely, only a small 4% minority expressed little concern, highlighting a relatively low level of apathy towards environmental matters. When it comes to the efforts of decision-makers in environmental protection, a significant portion of respondents expressed dissatisfaction, with 7% feeling that these efforts were lacking. A considerable number of individuals showed genuine concern about environmental issues, with 21% expressing high levels of worry and an additional 25% showing considerable concern. This indicates a widespread recognition of the importance of environmental conservation. The survey revealed a worrying trend regarding the perception of environmental protection as a concept foreign to the country's context, with 6% highly concerned about this notion

and 1% expressing considerable concern. A similar trend was observed in responses to EC 7, indicating a need for greater awareness and engagement with environmental issues. The majority recognized environmental protection as crucial, with 36% considering it a high concern. Conversely, only 4% showed little concern. This underscores a shared apprehension about the global significance of the environment, with 36% labeling it a high concern and 35% expressing considerable concern. Additionally, **13% felt the environment's importance was exaggerated, while 32% had low concern, 33% were moderately concerned, and 17% were considerably concerned. Only 5% were highly concerned.**

Environmental attitude: the highest-rated factor under this construct is EA1, which states that environmental protection is a very important issue, but again, it ranges from modest to considerable importance. **Youth from Montenegro feel extremely positive about actively participating in an environmentalist group** (EA2) only at a level of 13.9% and only 15% of the participants would help raise funds for environmental protection (EA3). **The positive moves to persuade others that the environment is important (EA4) are also low while being neutral regarding the effect of being eco-friendly on the preservation of nature (EA5).**

Environmental behavior: the most rated factor under this construct is that youth from Montenegro have learned from other people, like longtime residents or elders, to solve an environmental problem (EB3), while the least rated are participation in policymaking (EB7) and writing an email about an environmental issue (EB9). **45% of participants have encouraged other people to attend an event related to the environment (EB1) at a moderate level, while only 22% have talked to other people about the environment** (EB2). Measures like repurposing products to reduce my waste and separate containers for paper, plastic, glass, etc. (EB4) are at a moderate level for 41% of the participants and are at a high level for only 10% of them. Only 11% have avoided traveling out of town for non-local products (EA5), while the scientific information search (EB6) is even lower at a level of 5%.

FINDINGS FROM ALBANIA

© Beyond Barriers

The survey was conducted among 180 respondents, all pupils from high schools, of whom 65% were female and 35% were male. Results show that they have knowledge about the environment, nature, biodiversity, and cultural heritage. They have participated in activities for cleaning the environment and walks in nature, but they didn't participate in practical fields related to EE or excursions or games in nature with the goal of knowing and protecting nature. They were able to identify facts but were not able to propose solutions. The necessity of having other activities and EE materials, such as books, fact sheets, etc., in the schools is of great importance.

Environmental context: Albania is especially vulnerable to natural disasters due to the expected sea level rises due to climate change, in combination with intense rainfall events. It has nearly 2.4 million inhabitants and is a low-emitting country. The highest greenhouse gas-emitting sectors in the country are energy (47%), agriculture (21%), land use and forestry (12%), industrial processes and product use (12%), and waste (8%).

Environmental knowledge in Albania is rounded on points like existence and behavior in relation to nature. Concepts of climate change education and sustainable development are not recognized widely in Albania and remain low on the agenda. The results from environmental knowledge constructs in Albania range as below: **58% of the Albanian youth have high knowledge about environmental issues (EK1), 28% have modest knowledge regarding the relationship between human behaviour and the connection with nature (EK2), and around 36% have poor knowledge regarding recycling (EK3).** Differently from this, the information about the effect that packages have **on the reduction of landfill waste** (EK5) ranges from modest to considerable; respectively, **28% have modest knowledge and 34% have considerable knowledge.** Only a minority of 23% have knowledge about the environmental safety of the package (EK7) they buy. Finally, only 18% of the participants are poorly aware that this manner of action may cause environmental disaster (EK8), while 50% of them have modest to considerable knowledge about this. **The lowest factor on this construct is that the youngest in Albania do not connect their behaviour with nature, despite having environmental knowledge at a level of 58%.**

Their environmental concerns (EC) are ranked from high to low. Initially, they list the issues relating to the environment as very important to me and Decision-makers are doing far too little to protect the environment. The three important steps to change their environmental behavior are considered to actively participate in an environmentalist

group, environmental protection, and eco-friendly practices help preserve nature. This variable, in its construction, was composed of 12 different factors. **32% of participants show modest environmental concerns when they declare that the environment is one of the most important issues facing the world today** (EC1) and **unfortunately, 23% have considered this issue as a very low concern.** Unexpectedly, **about 66% of them think that the environmental issue is often exaggerated** (EC2), **65% think that decision-makers are doing far too little to protect the environment** (EC3), and about **60% consider that environmental issues are very important to them** (EC4). The increasing destruction of the environment is a serious problem and if we continue down the same path, we are heading toward an environmental catastrophe (EC5) by a level of 82%, which is very surprising for a country such as Albania and contradictory **63% of them consider environmental protection a Western idea** (EC6) and not relevant for us in this country. At the same time, **53% of them think that there is really no need for anyone to worry about protecting the environment because it can take care of itself naturally** (EC7). When asked if there are other more serious problems facing our society than the environment (EC8), most of them (64%) rate this variable very low and almost all of them (85%) agree that we are not doing enough to protect the environment (EC9), while **74% of Albanian youth say that it is very important for everyone to try to protect our environment for future generations** (EC 10). To finalize, they show a proportionate share in different levels of devotion to nature (EC11), while contradictorily, they think that the benefits of environmental protection do not justify the costs (EC12) involved, and 28% of them highly agree on this, while 32% of them agree in a considerable way, and 21% of them modestly agree.

Environmental attitude (EA) is the variable showing consistency towards the issue after realizing that there is environmental knowledge and concern. It is analyzed using 6 factors and on average, this variable shows a slight decline from the previous one, which is also explained by the theories and literature. In this regard, **only 25% of the participants responded that environmental protection is a very important issue for them** (EA1), while **53% of them expressed their willingness to actively participate in an environmentalist group** (EA2). Only **10% of them think it is extremely positive and can help raise funds for environmental protection** (EA3), while **65% of them are neutral towards this factor**. A very positive and promising result is that they often try to persuade others that the environment is important (EA4) at a level between positive (25%) and extremely positive (45%). Albanian youth hold a positive attitude toward the role of eco-friendly behavior in nature preservation (EA5); 25% of them are moderate.

28% have a positive attitude, and 35% of an extremely positive attitude towards this factor. Finally, contrary to all the previous results, when it comes to concrete actions, the positive attitude declines considerably. We measured this result by a sample of 58% being negligent when it comes to picking up green products (EA6), which based on literature is the main pathway to green transition in developing countries.

Environmental behavior (EB) is the final analysis to derive the results from the case studies. This construct is measured by nine other factors and the results are as follows: **Social environmentalism was found to be the highest variable, while conservation lifestyle and environmental citizenship were considerably lower than the first one.** 81% of youngsters have encouraged other people to attend an event related to the environment (EB1) in a range from moderate (31%), frequently (22%), to very frequently (28%). In the same vein, they have tried to explain environmental issues to others (EB2) at an e-level of 79%. Based on the results, it is seen that the elder persons have given little explanation regarding (EB3) the issues. Regarding the conservation lifestyle, **only 30% of them took measures like repurposing products to reduce their waste and separating containers for paper, plastic, glass, etc.** (EB4); **only 41% avoided traveling out of town for non-local products (EB5); and what is surprising is that only 21% of them looked up scientific information about the environment (EB6).** The last category has shown the lowest percentages all over the questionnaire, which, in fact, based on the literature, is the real indicator of the actual environmental situation in any country. Environmental citizenship shows the co-movement of the community and unfortunately, the results are as low as **only 12% of participants have participated in a policy process like a public comment period that affected the environment** (EB7); **no one of them (0%) donated money with the intention of benefiting the environment** and was willing to pay higher prices for products that are environmentally friendly and only a very low percentage of 8% wrote a letter or email about an environmental issue (EB9).

The professionals' results are very special insights for the research to be more comprehensive and multifaceted. During the surveys, very important insides were also derived from the professionals related to important factors according to their opinion. In this regard, for 43% of them, appropriate presentation and interpretation of the environmental issues (e.g., reports, publications, forums, conferences, social media) (IEE1) is very important, and 41% emphasize the importance of data from multiple sources (biophysical assessment, i.e., modelling, simulation, other approaches to quantify

environmental elements) and data sharing (IEE2), **33% think that socioeconomic indicators related to the environment (e.g., societal and community benefits; culture, heritage, and tradition benefits) are the main drivers of responsibility towards the issue** (IEE3). In line with those results, policy analysis and change at different levels (local and international policy) (IEE5) and common environmental frameworks and methodologies (IEE4) are the most important factors for the majority of professionals at a level above 65%.

When asked about the significant barriers that prevent environmental initiatives and projects that could foster environmental education, t**heir opinion is that the most obvious gaps and challenges at a range of 45%–46% are resistance to change, especially with political opinions (GEE6), lack of policy implementation of solutions (GEE5), lack of meaningful interaction between stakeholders and the professional network (GEE9) and lack of policy implementation of solutions (GEE4).** The professional's survey reveals that there is miscommunication between different professionals (GEE8), despite having representation from various stakeholders.

The final part of the survey done with professionals aims to address some possible recommendations after having their opinion related to any environmental initiative that may have an impact. The most important aspect that should be considered when taking any of such initiatives is the impact on human and/or environmental health (EPI4) at a level of 74%; additionally, **72% of them consider stakeholder engagement and collaboration (EPI3) very important to have an impactful initiative, and 77% of the professionals agree that policy and regulatory frameworks (EPI8) are very important to have a sustainable impact. Inclusion of marginalized communities (EPI) is the factor rated at the lowest level.**

8.COMPARATIVE ANALYSIS

As previously explained, on country findings we have reported the percentage of people reporting for any factor while when making the comparison analysis the study makes an analysis of the average for each country and for the sample (composed of all participants from the three countries). Referring to the Table 1 you may find the average results for each factor:

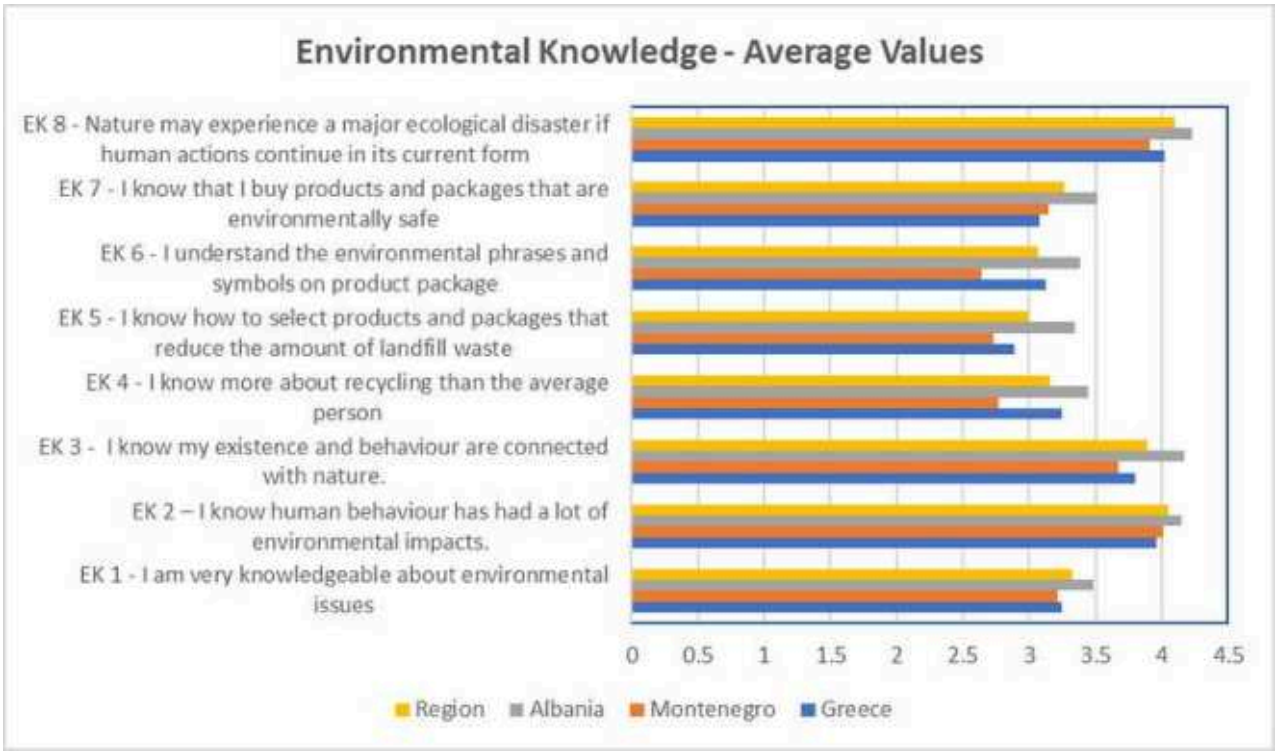
Table 1. Average results from each country and for the region				
CONSTRUCTS	**AVERAGE**			
Construct 1 – Environmental Knowledge (EK)	**Greece**	**Montenegro**	**Albania**	**All**
EK1-I am very knowledgeable about environmental issues	3.24	3.21	3.48	3.32
EK 2 – I know human behaviour has had a lot of environmental impacts.	3.96	4.01	4.15	4.05
EK 3 - I know my existence and behaviour are connected with nature.	3.8	3.67	4.17	3.89
EK 4 - I know more about recycling than the average person	3.24	2.77	3.44	3.15
EK 5 - I know how to select products and packages that reduce the amount of landfill waste	2.89	2.73	3.34	3.00
EK 6: I understand the environmental phrases and symbols on product package	3.12	2.64	3.38	3.06
EK 7 - I know that I buy products and packages that are environmentally safe	3.07	3.14	3.51	3.26
EK 8 - Nature may experience a major ecological disaster if human actions continue in its current form	4.02	3.91	4.23	4.10

CONSTRUCTS	AVERAGE			
CONSTRUCT 2 – ENVIRONMENTAL CONCERN (EC)	**Greece**	**Montenegro**	**Albania**	**All**
EC1 - The environment is one of the most important issues facing the world today	3.86	3.67	4.17	3.91
EC2 - The importance of the environment is often exaggerated	2.61	2.70	3.17	2.84
EC3 - Decision-makers are doing far too little to protect the environment	3.72	3.49	3.93	3.72
EC 4 - Issues relating to the environment are very important to me	3.52	3.42	3.88	3.62
EC 5 - The increasing destruction of the environment is a serious problem and if we continue down the same path, we are heading toward an environmental catastrophe	4.11	3.79	4.14	4.01
EC 6 - Environmental protection is a Western idea, and is not relevant for us in this country	2.77	2.46	3.44	2.91
EC 7 - There is really no need for anyone to worry about protecting the environment, because it can take care of itself naturally	2.50	2.16	3.52	2.75
EC 8 - There are other more serious problems facing our society than the environment	3.13	2.93	3.43	3.17
EC 9 - We are not doing enough in this country to protect the environment	4.03	3.75	4.00	3.92
EC 10 - It is important for me that we try to protect our environment for future generations	4.31	3.87	4.20	4.12
EC 11 - We should devote some part of our national resources to environmental protection	3.95	3.68	3.95	3.85
EC 12 - The benefits of environmental protection do not justify the costs involved	3.04	3.34	3.65	3.36

CONSTRUCTS	AVERAGE			
CONSTRUCT 3 – ENVIRONMENTAL ATTITUDE (EA)	**Greece**	**Montenegro**	**Albania**	**All**
EA1 - Environmental protection is a very important issue for me	3.47	3.20	4.22	3.66
EA2 - I would like to actively participate in an environmentalist group	3.28	3.10	3.71	3.38
EA3 - I think I would help to raise funds for environmental protection	3.36	3.28	3.74	3.48
EA4 - I often try to persuade others that the environment is important	3.26	3.03	3.83	3.39
EA5 - I think eco-friendly helps preserve nature	4.14	3.17	3.96	3.75
EA6 - I think if I have a choice; I will pick green products	3.66	3.21	3.80	3.56
CONSTRUCTS	**AVERAGE**			
CONSTRUCT 4- ENVIRONMENTAL BEHAVIOR (EB)	**Greece**	**Montenegro**	**Albania**	**All**
EB 1 - Encouraged other people to attend an event related to the environment	2.28	2.77	3.45	2.88
EB 2 - Talked to other people about the environment	2.69	2.76	3.60	3.38
EB 3 - Learned from other people like longtime residents or Elders to solve an environmental problem	3.25	3.09	3.64	3.34
EB 4 - Took measures like re-purposing products to reduce my waste and separate containers for paper, plastic, glass, etc.	3.14	2.90	3.50	3.21
EB 5 - Avoided traveling out of town for non-local products	2.44	2.77	2.88	2.72
EB 6 - Looked up scientific information about the environment	2.64	2.80	3.50	3.01
EB 7 - Participated in a policy process like a public comment period that affected the environment	2.15	2.12	2.51	2.28

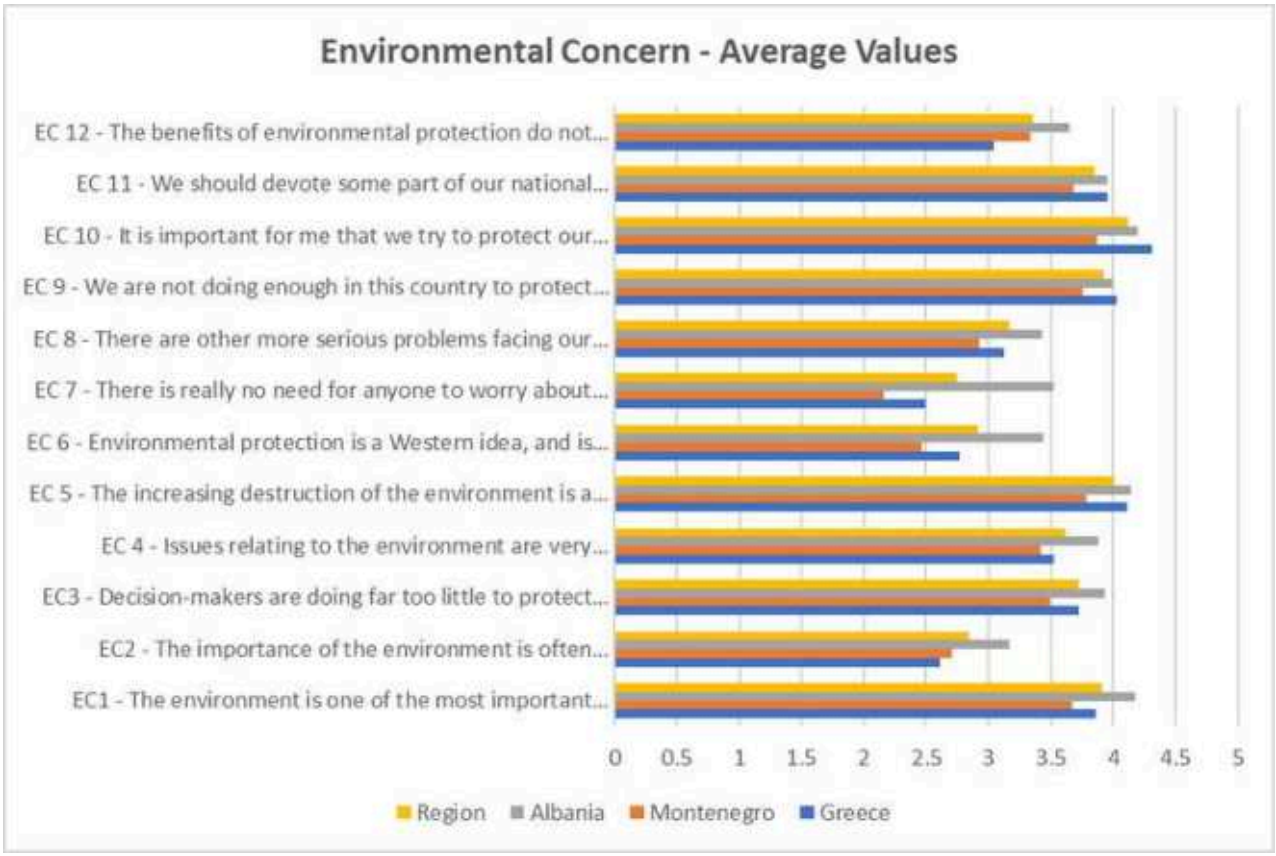
EB 8 - Donated money with the intention of benefiting the environment and willing to pay higher prices for products that are environmentally friendly	2.31	2.41	2.61	2.45
EB 9 - Wrote a letter or email about an environmental issues	2.18	2.11	2.58	2.30

To have a better overview of the current situation of the region, for each construct considered in the study, in the analysis below you may find the detailed description of every specific result processed from the data collected from the surveys.



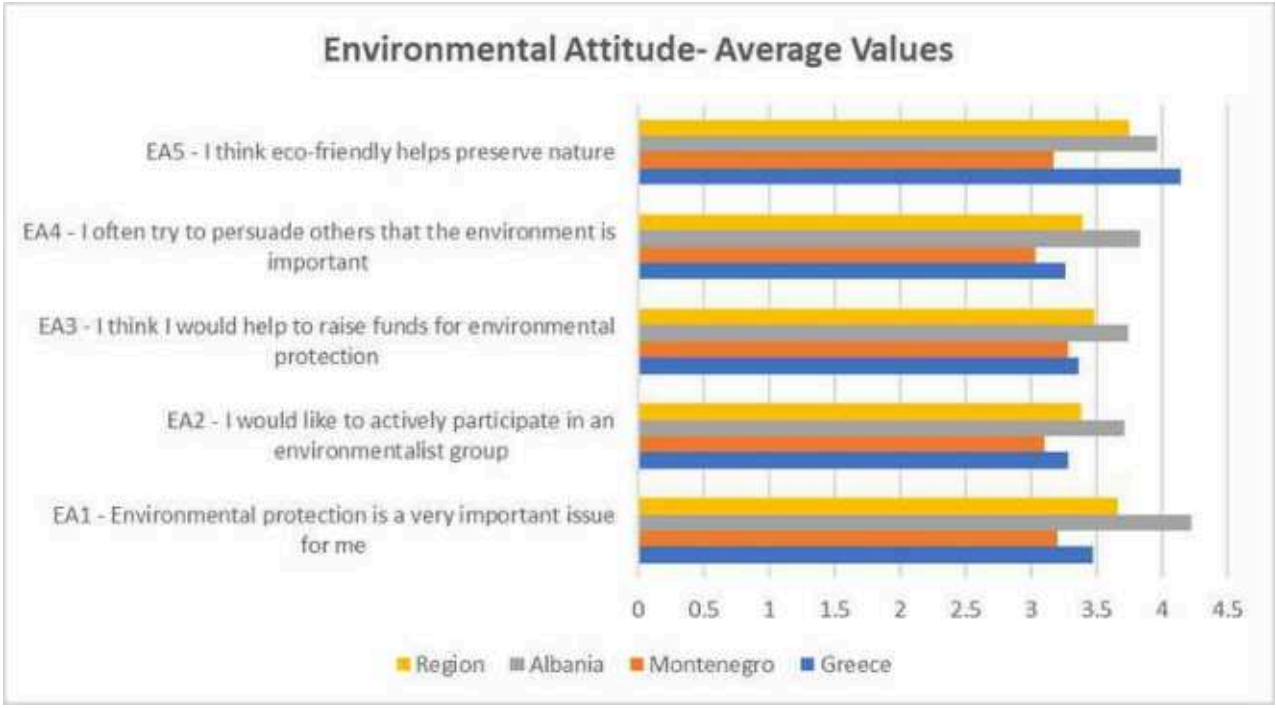
Environmental Knowledge: Based on the results of the surveys, Albania on average has the highest level of knowledge regarding environmental issues (EK1) at a level of 3.48, while the regional average is 3.32. All the countries have almost the same level of human behaviour that has had a lot of environmental impacts (EK2), with an average of 4.05. The lowest level of information in the region is regarding the products and packages that reduce landfill waste (EK5), resulting in moderate, and younger people in the region are all aware that nature may experience a major ecological disaster if human actions continue

in their current form (EK8), showing an average of 4.2/5. **An interesting result is also that younger people in the region face difficulties in understanding the environmental phrases and symbols on product packages (EK6) and this is especially evident in Montenegro.**



Environmental Concern: Environmental concern shows lower values than environmental knowledge, even though some factors have low differences. The factor with the highest scale is the fact that **younger people in the region agree that it is important if everyone tries to protect the environment for future generations (EC10), at a level of 4.21 out of 5 scales**. The youngers agree that the importance of the environment is not exaggerated (EC2) and they have a high level of concern that increasing destruction of the environment is a serious problem. If we continue down the same path, we are heading toward an environmental catastrophe (EC5), which ranges above 4.2/5 overall. **Results from Greece and Albania at the same level reveal that they are not doing enough in their countries to protect the environment** (EC 9), while Montenegro gives the highest value to the devotion of some of our national resources to environmental protection (EC 11).

According to the Albanian young generation, environment is one of the most important issues facing the world today (EC1), while the Greeks give mostly importance to conservation for future generations (EC10). Among the regions, the lowest average goes to the point that environmental protection is a Western idea and is not relevant for us in this country (EC6) at a level of 2.7 out of 5.



Environmental Attitude: At the regional level, the **most important factor is considered to be eco-friendliness and help in the preservation of nature** (EA5) from all countries at an average of 3.75, while actively participating in an environmentalist group (EA2) at an average of 3.38 out of 5 comes as the least important indicator of environmental attitude, especially with a very high result from Montenegro participants on the survey. Albanians declare that they often try to persuade others that the environment is important. On average, among factors in this construct, Montenegro shows a more obvious decline from the results of the previous construct, Greece a moderate one, and Albania shows very little change.

Environmental Behavior: As expected, the result of the final construct decreases considerably compared to other previous constructs, which have an average above level 3. In this case, all of them have a scale lower than that. Under this construct, conservation lifestyle has the set of factors that resulted in the highest average in the region, while environmental citizenship has the set of factors with the lowest values, as seen in the literature. At the regional level, **the factors that have the best results are the declaration that youngsters learned from other people, like longtime residents or elders, to solve an environmental problem (EB3) at an average of 3.34 and they took measures like repurposing products to reduce their waste and separate containers for paper, plastic, glass, etc. (EB4) at a level of 3.2. The factor rated as the lowest is EB7, which shows participation in a policy process like a public comment period that affected the environment and EB9, which shows if anyone wrote a letter or email about an environmental issue.** To summarize all the parts of the research, from country diagnosis to comparative analysis between the countries, we can conclude that the youth in the region face common challenges, despite the differences in circumstances and opportunities.

All countries have approved laws on youth, which are intended to regulate different matters related to youth, to ensure the empowerment of youth, to improve their social position, to support youth organizations, and to improve their participation in decision-making. Youth as a policy sector is usually coined around education, sports, or culture at the ministerial level. However, a fully functional youth system that ensures effective youth empowerment, engagement, and participation in decision-making is yet to be developed. Some positive aspects and strengths in the youth policy framework are observed, such as the consultation process in the development of youth laws and strategies. On the other hand, there are various weaknesses and a lack of willingness to prioritize youth as an inter-institutional and cross-sectorial policy and to effectively engage them as a very active actor in different processes, including environmental preservation.

There are no clear policies in the region to combat climate change, and young people cannot be the key players in initiating environmental actions. Almost the whole region shares the same environmental problems, of which **the most evident is air pollution.** There is a limited awareness of global environmental issues among the youth in this region, explained by the fact that they are currently facing other challenges like quality education, job opportunities, brain drain, and other basic human needs. Until a few years ago, topics such as environmental protection and the fight against climate change were not in the public spotlight and it seems that interest in environmental issues will grow in the upcoming period. Young people are aware, both globally and locally, that all environmental problems are getting bigger, the situation is getting worse and that stakeholders are not coordinated properly. However, in those years of working on raising awareness amongst different generations of people, including young people, significant progress has been made but is still insufficient to produce any visible change in improving the situation. To move from the starting point, it is important that young people in the region also gain concrete knowledge about their capabilities and the strength of their voice in terms of environment.

Based on the case studies developed in each country, the environmental knowledge regarding the environmental topics examined is moderate to high. **Higher environmental knowledge seems to be present in the topics concerning the impact of human behavior on the climate crisis. In Montenegro, environmental protection was viewed as a critical global priority by a significant 36% majority,** indicating a strong collective consciousness about the importance of preserving the environment. In Albania, young people declare to have good knowledge on environmental issues but weak knowledge on specific subtopics related to them.

Environmental concern: male and female students seem to show moderate to high levels of concern In Greece, higher levels of concern are found for issues related to the future impact of the environmental crisis and the lack of mobilization for environmental protection, while in Montenegro, a considerable number of individuals showed genuine concern about environmental issues, with 21% expressing high levels of worry and an additional 25% showing considerable concern. Environmental concern in Albania results in 32% having a modest concern related to the importance of the environment in comparison with other life issues. In general, youth from the three countries declared that the decision-makers are not effective in environmental protection and that there is much to be done in this regard.

Environmental attitudes result from being friendly in all countries and mainly concern individual daily actions rather than an effort to influence other people or participation in social actions. **Results from Greece show that 75.4% of participants agree that "being environmentally friendly helps to preserve nature".** In Albania they give meaning to environmental protection and additionally show very positive reaction. They are aware that the life of people are directly and indirectly linked with environmental issues, pollution, and clean food, and they express themselves very interested in participate in environmental groups to spread not only their positivity but also to contribute to the environment and to work in and about environmental protection. The three countries share the common thought that it is difficult to raise funds in support of such actions and they are expressing their commitment to work together for projects in environmental protection.

As far as **environmental behavior** is concerned, this variable has the lowest levels compared to the other variables. Specifically, the overall average of environmental behavior is slightly above the average. In this variable, Albania shows the lowest percentage below the average, and Greece shows the highest environmental behavior. All the countries emphasize the importance of proper dissemination of knowledge on environmental issues through the appropriate presentation and interpretation of environmental issues and the availability of data from multiple sources and their common use. Due to this, we should pay more attention to environmental education in either of its forms. Equally important barriers are the lack of a common framework and common understanding in education and policymaking and the lack of meaningful interaction between stakeholders and networks of professionals. All the regions consider environmental protection a critical global priority, indicating at the same time a strong collective consciousness about the importance of preserving the environment, followed

by an ultimate need for greater awareness and engagement with environmental issues.

Based on the results, **we can comprehensively conclude that to respond to the demands of global issues, the relevant institutions throughout the region should develop fast-track programmers' skills, advancing the needed skills among youth and enabling further activation and engagement.** Despite the contextual factors and different circumstances in which the regions are set, they show similar environmental knowledge, concern, attitude, and behavior, which draws us to the conclusion that regional development initiatives must be specifically designed to target youth and guarantee that their views and interests are equally represented. Additionally, those regional policies must be cohesive with each other to have a better effect and to show common progress in all the territories.

The education system must progress more on playing a proper role in transmitting green and environmental skills and competencies to all, especially young people. Despite its form, formal or non-formal, the focus must be on more specific sectors and professions: To effectively integrate environmental education, teachers and training programs should tailor their approach to specific sectors and professions. This means providing students with knowledge and practical skills related to sustainability within their chosen field.

Although there are important differences between formal and non-formal environmental education, important resemblances between them also exist. Moreover, many times, to achieve the aim and objectives of environmental education, a combination of these two forms is required. Despite the form of practice, environmental education is not recognized as a priority because society and the economy still rely on a historically traditional form of exploitation of natural resources. Although formal and non-formal environmental education exist, the application of knowledge in practice is based on segmented efforts. Even when initiative and action exist in individuals or groups, the system hampers these actions to expand their outreach, reducing their impacts and minimizing their success.

Formal environmental education is implemented by including environmental courses in the curriculum of schools and universities, generating a major channel of dissemination of environmental knowledge. Research and environmental initiatives endorse formal education as a way of educating the public and students with sound environmental knowledge and achieving behavioral change, since this appears to be the main element that is going to have an impact. Formal education is more structured and inclusive and the level of dissemination may be higher through this practice.

To facilitate the incorporation of environmental courses, international collaboration plays a key role, facilitating the dissemination of environmental knowledge through projects and exchange programs by enabling the exchange of knowledge and real-life examples. Youth exchange programs present a unique opportunity for ambitious students to acquire valuable know-how in environmental education. Non-formal education incorporates environmental education into its scope, but there are some key points when it comes to analyzing its effectiveness.

The development of non-formal environmental education requires the incorporation of environmental education objectives, concepts, teaching methods, and evaluation techniques into all processes of non-formal education. Initially, it must achieve environmental understanding. It is suggested that the concern with out-of-school or non-formal education is likely to promote a deeper understanding of the environment as a living, integrated, and interactive system. Non-formal educational practice places emphasis on training students as producers first and as consumers second. The methods included here, both from education, should have practical application; youngsters should learn how to work in a sustainable way and integrate sustainability issues into their daily lives. This involves not just theoretical knowledge but also practical skills that can be applied in real-world scenarios. Improving the impact of non-formal education (NFE) principles and methods in empowering young people as real actors in society and building bridges between different educational methods, approaches, or reflections requires targeted learning and priority setting.

Based on the research done by each country group, it appears that non-formal environmental education is conducted in two main ways: participatory and non-participatory programs. Non-participatory programs in environmental education are widespread and common throughout the world and although the main concern of these programs is to entertain the viewing audience, they are also instrumental in bringing about attitudinal changes in the world. It is difficult to assess the value and effectiveness of the learning situation in these non-participatory activities because little research has been undertaken.

The boost of non-participatory environmental educational programs with those that are more structured, educative, and interactive is most important for the countries in which environmental issues are immediate and relevant to the day-to-day lives (or deaths) of the people.

Based on specific country diagnoses, the education system in general is often disadvantaged by a lack of resources, high drop-out rates, and insufficient placements at all levels of schooling, and subsequently, non-formal environmental educational programs of a participatory nature assume to have increased significance.

9. CONCLUSIONS AND POLICY RECOMMENDATIONS

CONCLUSIONS

For the implementation of the research in the framework of the Erasmus+ project "Capacity Building, Action, and Responsibility for the Environment" (Youth-CARE), a series of steps were carried out, which constituted vital and interlinked stages of the research process and led us to present the conclusions. More specifically, the contextual analysis highlighted the need for environmental education, interest, and environmental awareness among both young people and professionals in the education sector through curriculum-friendly interventions in schools that motivate action at both an individual and collective level. At the same time, the context analysis guided the collection of best practices in different forms of education and determined the choice of activity for the case study. The implementation of the case study activity sought to provide a global picture of the environmental crisis and, at the same time, provide a starting point for action. Feedback on the case study was positive, highlighting the importance of interventions that aim to both build knowledge and practical application. In fact, providing concise, relevant, and practical information on the environment and environmental behavior, using multimedia such as audiovisual material, motivating action, raising awareness at the international and local level, and fostering a climate of cooperation to address the climate crisis seems to work in a way that ensures that the needs of both students, teachers, and the education system are being met in the context of environmental education.

Finally, emphasis needs to be placed on implementing interventions and activities that do not place the responsibility for the climate crisis solely on the individual but recognize the importance of individuals as active stakeholders in their environment capable of bringing about change. The research on the environmental awareness and consciousness of students from disadvantaged areas in regional settings revealed both promising aspects and areas for improvement, while also highlighting the importance of integrating environmental education into the wider development efforts of young people to cultivate a generation of environmentally aware citizens. With future steps, continued investment in the career needs of different regions and individuals, investing in tailored education programs, and integrating environmental considerations into policymaking, we can pave the way for a more sustainable future.

National policymakers in each country have established a different comprehensive youth policy framework, encompassing national strategies, laws, and local action plans.

However, despite these efforts, young people often feel marginalized and inadequately represented in decision-making processes, especially concerning environmental issues. Environmental education is gaining recognition at a slow pace. Efforts to integrate sustainable development content into school curricula and initiatives such as the Eco-School program demonstrate progress. However, there is still a need for organized non-formal participatory environmental education programs, especially in areas facing environmental degradation and when this degradation directly affects humans' lives.

Primary data collected indicates that despite having some basic knowledge of environmental education, young people still do not feel empowered to lead environmental initiatives. A deeper understanding of environmental issues and policies is lacking among youth, indicating a need for enhanced education and awareness-raising efforts.However, there is a consensus among stakeholders that environmental protection is crucial, emphasizing the importance of capacity-building initiatives to empower youth to take proactive roles in safeguarding the environment.

In conclusion, the context analysis and utilization of PESTEL analysis enhanced the research on the environmental crisis and education, as well as the obstacles hindering environmental education among young people in disadvantaged areas. Barriers to environmental education are found at political (e.g., lack of leadership support), economic (e.g., lack of resources), social (e.g., demographic characteristics, parental attitudes, incomplete or distorted knowledge of teachers and students), technological (e.g., lack of infrastructure and use of technological means), environmental (e.g., environmental issues, lack of ecological culture), and legal (e.g., reduced compliance checks and sanctions) levels and can be summarized as follows: Challenges in incorporating environmental education into the curriculum, including rigid educational structures, lack of interest or training among students, parents, and teachers, socio-demographic factors, and political and economic obstacles; formulation of tailored programs that are conceptualized with the proper teaching method, practice, materials, and methodologies. Therefore, taking into account the objectives of interventions that promote positive changes in individuals, groups, communities, and/or systems, there is a need to implement activities that sensitize and inform young people while motivating them to take action and influence the other systems around them (e.g., the social or political level).

POLICY RECCOMENDATIONS

- **Youth Engagement**: Enhancing youth participation and representation in decision-making processes is crucial for effective policy implementation. Young people must be actively involved in shaping environmental education initiatives and strategies to ensure their relevance and effectiveness.

- **Tailored Programs:** Non-formal education programs should be tailored to the specific needs and interests of young individuals, particularly those in disadvantaged areas. Addressing barriers to participation, such as lack of information and motivation, is essential for increasing engagement.

- **Participatory non-formal environmental education**: The development of non-formal environmental education requires the incorporation of environmental education objectives, concepts, teaching methods, and evaluation techniques into all processes of non-formal education. Initially, it must achieve environmental understanding relevance with out-of-school or non-formal education, which is likely to promote a deeper understanding of the environment as a living, integrated, and interactive system. Improving the impact of non-formal education (NFE) principles and methods in empowering young people as real actors in society and building bridges between different educational methods, approaches, or reflections requires targeted learning and priority setting.

- **Partnership and Collaboration:** Collaboration between government agencies, non-governmental organizations, educational institutions, and other stakeholders is vital for the success of environmental education initiatives. By working together, these entities can leverage their resources and expertise to create comprehensive and sustainable programs.

- **Policy Integration**: Environmental education should be integrated into broader policy frameworks, including national sustainable development strategies and climate action plans. This integration ensures a holistic approach to addressing environmental challenges and promotes synergy between different sectors.

- **Priority Setting:** The main weakness of almost all programs has been the competing priorities, and due to that, we recommend setting environmental education as a priority on the indicators undertaken by formal and non-formal educational practices.

- **Empowering Youth as Agents of Change:** Despite having some basic knowledge of environmental education, young people still do not feel empowered to lead environmental initiatives. A deeper understanding of environmental issues and policies is lacking among youth, indicating a need for enhanced education and awareness-raising efforts.

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11. APPENDIXES

APPENDIX 1: YOUNGSTERS SURVEY

This questionnaire is in the framework of the Capacity building, Action and Responsibility for the Environment (Youth-CARE) project and aims the understanding and analyzing of environmental issues multi-dimensionally by providing a clear and comprehensive picture from the perspective of disadvantaged youth people living in areas with key natural environmental resources. It is developed into 4 constructs with their respective component. Please select an answer from 1 to 5, where respectively, 1 means the lowest measure and 5 the highest measure of the component.

Demographic Data

Group age: Up to 15 /15-18 /Above 18

Gender: Male / Female

Education: Secondary School / High School

Country: Albania / Greece / Montenegro

Construct 1- Environmental Knowledge (EK)

1-Poor knowledge, 2-Low knowledge, 3-Modest knowledge, 4- Considerable knowledge, 5-High knowledge

EK 1 - I am very knowledgeable about environmental issues

EK 2 – I know human behaviour has had a lot of environmental impacts.

EK 3 - I know my existence and behaviour are connected with nature.

EK 4 - I know more about recycling than the average person

EK 5 - I know how to select products and packages that reduce the amount of landfill waste

EK 6 - I understand the environmental phrases and symbols on product package

EK 7 - I know that I buy products and packages that are environmentally safe

EK 8 - Nature may experience a major ecological disaster if human actions continue in its current form

Construct 2 - Environmental Concern (EC)

1-Poor concern, 2-Low concern, 3-Modest concern, 4- Considerable concern, 5-High concern

EC1 - The environment is one of the most important issues facing the world today

EC2 - The importance of the environment is often exaggerated

EC3 - Decision-makers are doing far too little to protect the environment

EC 4 - Issues relating to the environment are very important to me

EC 5 - The increasing destruction of the environment is a serious problem and if we continue down the same path, we are heading toward an environmental catastrophe

EC 6 - Environmental protection is a Western idea, and is not relevant for us in this country
EC 7 - There is really no need for anyone to worry about protecting the environment, because it can take care of itself naturally
EC 8 - There are other more serious problems facing our society than the environment
EC 9 - We are not doing enough in this country to protect the environment
EC 10 - It is important for me that we try to protect our environment for future generations
EC 11 - We should devote some part of our national resources to environmental protection
EC 12 - The benefits of environmental protection do not justify the costs involved

C**ONSTRUCT 3 – ENVIRONMENTAL ATTITUDE (EA)**

1-Extermely negative, 2-Negative, 3-Neutral, 4-Positive, 5-Extremely Positive
EA1 - Environmental protection is a very important issue for me
EA2 - I would like to actively participate in an environmentalist group
EA3 - I think I would help to raise funds for environmental protection
EA4 - I often try to persuade others that the environment is important
EA5 - I think eco-friendly helps preserve nature
EA6 - I think if I have a choice; I will pick green products

CONSTRUCT 4 - ENVIRONMENTAL BEHAVIOR (EB)

1-very Rarely; 2-Rarely; 3-Neutral; 4-Frequently; 5-Very Frequently
Social Environmentalism
EB 1 - Encouraged other people to attend an event related to the environment
EB 2 - Talked to other people about the environment
EB 3 - Learned from other people like longtime residents or Elders to solve an environmental problem
Conservation Lifestyle
EB 4 - Took measures like re-purposing products to reduce my waste and separate containers for paper, plastic, glass, etc.
EB 5 - Avoided traveling out of town for non-local products
EB 6 - Looked up scientific information about the environment
Environmental Citizenship
EB 7 - Participated in a policy process like a public comment period that affected the environment
EB 8 - Donated money with the intention of benefiting the environment and willing to pay higher prices for products that are environmentally friendly
EB 9 - Wrote a letter or email about an environmental issue

APPENDIX 2: PROFESSIONALS AND OTHER STAKEHOLDERS SURVEY

This questionnaire is in the framework of the Capacity building, Action and Responsibility for the Environment (Youth-CARE) project and aims the understanding and analyzing of environmental issues multi-dimensionally by providing a clear and comprehensive picture from the perspective of disadvantaged youth people living in areas with key natural environmental resources. It is developed into 4 constructs with their respective component. Please select an answer from 1 to 5, where respectively, 1 means the lowest measure and 5 the highest measure of the component.

I. **GENERAL INFORMATION ON QUESTIONNAIRE PARTICIPANTS**

I.1. Age:*

I.2. Gender:*

I.3. Region of Country

I.4. Education level: :*

I.5. What is your field of EDUCATION? (It is possible to select more than one answer and/or add the option "Other")

Mathematics
Computer and information/communication sciences
Physical and/or Chemical sciences
Earth and related environmental sciences (e.g., geology, geography, geophysics)
Biological sciences (including Ecology)
Medicine, pharmacy and/or health-related sciences
Agricultural and forestry sciences
Engineering sciences and/or (bio/food) technology
Economics, business and/or tourism
Architecture and/or urban planning
Mining, oil and gas
Transportation
Law and/or political science
Sociology, psychology, education and/or philosophy
History, archaeology, religious studies and/or philology, Art and/or design
Other:

I.6. Employment status (it is possible to select more than one answer): *

Employed at a university
Employed in a research institute/facility

Employed in a government agency/institution
Employed in civil society/NGO
Employed in the private sector/company
Employed in the public sector
Employed in a multinational company
Unemployed
Studying
Maternity leave
Retired
Other:

II.NEED/IMPORTANCE OF ENVIRONMENT EDUCATION (IEE)

How important are the following OUTPUTS, OUTCOMES, and IMPACTS for disseminating proper education on Environmental issues?

1 – not important at all 2 – not important 3 – moderately important 4 – important 5 – very important

IEE 1 - Appropriate presentation and interpretation of the environmental issues (e.g., reports, publications, forums, conferences, social media)

IEE 2 - Data from multiple sources (biophysical assessment, i.e., modelling, simulation, other approaches to quantify environmental elements) and data sharing

IEE 3 - Socioeconomic indicators related to Environment (e.g., societal/community benefits, culture, heritage and tradition benefits)

IEE 4 - Common environmental frameworks and methodologies

IEE 5 - policy analysis and change at different levels (local and international policy)

III.GAPS/CHALLENGES OF ENVIRONMENTAL EDUCATION (GEE)

How significant are the BARRIERS that prevent Environmental initiatives and projects from having an impact?

1-very minor barrier 2- minor barrier 3-moderately barrier 4- major barrier 5-very major barrier

GEE 1 - Scarce data from various sources/data collection

GEE 2 - Lack of representation from various stakeholders

GEE 3 - Lack of cross-sector partners

GEE 4 - Lack of policy implementation of solutions

GEE 5 - Lack of systemic thinking/Silo thinking

GEE 6 - Resistance to change, especially with political opinions

GEE 7 - Lack of a common framework/common understanding in education and in policy making
GEE 8 - Miscommunication between different professionals
GEE 9 - Lack of meaningful interaction between stakeholders and professional's network
GEE 10- Lack of socioeconomic indicators, (Multi)cultural differences the level of adoption of new technologies

II.KEY ENVIRONMENTAL PERFORMANCE AND IMPACT INDICATORS (EPI)

What do you think is the MOST IMPORTANT ASPECT of an IMPACTFUL Environmental initiative?

1 – not important at all 2 – not important 3 – moderately important 4 – important 5 – very important

EPI 1 - Integration of resources (water, energy, food, wastes) and other interconnected sectors
EPI 2 - Sustainable integrated resource management
EPI 3 - Stakeholder engagement and collaboration
EPI 4 - Impact on human and/or environmental health
EPI 5 - Integration of biophysical and socioeconomic aspects
EPI 6 - Promotion of cultural heritage and local communities
EPI 7 - Inclusion of marginalized communities
EPI 8 - Policy and regulatory frameworks
EPI 9 -Technological innovations

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